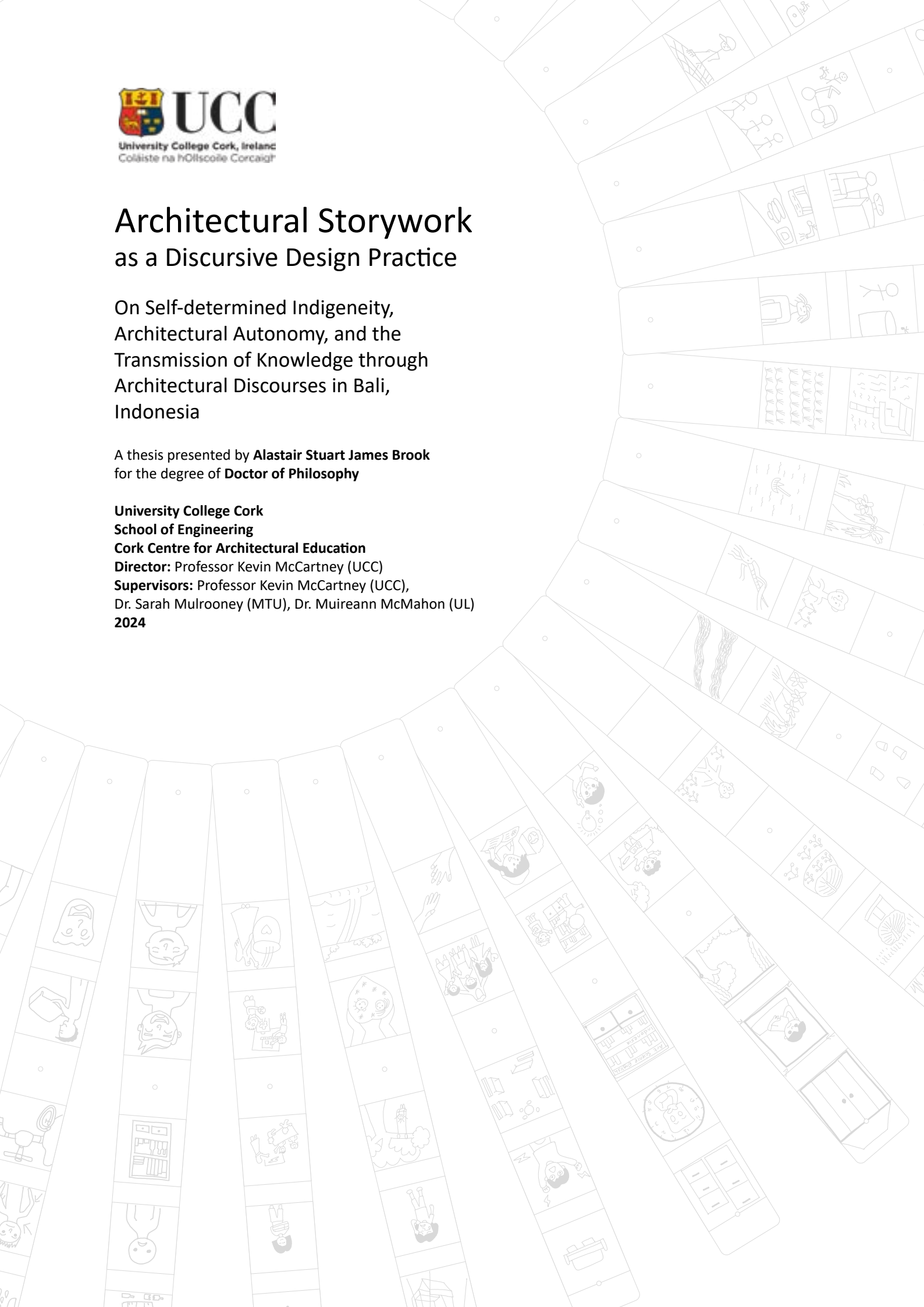
CORA Cork Open Research Archive
Cartlann Taighde Oscailte Chorcaí

Title	Architectural Storywork as a discursive design practice: on self-determined Indigeneity, architectural autonomy, and the transmission of knowledge through architectural discourses in Bali, Indonesia
Authors	Brook, Alastair
Publication date	2024
Original Citation	Brook, A. S. J. 2024. Architectural Storywork as a discursive design practice: on self-determined Indigeneity, architectural autonomy, and the transmission of knowledge through architectural discourses in Bali, Indonesia. PhD Thesis, University College Cork.
Type of publication	Doctoral thesis
Rights	© 2024, Alastair Stuart James Brook. - https://creativecommons.org/licenses/by-nc-sa/4.0/
Download date	2026-11-04 19:51:51
Item downloaded from	https://hdl.handle.net/10468/16396



UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh



Architectural Storywork
as a Discursive Design Practice

On Self-determined Indigeneity, Architectural Autonomy, and the Transmission of Knowledge through Architectural Discourses in Bali, Indonesia

A thesis presented by **Alastair Stuart James Brook**
for the degree of **Doctor of Philosophy**

University College Cork
School of Engineering
Cork Centre for Architectural Education
Director: Professor Kevin McCartney (UCC)
Supervisors: Professor Kevin McCartney (UCC),
Dr. Sarah Mulrooney (MTU), Dr. Muireann McMahon (UL)
2024

Contents

Acknowledgements **xii**

Abstract **xiii**

Glossary **xiv**

English Vocabulary xiv

Indonesian and Balinese Vocabulary xvi

Key Names of places and people xix

1.0 An Introduction **21**

1.1 Formalising Indigenous Research Methodologies for Architecture 21

1.2 Indigenous Research Methodologies as Articulatory and Discursive Practice 22

1.3 Thesis Structure 24

1.4 Researcher Positionality 26

1.4.1 As an 'Outsider' 26

1.4.2 Within Architectural Ethnography 27

2.0 Settings and Strategies **29**

2.1 Settings 29

2.1.1 Indonesian Vernacular: A Space of Quiet Resistance 31

2.1.2 The PKP Community Centre: A Space of Indigenous Tourism 36

2.1.3 The Responsibilities of Architecture 38

2.2 Strategies 39

2.2.1 Current Values of the PKP Community Centre 39

2.2.2 Future Values of the PKP Community Centre 41

2.2.3 Three Strategies of Identity, Politics, and Knowledge Movements 45

2.2.4 Strategy 1: Identity Movements 48

2.2.5 Strategy 2: Political Movements 50

2.2.6 Strategy 3: Knowledge Movements 53

2.3 Research Questions 55

3.0 Theories and Practices **59**

3.1 Articulatory and Discursive Design Practices 61

3.1.1 A Comparison 61

3.2 The Original Production Site(s) of Architecture 64

3.2.1 Western Philosophy's Metaphor of the House 64

3.2.2 Indigenous Knowledge's Metaphor of the Cave 67

3.2.3 Visual Dialogues 68
3.3 Siting Architecture within Discourse 70
3.3.1 Metaphors of Visual Dialogue 70
3.3.2 ‘Repair’ and ‘Return’ Briefs 72
3.3.3 The Architectural Charge and making Responsible Decisions 74
3.3.4 Critical Reflexivity 76
3.3.5 De-spacing 77
3.4 Storywork as a Discursive Practice 80
3.4.1 Voicing through Indigenous Research Methodologies 80
3.4.2 Storywork and its Principles 82
3.4.3 Storywork as a Discursive Practice 84
3.5 Implementing Storywork 89
4.0 Methodology **91**
4.1 My Storywork Methodology 92
4.1.1 A Discursive Landscape 92
4.1.2 Theoretical Principles and their Metaphors 96
4.1.3 Ethical Principles and their Metaphors 97
4.2 The Mandala Philosophy of the Balinese Banua 101
4.2.1 Appropriation of Indigenous Architectural Principles 101
4.2.2 The Desa Banua: ‘Source Village of the Sacred Landscape’ 104
4.3 Constructing a Discursive Methodology 107
4.3.1 The ‘Original’ Banua 109
4.3.2. The Origin Stories of Rsi Markandeya 110
4.3.3 Mandala Architecture 112
4.3.4 Mandala Landscape 113
4.4 The Lessons of the Landscape 118
4.4.1 The Role of the Asta Kosala Kosali and the Undagi 118
4.4.2 Digital and Transformative Storywork 120
4.5 From Theory to Practice 124
5.0 Fieldwork Initiation **126**
5.1 Methodological Overview 126
5.2 Fieldwork Structure 128
5.3 Fieldwork Initiation 130

5.3.1 The Complex Personhood of the PKP Community 130
5.3.2 The Practical Methods of Fieldwork Initiation 133
5.3.3 Ethical Methods of Fieldwork Initiation 136
5.4 Implementation 140
6.0 Data Collection, Analysis, and Outputs 141
6.1 Data Collection 141
6.1.1 Architectural Boundary Objects 141
6.1.2 Data Recording and Storage During Data Collection 144
6.1.3 Creating a Discursive Cartographic Guide 146
6.1.4 The Practical Methods of Data Collection 150
6.2 Data Analysis 161
6.2.1 Deconstructive Discourse Analysis and Discursive IPA 161
6.2.2 Coding Systems 163
6.2.3 The Practical Methods of Data Analysis 167
6.2.4 The Practical Ethics of Data Collection and Data Analysis 173
6.3 Fieldwork Outputs 176
6.3.1 Deconstruction as Construction 176
6.3.2 The Practical Methods of Fieldwork Outputs 177
6.3.3 The Practical Ethics of Fieldwork Outputs 192
6.4 An Architecture of Events 194
7.0 Findings 197
7.1 Participant Pseudonyms 198
7.2 New Critical Perspectives of Balinese Culture and Self-determined Indigeneity 200
7.2.1 Individual Critical Perspectives of Balinese Culture 201
7.2.2 Collective Critical Perspectives of Balinese Culture 204
7.2.3 Radical Hermeneutics of Self-determined Indigeneity 205
7.2.4 Findings 208
7.3 Critical Perspectives of Architectural Autonomy 209
7.3.1 Reconceptualising the Manik Ring Cucupu 210
7.3.2 Reconceptualising the Tri Hita Karana 214
7.3.3 Reconceptualising the Tri Angga 217
7.3.4 Reconceptualising the Tri Mandala and Sanga Mandala 220
7.3.4 Findings 224

7.4 Critical Perspectives of Indigenous Teachings 225
7.4.1 Recognition of Indigenous Knowledge Gaps 226
7.4.2 Teachings of the Tong Tong 227
7.4.3 Interventions 230
7.4.4 Findings 231
7.5 Summary of Findings and the Content for Discussion 231
8.0 Discussion **233**
8.1 Implementation 233
8.1.1 The Eight Steps of Architectural Storywork 234
8.1.2 Framework for Relational Accountability 236
8.2 Methodological Influences on Architectural Design 239
8.2.1 Categorisation of Architectural Characteristics 239
8.3. Relational Accountability 245
8.3.1 Relational Ethics 245
8.3.2 Facilitation of Ethically-led Architectural Storywork 247
8.3.3 Pathways to Permission and Avenues of Analysis 249
8.3.4 'Micro-Ethics' 250
8.4 Generalisability and Reproducibility in Practice 252
8.4.1 A Community-informed Approach to Ethics 252
8.4.2 Beyond Academic Research 256
8.5 A Relational Framework for Architectural Storywork 257
9.0 A Conclusion **263**
9.1 Answering Research Questions and Fulfilling Objectives 263
9.1.1 Primary Objective 263
9.1.2 Secondary Objectives 264
9.2 Contribution to Knowledge 266
9.2.1 Contributions to Critical Architectural Discourse 267
9.2.2 Contributions to Indigenous Research Methodologies 268
9.2.3 Contributions to Practice-based Decolonising Methods 269
9.2.3 Implications for Research Goals 273
9.3 Limitations and Preventative Actions 274
9.3.1 Methodological Restrictions 274
9.3.2 The Unpredictability of Human Behaviour 276

9.3.3 Translation Barriers 277
9.3.4 Democratising Voices 279
9.3.5 Limitations of Professional Practice 281
9.3.5 Questions of Validity 283
9.4 Further Research 283
9.5 Reflection 284
References **288**
Appendix A Precedents for the PKP Bale Tong Tong Project **316**
Appendix B De-Spacing Examples **323**
Appendix C Theoretical and Ethical Principles of Architectural Storywork **326**
Appendix D University College Cork Ethics Application Process & Fieldwork Documents **337**
Appendix E Workshop Activity Sheets **354**
Appendix F The Architectural Charge for the PKP 'Bale Tong Tong' Community Centre **370**
Appendix G The Draft Design Brief for the PKP 'Bale Tong Tong' Community Centre **389**
Appendix H Evaluation Questions and Focus Group **410**

Figure List

Fig 1.1 Thesis Structure 25

Fig 2.1 The Geographical Locations of the PKP Community Centre Buildings 30

Fig 2.2 Illustrations of Pondok and Kampung Dwellings 34

Fig 2.3 Field Photographs and Drawings of the Banjar Selasih Bale Tong Tong 43

Fig 2.4 Summary of the Theses' Strategic System 47

Fig 3.1 Illustrations of Visual Dialogue 'Mapping' Workshops 71

Fig 3.2 Derrida's (1986) 'Writing Architecture' 79

Fig 3.3 Karami's (2018) 'Writing Dissident Architecture' 79

Fig 3.4 Tschumi's (1994) 'Sequencing' 79

Fig 3.5 Perec's (1974) 'Space' 79

Fig 3.6 Mallarmé's (1897) 'Mapping Textual Landscapes' 79

Fig 4.1 The Discursive Landscape 95

Fig 4.2 Metaphorical Diagram of Balinese Architectural Knowledge 102

Fig 4.3 The Orientation of Balinese Architecture 104

Fig 4.4 Austronesian and Indic Characteristics of the Neo-Banua 106

Fig 4.5 Markandeya's Mythological Journey 111

Fig 4.6 The Plan and Elevation of the Kalachakra Mandala 114

Fig 4.7 The Taro-Ubud and Tegalalang-Payangan Axes 115

Fig. 5.1 Fieldwork Timeline 128

Fig 6.1 Example of Data Storage 146

Fig 6.2 Discursive Data Collection Guide 147

Fig 6.3 Ecologies of Plausibility 149

Fig 6.4 Excerpts from Three 'User-created Persona' Archetype Activities 156

Fig.6.5 Excerpts from Three 'Tour Guide' Activities 157

Fig 6.6 Excerpts from Three 'Energy/ Engagement' Activities 157

Fig 6.7 Excerpts from Two 'Compass' and 'Life Map' Activities 158

Fig 6.8 Field Photograph of 'User-created Persona' Group Roles Activity 158

Fig 6.9 Field Photographs and Description of 'User-created Persona' Activity 159

Fig 6.10 Example of Digitising Participants' Hand-drawn Architectural Plans 160

Fig 6.11 Field Photographs of Six ‘Think with Things’ Architectural Models 160

Fig 6.12 Field Photographs of ‘Think with Things’ Site Plan 160

Fig 6.13 Coding Process 164

Fig 16.4 Excerpt of Coding Matrix 172

Fig 6.15 Excerpt of Conceptual Story Narratives 185

Fig 6.16 Excerpt of Discursive IPA and List of Architectural Oppositions 186

Fig 6.17 Excerpt of Deconstructive Narrative Frames 187

Fig 6.18 Example of Stories Contributing to the Architectural Charge 188

Fig 6.19 Traditional and Circular Storytelling Format 189

Fig 6.20 Field Photographs of Model-Making Workshop 190

Fig 6.21 Field Photographs and Video Stills of ‘Stories Inhabiting Models’ Activity 190

Fig 6.22 Field Photographs of ‘final’ PKP Bale Tong Tong Site Plan 191

Fig 7.1. Initial Schematic Drawings exemplifying Tri Angga Zoning 219

Fig 7.2. Initial Schematic Drawings exemplifying Tri Mandala and Sanga Mandala Zoning 221

Fig 8.1 The Eight Steps of Architectural Storywork and their Impacts 233

Fig 8.2 Architectural Characteristics of the PKP Bale Tong Tong 240

Fig 8.3 Ethically Led Facilitation Strategies 247

Fig 8.4 A Framework for Architectural Storywork 258

Nota Bene: All images are author’s own. Citations of adapted or contributing works are provided in applicable image captions.

List of Tables

Table 2.1 The PKP rules 39

Table 2.2 The Six Balinese Concepts of Ibu Sari's Balinese Indigeneity 41

Table 2.3 Three Strategies of Identity, Politics, and Knowledge Movements 46

Table 3.1. Articulatory and Discursive Design Practices 61

Table 3.2 The Characteristics of the Architectural Charge and Design Brief 75

Table 3.3. A Summary of the Seven Principles of Storywork 83

Table 4.1 The Three Theoretical Principles of my Architectural Storywork Methodology 96

Table 4.2 The Eight Ethical Principles of Architectural Storywork 97

Table 4.3 The Hierarchy of Arthana's (2019) 'House' Metaphor 103

Table 4.4 Characteristics of the Neo-Banua from Austronesian and Indic Worldviews 106

Table 5.1 Participant Numbers 131

Table 5.2 Practical Methods of Fieldwork Initiation 134

Table 5.3 Storywork Ethics of Fieldwork Initiation 137

Table 6.1 Practical Methods of Data Collection 151

Table 6.2 Key to Transcribing Audio and Video Discourses 165

Table 6.3 Key to Transcribing Written Discourses 166

Table 6.5 Storywork Ethics of Data Collection and Data Analysis 174

Table 6.6. Practical Methods of Fieldwork Outputs 179

Table 6.7 Storywork Ethics of Fieldwork Outputs 193

Table 7.1- Participant Pseudonyms 199

Table 8.1- The Eight Steps of Architectural Storywork 234

Table 8.2- The Four-Part Framework for Relational Accountability 237

Table 8.3- Architectural Characteristics of the PKP Bale Tong Tong 241

Table 8.5- Limitations and Characteristics 246

Table 8.6- Facilitation Strategies for Ethically-led Architectural Storywork 248

Table 8.7- Thirteen Community-informed Approaches to Ethics 253

This is to certify that the work I am submitting is my own and has not been submitted for another degree, either at University College Cork or elsewhere. All external references and sources are clearly acknowledged and identified within the contents. I have read and understood the regulations of University College Cork concerning plagiarism and intellectual property.

This page intentionally left blank

Acknowledgements

This thesis is dedicated to Ibu Sari (Ni Komang Sariadi) and the PKP community. Thank you for welcoming me into your lives and trusting me with the knowledge held within your stories, for which I am eternally grateful.

I would like to thank:

Dr. Sarah Mulrooney, Dr. Muireann McMahon, and Prof. Kevin McCartney for their critical and constructive support, and an unyielding conviction in my work to the last.

Dr. Jack Lehane, dear friend and incredible colleague, who has inspired and motivated me throughout every step of the last 8 years. You have been my rock.

Kathryn and Roger Brook, parents and worldly mentors, who taught me to be critical, compassionate, and carve my own path. Without the wisdom and love you have gifted me over my lifetime, this would not have been possible.

Nicola Burke, for embracing every twist and turn of this path by my side, with a sense of joy, exploration, and adventure that has rippled through every facet of my life. Words cannot express my gratitude for your companionship- thank you!

My community throughout this journey, who have helped me grow in ways I could not possibly have imagined: Seán Conlan-Smith, Jack Burdess, Jason Ladrigan, Samory de Zitter, and Emma Carter.

and finally, Nadine Vroom, Dr. Alan Yu and I Putu Wiraguna (Wira) for introducing me to the Island of the Gods- Bali.

Abstract

This study documents the co-creation and implementation of a discursive, decolonial design practice with the Pusat Kegiatan Perempuan (PKP) community as they begin to re-design their Community Centre in rural Bali, Indonesia. This is timely, as architectural scholars call on the discipline to develop new decolonial practices and discursive design cultures that aim to reinstate difference, value alterity, and engage with pluriversal narratives; unsettling the theoretical and practical foundations of architectural history. This study also answers calls from Indigenous scholars to activate Storywork as a practice-based and decolonising methodology within architecture by developing and formalising a novel research methodology by applying the Indigenous practice of Storywork through a discursive architectural lens; an approach I have termed *Architectural Storywork*. A situated Storywork methodology is developed through the application of three parallel research strategies related to the metaphorical movements of Identity, Politics, and Knowledge within the PKP community. Discursive practices, including the co-creation of physical and conceptual architectural models, and rigorous analyses are implemented with the PKP community through guided storytelling workshops. This process defines an 'architectural charge' for the PKP Community Centre, outlining the buildings' architectural responsibility to current and future inhabitants. Where genuine co-creation occurred, Architectural Storywork was able to support the PKP community in establishing new critical perspectives of Balinese Indigeneity, reconceptualising their architectural autonomy, and reflecting upon and retelling their Indigenous Knowledge as creative transformational praxis through architectural discourse.

Glossary

All terms are expanded upon and/ or thoroughly referenced within the text. Please treat this glossary as an abridged version of each definition, which does not cite references for ease of reader comprehension.

English Vocabulary

Alterity	The state of complete otherness.
Architectural Charge	Critical, imaginative, and ethical practices that help to understand architecture, formulate design intent, and define architecture's responsibility to its inhabitants (Kanekar in Psarra, 2019). Derrida believed that the general charge or responsibility of architecture is to design based solely on our encounters with the complete alterity of others (Vitale, 2018)
Deconstruction	A concept on the 'margins of Western philosophy', introduced by Jacques Derrida, that attempts to extinguish power struggles between binary concepts within discourses by tracing the meaning of a discourse back to an origin and proving, through critical arguments, that it should not be privileged over other discourses. Binaries are then subverted and reduced into a new term that uproots us from binary logic. This new term refers to how the original dualities are internal to one another yet remain heterogenous
Design Brief	The development of criteria for the design of an architectural space based on information about the building's inhabitants. It serves as a point of reference throughout a project for everyone involved, structuring future procedures to bring a design into existence.
Discursive Landscape	A form of mental mapping, sometimes referred to as cognitive mapping or cognitive cartography, in which ideas, knowledge, and experiences are spatially arranged in the mind before being practically expressed in an articulated form as geographical, architectural, and ecological landscapes. These landscapes are constructed by abstracting layers of architectural and geographical metaphors from both sacred and historical Indigenous stories that are relevant to a community and

	the parameters and goals they have set for their research or architectural project. Once constructed, discursive landscapes communicate a set of theoretical and ethical principles for conducting the research or architectural project, which are derived from a situated architectural study by using, to varying degrees, discursive tools, spaces, and practices to actively deconstruct a peoples' experiences (memories) and expectations (anticipations) of architecture. See 'Discursive Tools', 'Discursive Space', 'Discursive Practice', and 'Deconstruction'.
Discursive Practice	Actions engaged in the continual weaving, untying, and retying of discursive elements to (re)construct meaning around spatial discourses in the real world.
Discursive Space	A method of architectural inquiry that enable spatial discourses to act in the here and now as discursively engaged design tools. Discursive spaces employ imaginative acts towards the empowerment of the most vulnerable through the development of new design cultures and tools in which oral, aural, visual, and other semiotic resources are not always distinct entities but shift between states; writing that reads as if speaking, or from orality to writing and back again.
Discursive Tool	A device used to support and inform the construction of new architectural representations in a variety of discursive mediums, such as writing, drawing, dance, photography, videography, model-making etc.
Indigeneity	Describes the self-representation and self-determined identity of populations usually labelled as "Indigenous", and understands that Indigenous people have specific protocols and preferences for identifying as Indigenous as well as for sharing their situated, people and place specific, knowledges. This moves beyond the colonially defined concept of the 'Indigenous Other' that views Indigenous peoples as simple, innocent people who are 'close to nature' or 'spiritual', and therefore either threatening or in need of protection. Indigeneity in this context recognises the Balinese people's connection to land and ancestry, as well as being extensively connected to, and deeply influenced by, global socio-cultural, socio-economic and political realities.

Polyphonic Practices	Where multiple, diverse, worlds are voiced simultaneously without being reduced, redacted, altered, or judged by another authoritative voice.
Redirective Design	Design that aims to redirect past colonial experiences into possible decolonial futures through urgent but sustained actions.
Respectful Relationships	Relationships between oneself and the alterity of others. The most pressing example of the 'other' are future generations; someone else, somewhere else, somewhen else. We have a responsibility to allow future generations to show up and dwell based on their own diverse knowledges, conditions, histories, or realities. By accepting this responsibility and not shrinking away from its difficulties, we help to construct a sense of 'being together' that has been neglected by Western metaphysics.
Responsible Decision Making	In which individuals can accepts a state of not knowing and do not try to reduce alterity to a well-known generality, or project their own knowledge onto it.
Storywork	A fluid and organic process by which Indigenous scholars, activists, protectors, and allies of Indigenous people treat "scared" Indigenous stories as a 'theoretical anchor' in their research methodology

Indonesian and Balinese Vocabulary

Asta Kosala Kosali	The guiding literature of Balinese architecture, written in the old Balinese language with scarce translations.
Bale	The traditional definition of a *bale* is a building in which the community gather to discuss civic and customary laws, but it can refer to many types of buildings used by villagers or agricultural workers.
Bale Agung	'Great Pavilions' in which the gods associated with a village assemble.
Banjar	The lowest form of administrative structure in national governance, comprised of a small neighbourhood or village organisational system.

Banua	A ritual or spiritual territory, known as a 'sacred landscape', linked to the original Indigenous peoples of Bali. It precedes other known divisions of land and is usually evidenced by a network of *desa*, or villages, linked by reciprocal ritual ties to a 'source village'.
Desa	Roughly translates to a village, who traditionally have a responsibility for the maintenance of ritual harmony between human and spiritual communities (i.e. spirits, ancestors, deities, and gods) through frequent ceremonies and offerings.
Desa Banua	The 'source village' of a ritual or spiritual territory. Origin stories of such territories often describe ancestors who traveled from a 'source village' to establish new communities. These new communities have since paid tribute to the 'source village' through ceremonial offerings.
Desa Kala Patra	*Desa* = place, such as location and orientation, *kala* = the circularity and longevity of time, *patra* = the circumstances-situations, actions, and identity- of individuals and communities. This concept dictates that humans are not passive individuals, but will always try to adapt themselves to the different landscapes that influences their lives.
Dewata Nawa Sanga	An octagonal mandala used instead of a compass to navigate and orientate directions. Eight Guardians of Direction, or eight gods, are placed at the eight cardinal directions and are guided by the god Shiva at its ninth central point.
Lontar	Manuscripts made from dried, treated, and bound palm leaves.
Mandala	*Mandalas* are believed to originate from the Sanskrit word for 'circle', but have been used as spiritual tools in Indic religions for individuals to connect with themselves. Balinese *mandalas* are uniquely connected to the Balinese mythologies and histories surrounding origin and orientation, and are utilised as a space where we see others from the inside out; they see us from outside in; and our mutual perceptions form a shared circle.
Manik Ring Cucupu	Describes the harmonious interplay between a building (macrocosm) and its inhabitants (microcosm) at a 'third centre', a point in which the building and its inhabitants are a unified whole yet remain heterogeneous.

Niskala	The Balinese term to describe the spiritual world, relating to ancestral deities and concepts of *karma phala*- the law of cause and effect, where the deeds of previous generations are carried by their descendants.
Pura	Temple.
Puri	Palace, associated with the Kingdoms of ancient Bali.
Rua Bineda	Literally meaning “two that are different”, which accepts that things are both themselves and other things at the same time, causing binaries to undergo constant adjustments to form a sense of balance. It is a philosophy that has no ambition to deny difference or resolve tensions by permanently uniting or separating them and, instead, accepts that things are both themselves and other things at the same time.
Sanga Mandala	Literally meaning the nine mandala, this divides space into a 3x3 grid known as the ‘nine-folded hierarchal space’- dictating the layout of Balinese architecture based on the mountainward-seaward and sunrise-sunset axes.
Sekala	The Balinese term to describe the real, physical world.
Subak	A complex and community-based irrigation system for rice agriculture that spans across the entirety of Bali. It is upheld today as a model for the whole of Balinese society and integral to their way of life by linking farmers to the land, to each other, and to their ancestral deities and gods through organising cycles of labour that maintain rice yields and reduce pests and diseases throughout both wet and dry seasons.
Tong Tong	Tong Tong is the pre-colonial name for the Kulkul, or Kul-Kul (Dutch colonial). It describes a drum, or set of drums of varying sizes and diameters, that are used to communicate to different groups of people in a village through sequences of drum beats. Each village has unique musical sequences for different topics, differentiating them from other nearby villages.
Tri Angga	Qualifies the spatial groupings of houses into a sacred upper zone (i.e. roof), neutral middle zone (i.e. walls or structure), and profane lower zone (i.e. foundations). Also refers to the spatial patterns of settlements, such as linear, crossroads, or a combination of the two.

Tri Hita Karana	A foundational philosophical principles that describes the harmony between *palemahan* (environment/ Nature), *parahyangan* (the universe/ God), and *pawongan* (people/ Human), and has been an integral part of Balinese society for centuries
Tri Mandala	Classifies the spatial grouping of buildings within a plot of land into scared spaces (such as family or village temples), general dwellings, and profane spaces (such as kitchens or animal sties).
Undagi	Traditional Balinese architects who are viewed as the patrons of Bhagawan Wiswakarma, the deity of craftspeople, and are therefore seen as holy and able to access the Asta Kosala Kosali texts.

Key Names of places and people

PKP Community Centre	Pusat Kegiatan Perempuan: *pusat*= centre, *kegiatan*= activity, *perempuan*= women. A safe haven for Balinese women and other stigmatised groups who are often highly oppressed by a traditionally patriarchal system.
Banjar Selasih	The village system in which the main PKP Community Centre buildings are located.
Ibu Sari	Ni Komang Sariadi, the founder of the PKP Community Centre and co-facilitator of this research study.
PKP Bale Tong Tong	The name given to the future PKP Community Centre, for which an architectural charge and draft design brief are created over the course of this thesis.
Ubud	The nearest urban town to the PKP Community Centre.
Taro	The 'original' settlement of Bali, as depicted by the arrival of a Hindu sage Rsi Markandeya to Bali circa 600 AD. The axis between Taro and Ubud marks an important mytho-historical region, within which the PKP community operate.
Gunung Lebah	A natural ridge that forms the axis between Taro and Ubud, situated between two tributaries of the Wos river.

Part 1: Framework

1.0 An Introduction

This section provides a short introduction to Architectural Storywork, a novel application of Indigenous Storywork through an architectural lens, and outlines the structure of this thesis.

1.1 Formalising Indigenous Research Methodologies for Architecture

Stories are a central component of Indigenous Research Methodologies, situated research practices applied by Indigenous and non-Indigenous scholars across many disciplines in de-colonial efforts (Windchief & San Pedro, 2019). Storytelling as an architectural practice is not a new phenomenon for Indigenous peoples, with many documented applications across Austronesia (particularly within Aboriginal and Māori nations) as a decolonial approach to contemporary colonial practices. These decolonial approaches centre on relational architecture; spaces that embody the relationship between all living things through connections to ancestry and ecology. Various Aboriginal cultural centres present ancestral stories and relationships with land through the building's form, layout, configuration, circulation and spatial movements, which have been guided by mapping of oral traditions and stories or integrating artwork into the design process (see Grant & Greenop and Broffman in Grant et al., 2018). More recently, pedagogical approaches to relational architecture that are informed by situated knowledge systems have been trialled by Aboriginal peoples (Gajendran et al., 2022). In these approaches, scale architectural models were constructed by Indigenous peoples in ways that resonated with their culture. These models became miniature sites in which community members could deconstruct their thinking in non-linear ways, articulating their own stories, understandings, and cultures through site-based investigations using painting and ethnographically found objects.

Whilst attempts have been made in design research to formalise Indigenous Research Methodologies for application across any geography (Schultz, 2018; 2019; Moran et al., 2018), my extensive research suggest that there are no similar formalised methods for architectural research using Indigenous methodologies. In considering how to 'craft an Indigenous story in architecture', Dalla Costa (in Grant et al., 2018) suggests that discursive architectural practices can help to capture cultural undercurrents, transcribe the potency of Indigenous

built environments, and grasp the vital role of process in Indigenous design- i.e. the inclusion of everyone, including ancestors and future generations, in the design process so that the outcome is beneficial to as many people as possible and reveals possible biological, cultural, social, economic, or political factors that could impact the spatial environment. Activities that engage with the physical and mental constructs of architecture, that recall presence and experience, can help to articulate the complex undercurrents of Indigenous architecture (Matunga 2013). In this thesis, I propose Architectural Storywork as a discursive architectural practice, with the potential to be applied in different Indigenous locations by incorporating situated knowledges through storytelling.

1.2 Indigenous Research Methodologies as Articulatory and Discursive Practice

Storywork is one of many Indigenous Research Methodologies that centres storytelling, and occurs at the intersection between ancestral mytho-historical stories and the ethnographic stories of everyday lived experience. Indigenous scholars, activists, protectors, and allies engage in Storywork by adopting epistemological frameworks that are guided by the lessons taught in these stories (Archibald et al., 2019). In this process, stories do not influence methodology but *become* methodology, *are* methodology. Indigenous Storywork practitioners often work within their own ancestral communities, which affords a deeper and more intimate understanding of these stories alongside the knowledge systems that construct them and the socio-cultural protocols of sharing them. Each practitioner can interpret different lessons based on their own complex positionality, unearthing layers of teachable metaphors through a deep understanding of the "surface story's" content and its discourse- how the story is communicated or performed (Archibald, 2008; Liu et al., 2019). Content is independent from performance, meaning that it can be told through multiple different modes of discourse including spoken word, song, music, dance, visual images, styles, and facial or hand gestures.

Aside from these traditional discourses, Indigenous stories can also be articulated through design practices. Schultz's (2019) extensive work with Aboriginal communities exemplifies Aboriginal Yarning methodologies through the lens of discursive cartography. Schultz uses the process of critical mapping within Yarning circles as an 'articulatory design practice' (see

later descriptions in 3.2.3, 3.4, and Fig 3.6), creating design briefs and beginning ideation for Indigenous futures. Schultz combined methods and processes of design facilitation with performative, participatory, and political sensibilities that support communities to think, talk, and articulate their situated knowledges and speculative futures. This is a process of 'respectful design', an Indigenous conception that is founded on design that aspires to a deeper situated awareness, positioning itself in relation to the natural patterns between all living things within the social worlds of Aboriginal communities (Sheehan, 2011). In this way, Schultz uses maps as a discursive tool to articulate Indigenous mytho-historical knowledges and individual stories of experience. Similar to maps, architectural landscapes can articulate Indigenous stories of situatedness as discourse products (Fromin, 2019; Psarra, 2019) and *discursive spaces* (Psarra, 2019; Toffa in Troiani & Ewing, 2020).

Discourse products are physical or tangible instances of socio-cultural practices, such as artefacts that embody and articulate situated knowledges such as oral/ aural/ visual Indigenous stories. These artefacts can help articulate the spatial practices we unconsciously perform everyday at the intersection between physical and abstract, or material and social, constructs of architecture (Fromin, 2019; Psarra, 2019). Discursive spaces are a method of architectural inquiry that enable these spatial discourses to act in the here and now as discursively engaged design tools. These spatial discourses can be both physical, such as real-world structures or models that articulate Indigenous stories through architectural properties, or abstract, such as the articulations of architectural landscapes within Indigenous stories (Psarra, 2019; Toffa in Troiani & Ewing, 2020). These articulations allow Storywork to be applied through *discursive* design practices, differentiated from Schultz's (2019) *articulatory* design practices- see 3.1 for a distinct definitions of the above terms and a comparison between articulatory and discursive practices.

Articulatory design practice describes how existing discursive elements (diverse realities, histories, conditions, or knowledges) connect, disconnect, or reconnect in a particular way- constructing novel meanings around situated, speculative designs that have the potential to translate into responsible design actions (ibid; Cleen & Stavrakakis, 2017). Discursive practice is engaged in the continual weaving, untying, and retying of discursive elements to (re)construct meaning around spatial discourses in the real world- considering how spatial

related disciplines can contribute towards constructing a polyphony of diverse realities, histories, conditions, or knowledges in the "real social world and its built environments" (Kenniff in Gosseye, 2019; Toffa in Troiani and Ewing, 2020, p.59).

Grant (et al., 2018) exemplify how Indigenous architectural artefacts can perform, signify, or communicate Indigenous stories- becoming their discourse. Understanding both the story and its discourse allows practitioners to unearth complex layers of situated metaphorical teaching. These teachings are 'stories within the story' (Archibald, 2008) and require their own concrete or abstract discourses, such as physical models or written architecture. Creating these new discourses is a process of design facilitation and architectural representation guided by Indigenous stories and Indigenous architectural discourses, and hopes to avoid the reproduction of colonial power and politics. This defines my self-termed methodology: Architectural Storywork.

1.3 Thesis Structure

This thesis documents the situated application of Architectural Storywork with the PKP (Pusat Kegiatan Perempuan: *pusat*= centre, *kegiatan*= activity*, perempuan*= women) community- a centre for marginalised women, their families, and other stigmatised groups- and their founder, Ni Komang Sariadi (Ibu Sari), in rural Bali, Indonesia. Firstly, I outline three strategies for this thesis, the metaphorical movements of Identity, Politics, and Knowledge, which have emerged from within the situated context of the PKP community and the tensions of Balinese architectural practice in the wake of touristic colonisation (Yu, 2015; Bunten & Graburn, 2018)- see Chapter 2. This defines a set of research questions that are then explored in subsequent chapters. Similar to Schultz's (2018; 2019) practice towards 'respectful design', these strategies move towards 'respectful architectural relationships' between the self and alterity- defined as the complete otherness of people, nature, and the universe. The structure of this thesis diverts from the traditional academic structure of a separate and distinct literature review. Instead, relevant literature is used thematically throughout each chapter, building upon the literature and data of the last to inform the next (Bellamy, 2022).

Therefore, each strategy is developed upon in Chapters 3 and 4, building on the content of the preceding chapter(s) to construct my Architectural Storywork methodology and outline core

theoretical and ethical principles that support the application of my methodology in practice. Chapters 5 and 6 explore the implementation of this methodology, applying all three strategies and their relevant principles within fieldwork initiation, data collection, data analysis, and fieldwork outputs. Chapter 7 outlines the findings of this study, considering if and how my research questions have been answered through the development and implementation of my Architectural Storywork methodology. Chapters 8 and 9 consider the implementation of Architectural Storywork with the PKP community, the impacts of this methodology on the research outputs, the ethical accountability of this process, its possible generalisability and reproducibility in practice, the study's contributions to knowledge, limitations, and possible future work (see Fig 1.1).

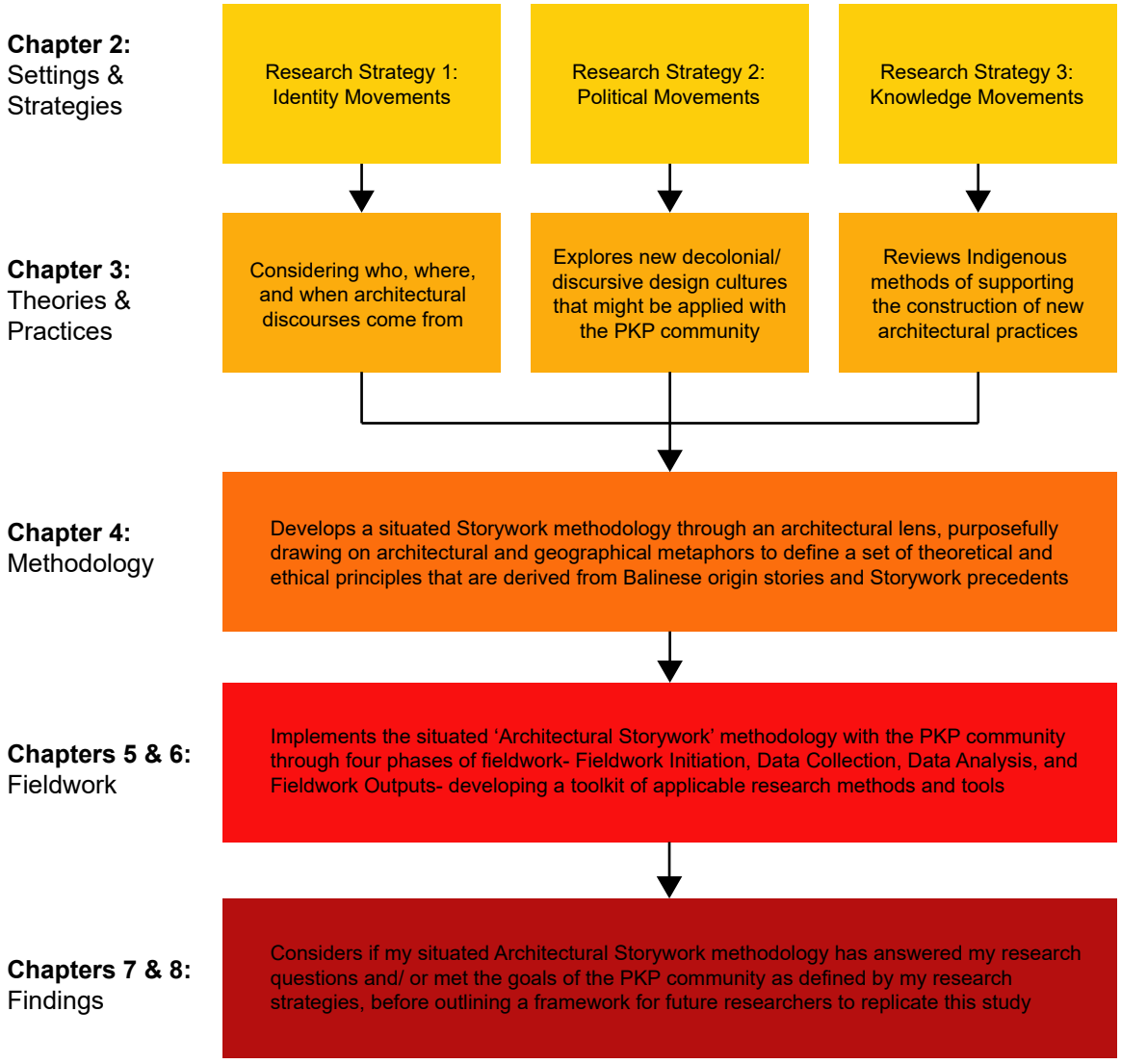


Fig 1.1 Thesis Structure

1.4 Researcher Positionality

1.4.1 As an 'Outsider'

Throughout this thesis I attempt to temper my own inherent biases as a white, male, Anglo researcher and 'outsider' ally of the PKP community. I hope that I can better fulfil my role as an architectural ally to the PKP community through my positionality as a non-architect, which frees me from the tropes of Western architectural education to better consider what architecture's role might be in improving the PKP community's quality of life. I choose the term 'ally' from those suggested by Archibald et al. (2019), which include Indigenous scholars, activists, and protectors, because I:

- Take steps to reduce 'otherness' between myself and the PKP community.
- Consider my own positionality as a researcher and attempt to make my own research interests accountable to the PKP community and their own goals and values.
- Continually refer to the voices of the PKP community when defining my alliance and relationship with them.
- Work towards 'activism' through actionable change.

This allyship was implemented by; a) studying relevant literature on Balinese Indigeneity and architecture, coming both directly and indirectly from Indigenous peoples; b) engaging in discussions with Indigenous scholars, elders, and cultural leaders on the history and practice of Balinese Indigenous Knowledge and architecture, and; c) adopting aspects of related practices that are interwoven, yet distinctly heterogeneous to, Storywork, such as Participatory Action Research practices that invite the PKP community to act as co-researchers and co-scholars in the study. These actions hope to construct discursive practices that originate from, and are sensitive to, the context of the research (Escobar-Tello et al., 2021).

The data I gather with the PKP community members are viewed as Indigenous stories- whether mythological, historical, or ethnographic- and are treated with respect, reverence, and a responsibility to reciprocate and share these knowledges faithfully (Archibald, 2008; 2019). The Seven Storywork principles outlined by Archibald (see Table 3.3) contribute to my own ethical framework (see Table 4.2), which is further supported by validity criteria

from subjects relevant to my fieldwork methodology- see Appendix C. By co-producing research with the PKP community, my insider vs outsider positionality is rather one of being 'in the middle' (Breen, 2007). However, I acknowledge that some bias still remains within my interpretations of Balinese knowledge and Indigenous stories.

1.4.2 Within Architectural Ethnography

As a situated and discursive architectural practice, Architectural Storywork fieldwork engages with ethnography in the vein of Yaneva (2009) and Martinez (2021), who attempt to utilise stories as counter-narratives to the settler-colonial understanding of design through 'boundary objects'. Boundary objects are curated works that carry and communicate connective stories across different contexts, giving meaning to diverse participants who might have disparate practices, competences, tools, or languages (ibid). This study uses discursive architectural practices to create an 'architectural charge' through the curation of boundary objects, physical and conceptual architectural models, into a collection of short stories that communicate the different design trajectories of the PKP community (see Table 6.6, Output 3 and Appendix F). These stories attempt to interpret the PKP community's design process without drawing sequential linear storylines or relying on predictable narratives of events. The PKP community are invited to analyse and reflect upon their stories in the hope of developing new design cultures that revolve around the resolution of tensions, assumptions, or expectations about their architectural landscape (see examples in Chapter 7 Findings).

I position myself as a participant-observer within this ethnographic process, fully engaging with the PKP community as a non-neutral participant; I am always trying to speak up for the PKP community, honour their knowledges and practices, help develop self-learning and community capacity, and learning through the traditional Balinese ways of doing (Rix et al., 2019; Datta, 2022). I recognise the contested positionality of participant-observation within ethnography, which either a) views the researcher as an unsolicited surrogate voice for the presumed 'voiceless' Other (Beier, 2005) or, b) is viewed as a practice that questions the researcher's presumptions by giving voice to knowledges that were previously confined to the margins or silenced (Shah, 2017). This contested positionality within Indigenous research requires a situated ethical framework that extends beyond university standards for ethical

conduct in research by embracing Indigenous Storywork principles (Archibald et al., 2019)- see table 4.2 for a detailed overview of my own ethical principles and Table 8.7 for the consideration of further ethically-led practices.

2.0 Settings and Strategies

This chapter outlines the settings of this research before culminating in the definition of three research strategies, which are then developed and implemented throughout the rest of this thesis.

2.1 Settings

I first met Ni Komang Sariadi (known as Ibu Sari) in 2017 through the Five Pillar Foundation's 'local heroes' program. *Ibu* literally translates to 'mother' or 'Mrs' and is traditionally used to show respect for a female elder. Ibu Sari has held this moniker for the majority of the PKP Community Centre's nine-year existence and, now in her mid-30's and an open advocate for divorced and abused women, the title of *Ibu* has become a symbol of progress and resistance. The Five Pillar Foundation is a community development organisation, founded by I Putu Wiraguna (Wira, of Balinese descent) and Dr. Alan Yu (Alan, of Asian-American descent), that utilises educational forms of Indigenous Tourism (Bunten & Graburn, 2018) to support the economic, social, and cultural agency of Indigenous Balinese communities- particularly in rural regions that may be most adversely affected by the impacts of traditional tourism. Indigenous Tourism refers to tourism venues and initiatives that are Indigenous owned and, as a term, describes the response of Indigenous people to the consumption and appropriation caused by the 'cultural tourism' of dominant societies (ibid).

The motivations for the Five Pillar Foundation came directly from Wira's own experiences of urbanisation, land loss, and cultural degradation in West Bali, alongside Alan's doctoral thesis on the moral imagination of Balinese Leaders dealing with tourism-related tensions (Yu, 2015). Their 'local heroes' program introduces visitors to integral members of rural communities suffering from colonial marginalisation; including women, children, those with physical or mental disabilities, or those prejudiced for caste or religion. I worked with Wira and Alan, alongside two colleagues Jack Lehane and Seán Conlan-Smith, to co-develop concepts for an international third-level design workshop in Bali to build a community centre (including architectural competitions, design development, budgets, and marketing materials), and a selection of design-based tour packages to support the funding of said workshop (including

business plans, marketing materials and channels). Wira and Alan have been invaluable in providing deeply contextual information about Bali, both practically during my fieldwork and academically through Alan's research publications, which has been insightful to myself and Ibu Sari.

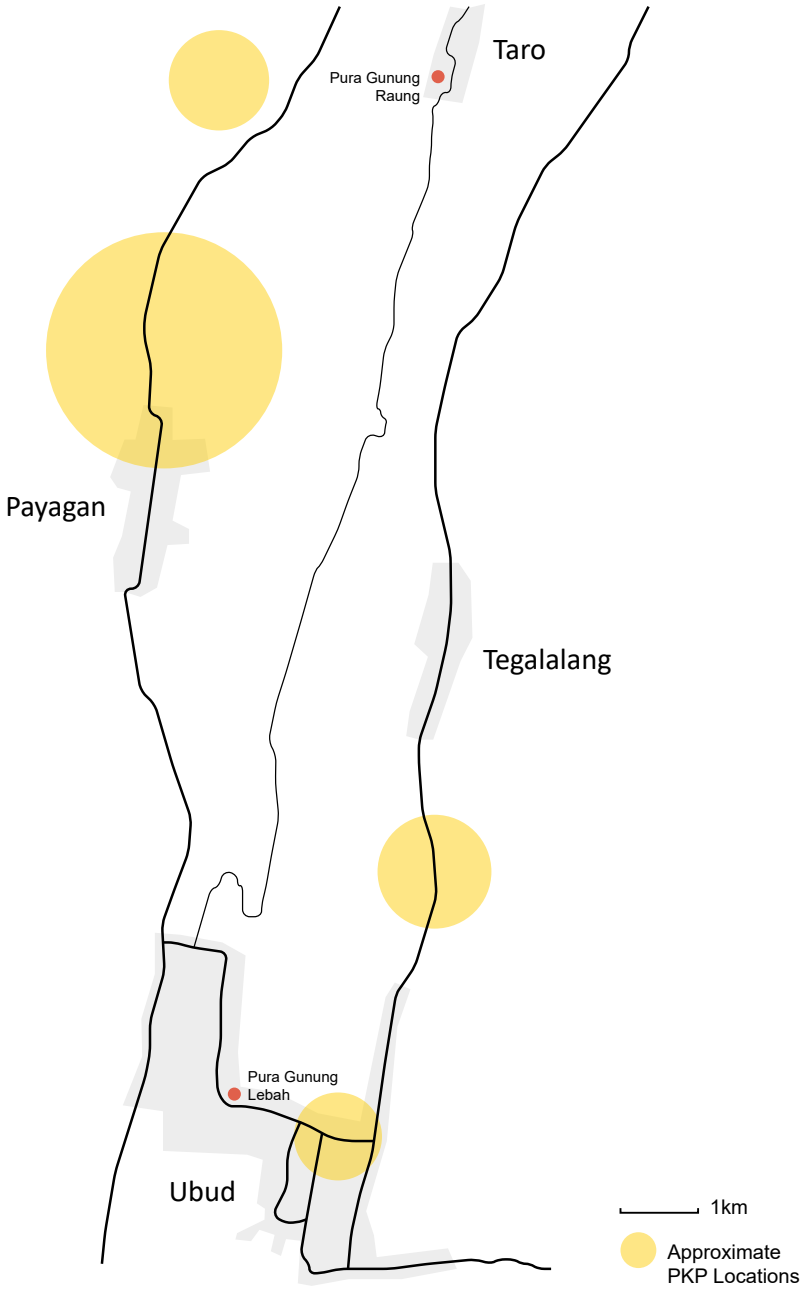


Fig 2.1 The Geographical Locations of the PKP Community Centre Buildings in Relation to Local Landmarks (Generalised to protect marginalised inhabitants of the PKP shelters)

Ibu Sari is the founder of the PKP Community Centre located in Puhu Province, Payangan District, Gianyar Regency, Bali, Indonesia (see Fig 2.1). The PKP Community Centre aims to be a safe haven for Balinese women, who are often highly oppressed and stigmatised by a traditionally patriarchal system- where women are relegated to positions of subservience to men, leading to physical and psychological abuse (Yu, 2015). In early 2020, Ibu Sari asked me to help design a new architectural space for the PKP Community Centre- for more detail on this project see Appendix A. In response to the rapidly changing circumstance surrounding the SARS-CoV-2 pandemic and local land concerns (see 2.1.2), Ibu Sari and I decided to adapt this project into a larger longitudinal research study to co-produce a draft design brief for a new PKP Community Centre.

Between the summer of 2020 and the beginning of 2023, we co-created and implemented a PKP specific approach to architectural research and design based on the discursive practice of Indigenous Storywork- which now composes the majority of this thesis. Such discursive design practices combine discursive elements in a particular way to construct novel meanings around situated, speculative design, and then engage in making these novel meanings tangible within architectural space. This process defines the architectural charge, or the responsibilities that architecture is tasked with by the community. This produced a community driven and place-specific method of Architectural Storywork that centred the PKP community's agency of self-representation within the architectural design process. A complementary outcome of the study was to give PKP community members the knowledge and tools to better engage with native architects and express their architectural needs in authentically Indigenous and decolonial ways.

This chapter outlines the Settings and Strategies for this study based on the relationship between vernacular Balinese architecture and Indigenous Tourism, which refers to tourism venues and initiatives that are Indigenous owned as a response to the consumption and appropriation caused by the 'cultural tourism' of dominant societies (Bunten & Graburn, 2018), and the PKP Community Centre as a space of Indigenous Tourism.

2.1.1 Indonesian Vernacular: A Space of Quiet Resistance

In Alan's doctoral thesis, undertaken with the University of San Diego whilst living in Bali, Yu

(2015) explored the moral imagination of thirteen Balinese leaders, including Ibu Sari, who each struggle with various moral-ethical tensions that have, in part, surfaced due to the drastic changes tourism has made to the cultural and economic capital of Bali. Moral-ethical tensions usually exist between the preservation of existing meanings and the creation of new meanings. For instance, new meanings may need to be constructed to replace older, less relevant, or directly harmful ones, such as colonial values that have eroded traditional ways of being or place-based belief systems that no longer serve contemporary local communities. Moral imagination is an ethical and decision-making concept used to address moral-ethical tensions (ibid).

A section of Yu's (2015, pp.176-186, 257-266) study suggests that architectural spaces 'of dialogue' can connect deeply to; 1) Balinese Indigeneity and self-determinable identity, 2) unique political practices that aim to bring agency and autonomy to people's lives, and 3) the transmission of socio-cultural values within Indigenous Balinese Knowledge. Yu details multiple instances of spaces 'of dialogue' that are comparable to discursive spaces that utilise discourse products to retell personal stories in empowering ways. His examples depict physical architectural spaces that each have discursive properties;

- The Anak Alam Community Centre for Balinese youth organises bare-foot walks around the mountains, crafting fictional stories that encourage participants to critically consider the real-world challenges faced by young children walking to school.
- The Senang Hati community centre for people with disabilities redefines the stigmas surrounding terms related to health conditions or impairments; creating new community values of acceptance through art and craft activities, re-telling stories of disability in their own voices that are passed on to new generations of similar people.
- The PKP Community Centre run healing workshops for marginalised woman, in which skills classes become a metaphorical vehicle for participants to learn about themselves and express their feelings.
- The ARMA museum uses all of its contents- from the paintings to the landscaping and architecture itself- to communicate and represent the traditional Balinese socio-cultural systems.

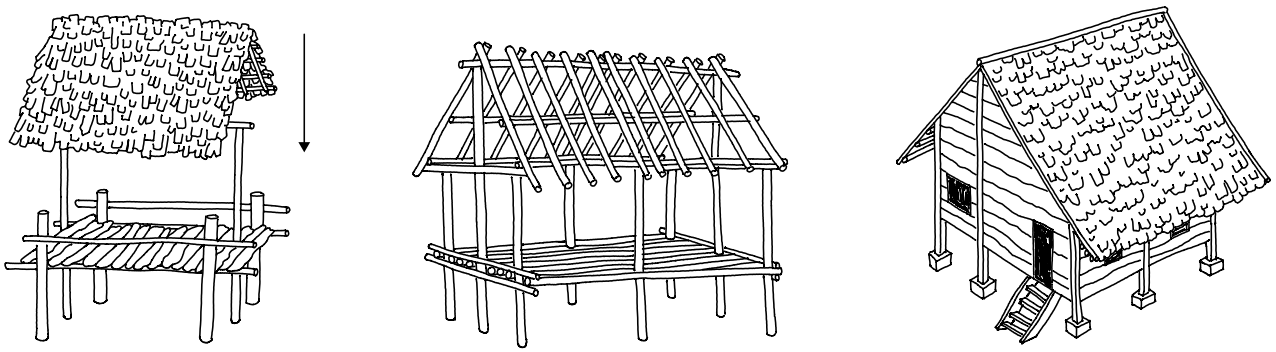
- Omunity organic farm discuss experimental farming techniques through literal and spiritual dialogues on dung, leaves, soils, and other elements of the natural landscape.

In each case, a discourse product was used to communicate different knowledges, from art and craft objects at the Senang Hati community and PKP Community Centre, to landscapes and architectures at the Anak Alam Community Centre, ARAM museum, and Omunity farm.

These spaces become sites of moral imagination by instigating dialogue around the moral-ethical tensions faced by Balinese communities, encouraging actions to be taken to address them. Yu's (2015) work is one of the first to explore decolonial tourism in a South East Asian-specific context, and his study finds that contemporary Balinese leaders face a considerable moral-ethical tension of compromising the cultural and social capital of their community in order to maintain a balance with economic capital. This stems from a deeper historical tension between the rich traditional heritage of Bali and the new consumer-oriented, touristic way of life- a way of life that influences foreign investment into Bali, domestic political policies, and new economic developments (Yu, 2015).

Traditional tourism has had a negative impact on the Balinese population as far back as the Dutch colonisation of the 1930s (Pringle, 2004; Picard, 1997). The rapid tourism of the 1960s onwards has continued to assimilate 'westernised' values into the popular culture, social infrastructure, and educational institutions of Bali (Jensen & Suryani, 1992, Lansing, 1995). This threatens to erode centuries-old cultural traditions (Hobart et al., 1996; Pringle, 2004) and create an imbalance between cultural, social, and economic capital (Yu, 2015).

Tourism also had a substantial impact on Indonesian architecture. The traditional egalitarian (equal or equitable rights) and autonomous (self-governed) structure of Indonesian autonomy has maintained complex relationships between various systems of governance, from royal kingdoms to the common *kampung* settlements. *Kampung* has a range of meanings- from palace-like compounds to semi-permanent slums- but most commonly refers to a collection of vernacular dwellings with particular characteristics including; raised on stilts/ piles above the ground, having a simple gable roof, or being constructed using timber, bamboo, and grass - see Fig 2.2. Similar temporary structures, which may not have traditional characteristics, are called *pondok*- literally meaning 'hut' (Schefold et al., 2008).



Pondok Simple *Kampung* Structure Contemporary *Kampung*

Fig 2.2 Illustrations of Pondok and Kampung Dwellings (adapted from Schefold et al., (2008)- Alastair Brook 2023

These complex systems were misinterpreted as authoritarian and hierarchical by Dutch colonisers, and were appropriated as such- with Kampung being shunned (Gantini in Suartika & Nichols, 2020). In the architectural field, a debate erupted around these vernacular buildings. Dutch architects in the early twentieth century discussed what parts of traditional structures could be counted as 'architecture' as well as which structures were 'Indigenous' and which had 'foreign influences' (Kusno in Suartika & Nichols, 2020). Buildings that passed this architectural evaluation became a form of 'high vernacular' that were allowed to remain (ibid). In the 1930s, the Dutch 'high vernacular' architecture was first used to promote Bali as a tourist destination (Pringle, 2004; Picard, 1997), attracting writers, painters, and photographers to depict Bali and its architecture (Vickers, 2012). This marks one of the first instances of economic capital being privileged over cultural and social capital in Bali, which has continued to this day.

However, Indonesia has been the site for acts of quiet architectural resistance against dominant commercial and colonial structures. In the 1920s Mas Marco Kortodikromo identified *kampung* architecture as the antithesis of the Dutch colonial city. The fact that the basic *kampung* dwellings still existed, despite deep colonial disapproval, represented the reluctance of the colonial governments to tackle housing issues. In this way, Mas Marco was utilising 'vernacular' architecture to highlight the social injustices of coloniality. Mas Marco rallied the Indonesia people behind his representation of the *kampung* as a decolonial tool, leading to the *kampung* becoming a 'popular vernacular' (Kusno in Suartika & Nichols, 2020).

By the 1970s, the Indonesian government was committed to preserving traditional buildings as a tourist object whilst building new developments for those still living in *kampung* (Kusno in Suartika & Nichols, 2020). However, by the 1980s, the government decided to remove *kampung* from their redevelopment schemes, causing an eruption of 'quiet resistance'. One documented example was by a native architect, Romo Mangunwijaya (Romo Mangun), who helped paint a Javanese settlement of *kampung* multiple colours in a bid to stop the residents' eviction. Today, we can see echoes of this 'quiet resistance' in sites such as The *Kampung Pelangi* (the rainbow village), a tourist attraction focused on brightly painted dwellings. The Indonesian government has since provided funding for other *kampung* to do the same, which has gained support from communities and business sectors. This participatory movement appropriates the power of tourism to help maintain traditional Indonesian architectural knowledge and identity through political acts of autonomy (ibid).

These acts of quiet resistance describe methods of storytelling that move around and through architectural sites. Matunga (in Grant et al., 2018) describes these as the 'quiet narratives' of Indigenous architecture that tell a more muted, unassuming, and poignant story of Indigenous survival in the modern era. Such narratives tell their own story of Indigenous compromise and adaptation, offering critical design insights into what could be (rather than what is), and can be seen as design templates for how Indigenous communities might live if they had cultural agency and autonomy over architecture and design. This is labelled a 'structural response' to colonial architecture and engages Indigenous communities to ask (and answer) fundamental questions around what Indigenous self-determinism looks like, what self-sufficiency looks like, and how cultural and spiritual values can be articulated in the built form (ibid, pp.308-309).

Matunga (in Grant et al., 2018) believes that quiet architectural narratives subvert colonial influences on design, particularly spatial dualisms and binaries, in ways that are critical to Indigenous architectural futures because they provide insights into what could have been and what might still be. Yu (2015, pp.176-186, 257-266) describes similar quiet narratives of architecture within Bali. He details how Balinese leaders focus much of their energies on constructing physical and discursive "spaces for dialogue". These spaces help the development and empowerment of the Balinese people by producing new narratives

around important Balinese values and the sharing of personal insights. From a performative perspective, producing new knowledge simultaneously produces space, and space is made by travelling (Rundstrom, 1995; Ingold, 2000). Therefore, knowing is a form of travelling through space that follows the movement of Indigenous people along paths that lead around, away from, or towards places (Ingold, 2000). Often, Indigenous narratives either lead away from the historical violence of colonialism by "speaking back" (Behrendt, 2016), or towards a transformation of colonial reality by "speaking forward" (Lee-Morgan in Archibald et al., 2019). Yu's key findings (2015, p.257) place 'space' as *the singular* intersection between a 'Western' colonial mindset and a traditional Balinese-Hindu mindset; spaces that speak back to what could have been and speak forward to what might still be.

2.1.2 The PKP Community Centre: A Space of Indigenous Tourism

The PKP Community Centre is not a singular, clearly defined physical space. Instead, it is a metaphorical space defined by a collection of ever-changing buildings spread across an area of approximately 85km^2, from the urban sprawl of Ubud to the rural jungle of Banjar Selasih. Bar the exception of one recent construction at Banjar Selasih, these buildings all fall into the definition of contemporary Indonesian vernacular. These vernacular structures reinforce unequal power relations between Indigenous groups and the dominant groups that dictate how tourism operates- from community level organisations to international bodies- who can manipulate the ways in which Indigenous identity is presented within architectural sites of tourism (Bunten & Graburn, 2018). The PKP community have limited agency or autonomy over the selection, renovation, or lease of the buildings they use, having to make difficult decisions between tolerating below average standards or investing in non-moveable assets, and always facing the lingering possibility of eviction (Sariadi, 2023- personal communication).

The PKP community are also at risk of being displaced from Banjar Selasih by development. The land on which the PKP Community Centre is currently situated is temporarily leased from a family member but, at the time of writing, is locked in a bureaucratic battle for ownership that could see the PKP community evicted, and the land developed on for capitalist gain. In Bali, inheritance of land passes down through the male bloodline of a family, contesting Ibu Sari's right to utilise the site for female and community empowerment initiatives- both literally and figuratively.

In Ibu Sari's own word, this means that the PKP community is "homeless" (Sariadi, 2023- personal communication), as there is a constant threat of community displacement. At the time of writing, the legal case for retaining the PKP Community Centre's land is currently in stalemate, after requiring extensive monetary loans to engage in legal action- leaving the PKP community in debt and without sufficient capital to purchase their own land. To sustain the PKP Community Centre in this precarious situation, Ibu Sari relies on Indigenous Tourism, through catering services to the hospitality and events sectors, and local clothing shops, to provide 95% of their total income. The other 5% of the community's finances come from donations by domestic and international organisations.

One of the few elements that the PKP community have control over is the use and access of their architectural spaces. By displaying or "veiling" certain spaces, the PKP community can mobilise different identities to various audiences for different political ends- whether to change policies or protect their culture from political influence (Theodossopoulos in Bunten & Graburn, 2018; Douny in Bunten & Graburn, 2018). This is achieved by creating boundary and frontier spaces (Dunbar-Hall, 2001). At boundary spaces, tourists are denied access to events and their meanings. In frontier spaces, community leaders like Ibu Sari help tourists to comprehend the significance of events, so that all participants can simultaneously input to the meaning of the event. Different events can include both boundary and frontier spaces in constant flux, as each event is unique and exhibits a different range of relationships between its participants.

Bunten (2008) describes this as "covert resistance" or the "deconstruction" of tourism, where control over space allows Indigenous people to participate in dominant commercial structures whilst maintaining internal cultural values and shifting the attitudes of visitors. Palomino-Schalsa (in Bunten & Graburn, 2018) decentres the dominant discourses that locate Indigenous people in positions of otherness by exploring the motivations and actions of Indigenous hosts, particularly by inviting guests to share in their worldview as a form of resistance. Bunn-Marcuse (in Bunten & Graburn, 2018) believes that this creates a liminal space for Indigenous people to transform core cultural values into political activities outside of tourism.

Other authors, such as Dunbar-Hall (2001), agree that meaning is constructed in these spaces through a diverse discourse of relationships, controlled by the cultural leader and their personal values. Yu's closing statements on space (2015, pp. 265-266) also suggest that Balinese leaders utilise space to influence communities based on their own values. Shepherd (2002) similarly suggests that we should examine the intent of the cultural leaders and treat any cultural modifications they make for tourists as a purposeful re-contextualisation of Indigenous tradition and identity as acts of resistance. This is because spaces of Indigenous Tourism allow hosts to impart their worldviews on visitors; describing the ongoing effects of colonisation, sharing authentic cultural artefacts and stories that assert Indigenous custody of Land, or explaining the diversity of Indigenous peoples that defy stereotypes and can change the perception of tourists (Bunten & Graburn, 2018).

2.1.3 The Responsibilities of Architecture

It is clear that architectural spaces of dialogue have become an integral way for Balinese communities to face moral-ethical tensions around colonialism and speak new decolonial goals and values forward to future generations. These spaces are imbued with a responsibility to allow current and future generations of Balinese people to show up and dwell based on their own conditions, needs, goals, and values by critically reflecting on and appropriating colonial experience and remembering pre-colonial lifeways (Fry, 2017). This situated, place and people specific responsibility of architecture is defined as an 'architectural charge' (Kanekar, 2002; 2015; in Psarra, 2019; Psarra, 2018); a critical, imaginative, and architectural stance towards dominant power structures through an interaction between design knowledges and discursive languages (see Table 3.2). The charge is not produced by an architect, but is given to an architect by someone else, somewhere else, somewhen else. The architect is then tasked with defining the boundaries, criteria, and procedures of this responsibility within a design brief.

This following section details the strategies I have developed for this study, which follow the existing work of Balinese communities to create 'spaces of dialogue' by framing an architectural charge around the PKP community's own values (parameters and goals) for their new architectural space.

2.2 Strategies

The following section discusses data on the values that Ibu Sari shares within the current spaces of the PKP Community Centre and the values that she describes for future spaces of the PKP Community Centre, defining three strategies that connect these values to Balinese Identity, Politics, and Knowledge. These three strategies are then developed in Chapters 3 and 4, before being applied in Chapters 5 and 6, and evaluated in Chapters 7 and 8.

2.2.1 Current Values of the PKP Community Centre

Ibu Sari has developed her own set of values at the PKP Community Centre called the 'PKP rules' (see Table 2.1), which are crucial to the construction of meaning in the current spaces of the PKP Community Centre (Sariadi, 2021- Personal Communication). These rules are centred around Ibu Sari's own personal philosophy of Balinese Indigeneity and the PKP community's complex positionality within Indigenous Tourism.

Table 2.1 The PKP rules

3 Es	Everybody is a teacher, Every place is a classroom, and Every moment is a lesson
5 Ks	Togetherness, caring, harmony, trust, and love
3 Ps	Passion, Patience, and Perseverance
WAO	Willing, Ability, Opportunity- many people are 'willing' to do things, many are 'able' to do them, but there is a lack of 'opportunity'
LAF	Look, Ask, and Feel- Look more, observe more, ask more, feel deeper, then take action even if the end result might not be what you expect
CPI	Copy, Paste, Improvise- to share life experiences with those who have not experienced it, including the heritage of our ancestors, but be willing to improvise and improve those ideas
Life Map	The experiences of others that can help guide us on our journey
6 Ks	How we can do things fast, beautifully, elegantly, tidily, comfortably, and safely
Bali Time	Do not 'take it or leave it', but 'take it or take a little more time' to slowly progress through trial and error

All of the PKP Rules are embodied in the single phrase, “the motivation has to come from their experience, and from themselves. This is our motto- “From us, to us”” (Sariadi, 2019- Interview). This is representative of her personal view on Balinese Indigeneity, mirroring the general Balinese understanding of themselves as *masyarakat adat* (literally “people whose life is governed by traditions”)- (Hauser-Schäublin, 2017).

Indigeneity is a contested concept that has been used to misrepresent and ‘universalise’ the identity of Indigenous peoples around the world. Within this thesis, it describes the self-representation and self-determined identity of the Balinese people- more specifically of Ibu Sari and the PKP community- who are usually defined by colonial conceptions of being “Indigenous” such as being simple, innocent people who are ‘close to nature’ or ‘spiritual’, and therefore either threatening or in need of protection (Gerharz et al., 2018; Bunten & Graburn, 2018).

I understand that Indigenous people have specific protocols and preferences for identifying as Indigenous as well as for sharing their situated, people and place specific, knowledges. Therefore, my definition of Balinese Indigeneity derives from the Balinese people’s connection to land and ancestry, as well as their extensive connection to, and deep influence from, global socio-cultural, socio-economic and political realities (Gerharz et al., 2018).

For Ibu Sari, Balinese Indigeneity is the preservation and application of pre-colonial knowledge, passed down by her ancestors, with the purpose of maintaining harmony in life (Sariadi, 2022- personal communication). The harmony that Ibu Sari speaks of is the application of the Tri Hita Karana- the harmony between *palemahan* (environment/ Nature), *parahyangan* (the universe/ God), and *pawongan* (people/ Human) that has been an integral part of Balinese society for centuries (Peters & Wardana, 2013; Pramartha & Davis, 2016). Ibu Sari does not believe this is something ‘achievable’ in the here-and-now, but is an end goal that is always ‘to come’ in the future. It requires individuals to engage in a constant process of reflection and adaption to the ever-changing circumstances of life.

For Ibu Sari, a vital part of this process is the application of six traditional Balinese concepts- see Table 2.2 (Sariadi, 2023- Personal Communication)

Table 2.2 The Six Balinese Concepts of Ibu Sari's Balinese Indigeneity

Panca Sradha	The five beliefs of being including *brahman* (god), *atman* (soul), *karma phala* (the law of cause and effect), as well as *karma phala* and *reincarnasi* (below).
Karma Phala	The law of cause and effect.
Reincarnasi	Reincarnation.
Moksa	Detachment from earthly possessions to merge with *brahman* (god).
Tatuam Asi	I am you, you are me, we are one. The foundational principle of *karma phala*.
Tri Prahmana	The tools of knowledge: are *bayu* (breath power or spirit energy), *sabda* (sound power or communication), and *idep* (mind power, or cognitive thought).

2.2.2 Future Values of the PKP Community Centre

I only engaged with the PKP Community Centre's architectural project after being invited to by Ibu Sari at the start of 2020 and ensuring, through Ibu Sari, that the PKP community had set clear values- parameters and goals- for the project. These values were initially told to me by Ibu Sari within a traditional architectural brief that described the site specifications and building requirements for a single structure to be built at the current PKP Community Centre location. This project was a collaboration between Ibu Sari, myself, and two other Irish architectural designers- Jack Lehane and Seán Conlan-Smith. Previous designs for a kitchen, cinema, and bamboo workshop, drafted by an unnamed Balinese architect, were used as precedent (see Appendix A).

As the current PKP Community Centre became at risk of being displaced from Banjar Selasih by development during the SARS-CoV-2 pandemic (see 2.1.2), the parameters of the project were widened to include the design of an entire new PKP Community Centre, whilst the goals were made more specific to include: the self-determinism for the PKP community who have little to no power over the events leading to their eventual displacement; architectural autonomy for the PKP community so that they might design, build, and take ownership of a new community centre without risk of displacement; and to continue creating their own micro-culture by sharing the PKP rules and stories with new people in new places.

These values are place and people specific instances of Bunten and Graburn's (2018) Indigenous Tourism movements of Identity, Politics, and Knowledge respectively, which the

PKP community have already being working towards through non-architectural projects (see 2.2.3 and Table 2.3 for detailed definitions). The work in this thesis aims to help the PKP community apply these values within the architectural field. Ibu Sari invited me to collaborate with her and the PKP community in this project because she felt that Balinese architects were not asking her or the PKP community ay questions about their values or goals for future architectural space.

My positionality as a non-Indigenous researcher and a non-architectural design practitioner gave space for these critical explorations by allowing me to enter into this study without any pre-conceived notions of Balinese or Western architecture. This placed me in a unique position to facilitate projects with the PKP community in ways that have minimal influence from Undagi (sacred Balinese architects who have been reported to gatekeep Balinese architectural knowledge) or from the Western institutionalisation of Balinese architectural knowledge (that promotes unsustainable use of non-local resources and energy intensive technologies that are not harmonious to Balinese socio-ecological systems)- see 4.3.1 for more detail.

Since our earliest discussions on designing a future PKP Community Centre, Ibu Sari has called it the "PKP Bale Tong Tong", after the traditional Balinese slit-drums that are used to communicate to the community (Sariadi, 2019-2023- personal communications). Tong Tong is the pre-colonial name for what is more commonly known today by the Dutch colonial name of Kulkul, or Kul-Kul (Karinata, 2022- interview). These drums are hung in an architectural structure called a Bale Tong Tong. The traditional definition of a *bale* is a building in which the community gather to discuss civic and customary laws. Most contemporary Bale Tong Tong are accompanied by a Wantilan, a large area where the community gather. In a standard Bale Tong Tong such as the one at Banjar Selasih, there are four Tong Tong drums; one to communicate the whole *banjar*, one to communicate to men, one to communicate to women, and one to communicate to the *subak* workers (see Fig 2.3 on next page).

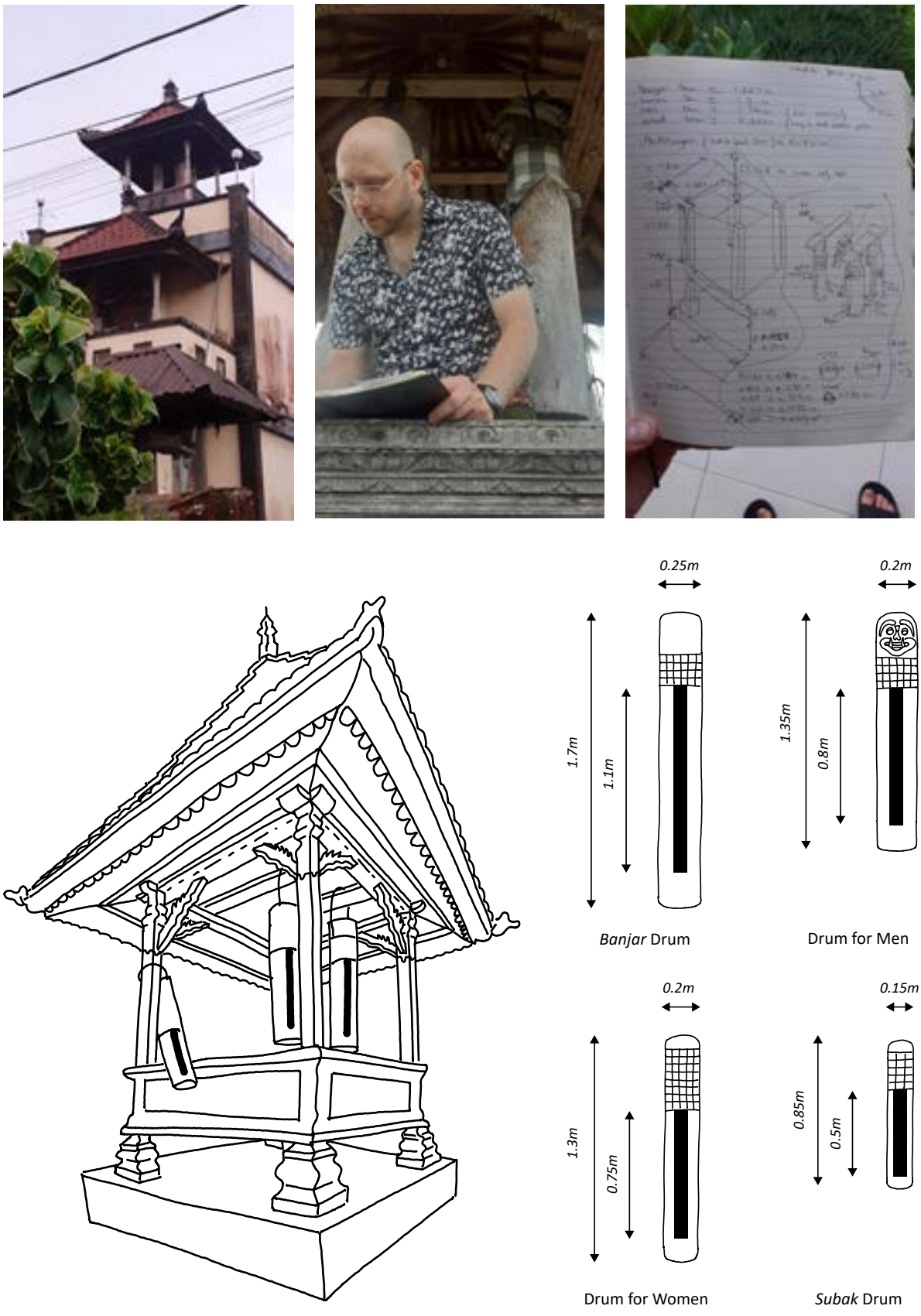


Fig 2.3 Field Photographs and Drawings of the Banjar Selasih Bale Tong Tong and Tong Tong Drums (access to the Bale Tong Tong and permission to record the measurements was granted by Drs. Wayan Sudiarta the banjar Kelian Adat or Head of Customs)- Alastair Brook 2023

Each drum is a different size and creates a different pitch when beaten, allowing the community to differentiate between messages for different groups of people. Different beats and tempos also signify different meanings, such as community meetings, deaths, disasters, or other emergencies. Each community has different beats for the same meaning, making each Tong Tong innately place-specific and irrevocably tied to a community (Pramartha & Davis, 2016; Desnanjaya & Sudipa, 2019; Gantini in Suartika & Nichols, 2020). It was immediately clear why the future PKP Community Centre was referred to as a Bale Tong Tong- a building that can communicate specific messages or values to disadvantaged groups of the community, inviting them to meet together in a space of dialogue and action.

The Tong Tong becomes a discursive tool by communicating Ibu Sari's abstract system of values, enabling a mental and social construct of architecture for the PKP community. The Tong Tong was originally introduced to Bali through Rsi Markandeya and his Hindu followers in the 8th Century, who are credited with establishing the basic foundations of 'Balinese civilisation' around the Taro region- less than 3km away from the PKP Community Centre (MacRae in Reuter, 2006).

In this time period, the Tong Tong played a vital role in the *subak* irrigation system, which was established in Bali before any village (*desa*) or village organisational systems (*banjar*) were created (Lansing in Watson, 2019). The *subak* system is upheld today as a model for the whole of Balinese society and integral to their way of life, because it embodies the Tri Hita Karana principle by linking farmers to the land, to each other, and to their ancestral deities and gods through organising cycles of labour (ibid). The *subak* Tong Tong drum was used to guide the pace of cultivation into explicit rhythms of ritualistic labour that embody the Tri Hita Karana.

The discursive concept of the Tong Tong provides opportunities for the PKP community to have spatial discourses around the future of their architectural space; creating mental constructs of architecture in the here and now that re-communicate and re-conceptualise the PKP rules in relation to the Tong Tong. Ibu Sari and I use the name Tong Tong partly as a way to "remember to remember" (re-telling or re-remembering) these principles (Watson, 2019), namely the Tri Hita Karana contextualised by Desa Kala Patra, and partly as a way to transmute these principles into new critical perspectives.

This is a process that, firstly, reveals the unmarked privilege of colonial and capitalist systems that have been shaped over time as a contrast to the "Indigenous Other"; a set of colonially derived values, institutions, laws, and symbology created to draw visitors into specifically built architectural spaces of tourism that commodify pre-contact, pre-colonial spaces that are 'close to nature' or 'spiritual'. Secondly, it humanises this difference by shifting touristic perceptions of Indigenous people away from the 'Indigenous Other' to one of 'fellow human' that; honour pre-colonial lifeways, support a re-discovery of themselves and demand recognition of their self-determined identity, and encourage respectful participation with alterity in contemporary society that invests in Balinese futures (Bunten & Graburn, 2018).

The Tri Hita Karana philosophy affirms that happiness, prosperity, and peacefulness are attainable when the people, environment, and the universe coexist in harmony with each other in daily life (Peters & Wardana, 2013; Pramartha & Davis, 2016). However, the Tri Hita Karana is practiced differently in different places through Desa Kala Patra; *desa* = place, such as location and orientation, *kala* = the circularity and longevity of time, *patra* = the circumstances- situations, actions, and identity- of individuals and communities. This concept dictates that humans are not passive individuals, but will always try to adapt themselves to the different landscapes that influences their lives, i.e. spatial landscapes that describe location and orientation, temporal landscapes that describe chronological time and the time of memory, and contextual landscapes that describe people's actions and identities (Pramartha & Davis, 2016; Clendinning, 2022). By centring the relationship between humans, nature, and the universe in different spatial, temporal and contextual landscapes, Ibu Sari is investing in the futures for the PKP community and the Balinese people as a whole.

2.2.3 Three Strategies of Identity, Politics, and Knowledge Movements

Yu's (2015) original findings on Balinese 'spaces of dialogue' correlate with Bunten and Graburn's (2018) general 'movements' of Indigenous Tourism and Matunga's (in Grant et al., 2018) concepts of Indigenous architecture 'in' place. These concepts align with the PKP community's situated values- parameters and goals- for architectural space (Sariadi, 2019-2023). By triangulating these four data sets, two general and two situated, I have formed a threefold strategic framework (see Table 2.3 on next page).

Table 2.3 Three Strategies of Identity, Politics, and Knowledge Movements

Strategies from Yu (2015), Matunga (in Grant et al., 2018), Bunten and Graburn (2018) and Sariadi (2019-2023)
Strategy 1: Identity Movements • Affirm Balinese Indigeneity and self-determinable identity (Yu, 2015). • Identity Movements consider physical movements through time and space, i.e. the literal movements of tourists and Indigenous hosts as they encounter each other in touristic architectural sites, and how these encounters define Indigenous identity (Bunten & Graburn, 2018). • Architecture embedded in the evolution of Indigenous people and place-based aesthetics; using Indigenous palettes, colours, designs, patterns, geometry, sculptural forms, and shapes that articulate an Indigenous narrative of identity through relationships to land and each other (Matunga in Grant et al., 2018). • The practice of values across contextual landscapes that describe people's actions and identities. A desire for self-determinism for the PKP community so that they might have the power to dictate their own life events. Implemented through the 3 Es (Everybody is a teacher, Every place is a classroom, and Every moment is a lesson), WAO (many people are 'willing' to do things, many are 'able' to do them, but there is a lack of 'opportunity'), and the 5 K rule which focuses on authentic relationships (Sariadi, 2019-2023).
Strategy 2: Political Movements • Enable unique political practices that aim to bring agency and autonomy to people's lives (Yu, 2015). • Political Movements locate Indigenous identity and politics within tourist activities, identifying how identity and politics shapes and are shaped by touristic activities (Bunten & Graburn, 2018). • Architecture that uses Indigenous natural resources, materials, and construction methods, or introduced materials, technologies (knowledges of making and doing), or approaches that have been adopted, adapted, or nuanced to Indigenous cultural and social needs (Matunga in Grant et al., 2018). • The practice of values across spatial landscapes that describe location and orientation. A desire for architectural autonomy so that they might design, build, and take ownership of a new space. Implemented through LAF (Look more, observe more, ask more, feel deeper, then take action even if the end result might not be what you expect), CPI (Copy, Paste, and Improvise on ancestral heritage and personal experiences), and the 6 K rule which focuses on urgency (Sariadi, 2019-2023).
Strategy 3: Knowledge Movements • Support the transmission of socio-cultural values within Indigenous Balinese Knowledge (Yu, 2015). • Knowledge Movements explore the intellectual movement of cultural knowledge through time and space, considering how knowledges of the past and future are manifested in the present (Bunten & Graburn, 2018). • The practice of values across temporal landscapes that describe chronological time and the time of memory. A desire to create and share their own micro-culture through the PKP rules and stories with new people in new places. Implemented through Life Map (The experiences of others that can help guide us on our journey), Bali Time (slowly progress forward through trial and error), and the 3 P rule which focuses on sustainment (Sariadi, 2019-2023).

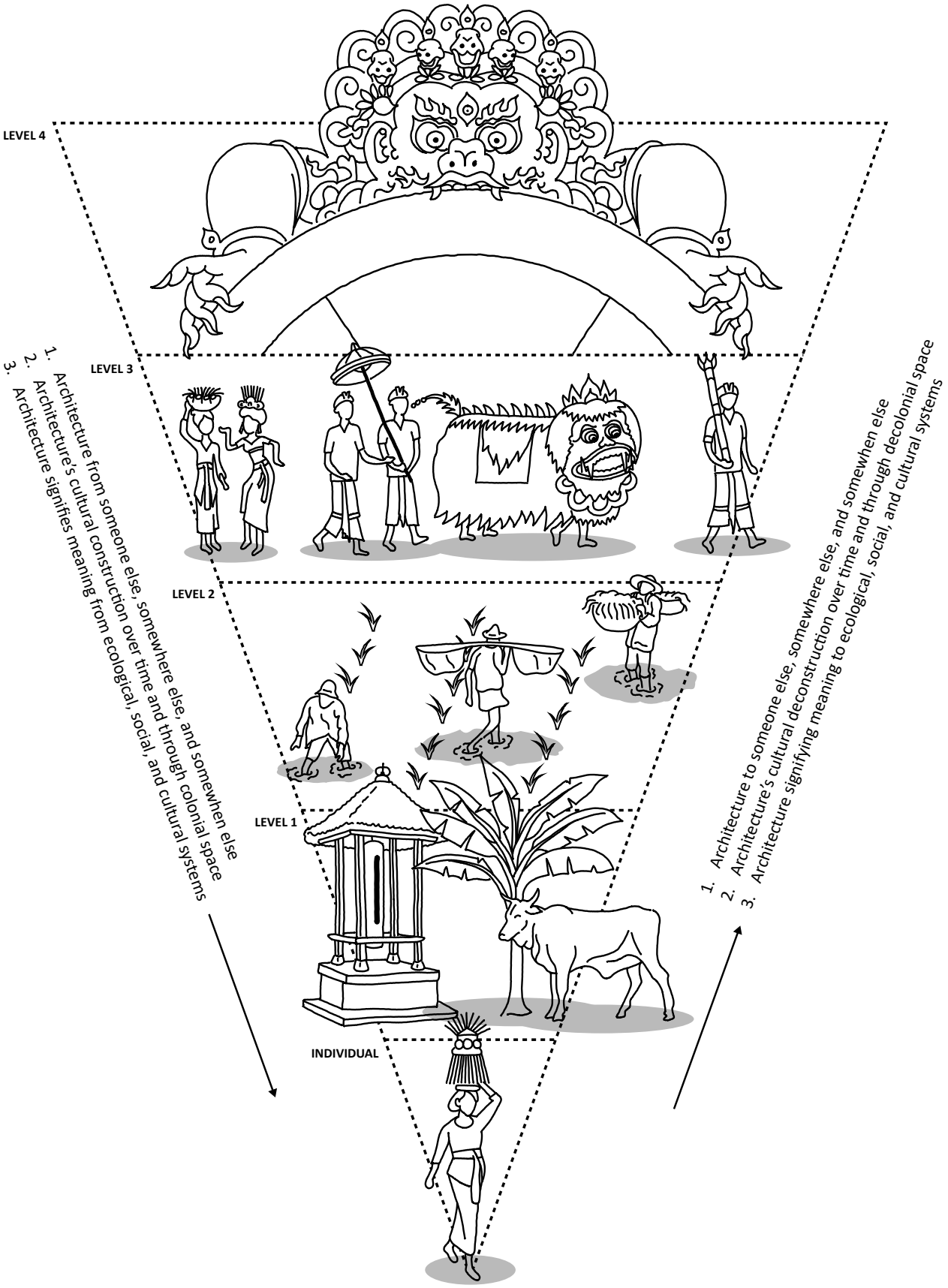


Fig 2.4 Summary of the Theses' Strategic System (depicting the core movements of each strategy to and from the individual through the Balinese 'knowledge-practice-belief' complex)- Alastair Brook 2023

These three strategies combine to create a strategic framework for the Tong Tong as a discursive tool- describing a transformative process from architecture that signifies colonial influences on Balinese systems from someone else, somewhere, and somewhen else, to architecture that reinstates decolonial and pre-colonial Balinese systems to someone else, somewhere else, somewhen else. These strategies are detailed in the following sub-sections.

Each strategy is further defined through the lens of the Tong Tong as a discursive tool; a device used in each strategy to support the construction of new architectural representations of the PKP Community Centre that do not reproduce colonial conditions of power and politics. In doing so, I connect each strategy to aspects of Jacques Derrida's 'auto-affection', 'radical hermeneutics', and 'architectural deconstruction' respectively, which align almost seamlessly with Matunga's (in Grant et al., 2018) 'structural response' to the colonisation of Indigenous architecture (see Fig 2.4 for a summary of all three strategies).

2.2.4 Strategy 1: Identity Movements

Identity movements consider who, where, and when architectural discourses come from, and supports self-determined Indigeneity for the PKP community through respectful relationships with others, considering architecture to someone else, somewhere else, somewhen else.

As the PKP community imagine possible future architectures through the discursive lens of the Tong Tong, they move between two states of identity in a process that Derrida calls 'auto-affection' (Lawlor, 2022); where the action of imagining themselves changes their identity from *the people who imagine* to the *people being imagined*. The people whom the PKP community imagine in the future are not exactly themselves, but someone else, somewhere else, and somewhen else (Ibid).

Simultaneously, the PKP community are also re-conceptualising values that originate far back in history from someone else, somewhere else, and somewhen else in the past. For the Balinese people, identity is situated within the Tri Hita Karana that connects them to nature (and ancestral deities) and the universe (and their gods). Indigenous architecture is situated within, and an extension of, this relationship- existing symbiotically with people, nature, and the universe (Matunga in Grant et al., 2018). Therefore, the otherness of the PKP community's identity- from or towards someone else, somewhere else, and somewhen else-

not only considers the other as people, but also nature and the universe. By embodying the Tri Hita Karana philosophy, the Tong Tong also represents the inherent otherness of people, land, and universe within Balinese identity. As a discursive tool, the Tong Tong can be used to situate this alterity alongside the identity of the PKP community in a respectful relationship.

In a 1994 interview (Derrida, Brunette, & Wills, 1994), Derrida claims that architecture's irreducible responsibility is to bring together the self and other in a respectful relationship. Respectful relationships involve responsible decision making that is not based on what we know, but account for the complete alterity of the other so that we might exceed what is already known and create something absolutely new (Vitale, 2018, pp.36-38). This requires us to make architectural decisions based on our encounters with the other (Vitale, 2018). In a detailed analysis of Derrida's work, Vitale (2018, pp.37-43) suggests that the most immediate 'other' to consider is that of future-generations and, indeed, our future selves; we must design architecture that grants future inhabitants the chance, space, and places to show up, dwell, and live according to their own circumstances rather than our own. The act of dwelling according to our own circumstances equates to a self-determination in how we live, the events we engage with, the actions we take, and the identities we affirm, rather than having these dictated to us by our physical and socio-cultural environments.

Yu (2015) discusses extensively how touristic and colonial changes to Balinese socio-cultural values have forced generations of Balinese people to appropriate rich cultural identities and abandon traditional ways of living with the land through vernacular architecture. Instead, they adopt the "Indigenous Other" identity that has been projected onto them by dominant touristic systems (Bunten & Graburn, 2018). Not surprisingly, this projected identity does not align with the pluriverse of experiences lived by the Balinese people. For Ibu Sari (Sariadi, 2019- interview), redefining Balinese Indigeneity must start with a deep understanding of people's individual experiences through a process of sharing stories with new people in new spaces using the 3 Es (everybody is a teacher, every place is a classroom, and every moment is a lesson) and the WAO (willingness, ability, opportunity) rules.

Ibu Sari believes that opening themselves up to receive new knowledges- from anyone in any place and any moment- helps the PKP community know themselves deeper, understand

others better, and “see something good for others” (Sariadi, 2019- interview)- whether that ‘other’ is other people, future generations, or their future selves. In opening themselves up to alterity, the PKP community connect more to the otherness that is inherent within their own identity. Not only does this strengthen personal understandings of identity, but it also helps to establish wider communal identities.

As Ibu Sari explains, many people are willing to do things, many are able to do them, but there is a lack of opportunity to know ‘how’; *how* to respond in unpleasant situations, *how* to be more creative, *how* to improve things, etc. (Sariadi, 2019- interview). Sharing allows community members to a) understand that they are not alone in their struggles, b) learn how to shed the feelings of shame attached to their own experiences, c) encourage them to pursue meaningful activities towards social change, and d) promote a sense of pride in their achievements (ibid). In doing so, the PKP community transform the rich cultural heritage of Bali into new meanings that are true to their complex contemporary identity.

Ibu Sari believes that the PKP community are “thirsty” to have a space where they can learn to be independent and self-sustaining in this way; so much so, that she wishes a PKP Community Centre “should be everywhere, in every district” so that it is possible “to continue the work, because this is worth it from generation to generation” (Sariadi, 2019- interview). In this way, Ibu Sari views any future community centre as a space that connects the identity of the PKP community to unknown others and future generations, connected through intergenerational gene-culture relationships with nature (ecologies) and god (the universe).

2.2.5 Strategy 2: Political Movements

Political movements consider architecture’s cultural construction over time and through colonial space, supporting the PKP community’s architectural autonomy by developing new design cultures that deconstruct architecture over time and through decolonial space. This might improve their experiences and re-conceptualise their expectations of architecture.

The discursive lens of the Tong Tong also allows the PKP community to engage in a ‘radical hermeneutics’, a process used by Derrida that aims to “breach” current understandings of architecture (Derrida, Brunette, & Wills, 1994, p.27). In his later life, Derrida spent much time analysing the complex relationship of Western philosophy and architecture- in particular

the hierarchal oppositions (hierarchies of binaries or dualities) that have emerged from these relationships, such as light over darkness, interior over exterior, or more importantly here, thought over craft. Derrida suggests a 'radical' hermeneutics that tasks communities to, firstly, uncover exploitations, oppressions, and exclusions within their interpretation of architectural oppositions and, secondly, seek to turn those ideas on their heads, unsettle expectations, and establish new modes of architectural practice (Coyne, 2011, pp.76-82).

This requires an engaged architecture with clarity about its place and people-based origins as well as an acute awareness of its evolution over time and through colonial space (Matunga in Grant et al., 2018). Indigenous architecture recognises that the 'universal' ideologies of Western architecture are not universal, but culturally constructed and imposed on Indigenous people. Instead, any distinctions of binaries or dualisms simply evaporate or, at the very least, are refracted through an Indigenous lens and reconstructed/ re-conceptualised using Indigenous paradigms (ibid). The Wantilan (a ceremonial gathering place for the community at the Bale Tong Tong) can support this process as an Indigenous 'threshold' between culturally constructed binaries. The Wantilan is a transition space between various architectural oppositions including; sacred/ secular, as community members move from the common space of the village to the revered space of the Bale Tong Tong; public/ private and self/ other as community members move from the privacy of their own lives into discussions and actions that affect the community as a whole; and past/ future, as community members connect with their ancestral deities and consider future actions. As a discursive tool, the Wantilan imagines a space in which the PKP community can consider such binaries and potentially subvert or dismantle them (ibid).

This strategy focuses on real-world efforts to unsettle expectations of architecture by paying particular attention to architectural oppositions that restrict a people's ability to show up and live according to their own circumstances. Coyne (2011) suggests that the juxtapositions of architectural discourse provide a practical route to identifying oppositions: inside/ outside, centre/ margin, structure/ ornament, light/ dark, noise/ silence, sensory saturation/ sensory absence, service areas/ areas to be served, past/ future, time/ space, east/ west (north/ south), front/ back, life/ death, heaven/ earth etc. Hermeneutics is, foremost, the study of interpretation. When we interpret architecture, we arrive with expectations and assumptions

of how we will experience a building based on our personal history and engagements within cultural values (ibid).

Similarly, Matunga (in Grant et al., 2018) discusses how Indigenous architecture must not only perceive space in a conceptual-cultural sense, i.e. a people's expectations of architecture based on dominant ideology, but also understand how people move through and utilise space in a more active-cultural sense, i.e. a people's practical experiences of architecture. In Bali, it is often expected that a building or compound with the correct orientations towards Mt Agung will give a better quality of life, or that a kitchen entrance facing southward towards Brahma, the god of fire, will impact its success. It is possible that these expectations are not met, and individuals must adjust their expectations based on what is learnt from their encounters with architecture (Coyne, 2011). This is crucial to understanding how space can be (re)framed and (re)purposed for the community's needs (Matunga in Grant et al., 2018).

For Ibu Sari, LAF-ing (to Look, Ask, and Feel) offers a way for the PKP community to consider if their expectations are met, and CPI (Copy, Paste, Improvising) offers a way for the PKP community to learn from these encounters and adjust their expectations. Ibu Sari believes that LAF-ing is a way for anyone to learn from knowledge by, firstly, respecting the teachings held within them and, secondly, being willing to adapt their mindsets based on those teachings (Sariadi, 2019- Interview). We must learn from our lived experiences of architectural space, treating those experiences as valid knowledge with the power to teach us something new.

Ibu Sari explains further that "many things have been experienced before. If we talk about an architect, or building, everything has been written down, the heritage of our ancestors. But what we do is CPI- Copy, Paste, Improvise" (ibid). What we experience in our encounters with architectural space has most likely been experienced before and has been repeated through copy/ paste of architectural patterns. An architect copies signifiers from other architects or other buildings and applies them to their own buildings, such as forms, structures, and materials that engage with situated socio-cultural or ecological philosophies. These buildings then reinforce certain socio-cultural or ecological philosophies to the communities that inhabit them- so much so that the community, and possibly the architect, would consider themselves the owner and instigator of those philosophies and be unwilling to acknowledge that they are copied from someone or something else (Ourghourlian, 2016).

The processes of LAF-ing (look, ask, and feel) and CPI (copy, paste, improvise) provide an opportunity to for the PKP community to "breach" this cycle by considering their own expectations of architecture, learning from their experiences of architecture (which may or may not meet their expectations), and improvising new ways to know and do architecture that improve their experiences and re-conceptualise their expectations. This can place more architectural agency and autonomy into the hands of the PKP community.

2.2.6 Strategy 3: Knowledge Movements

Knowledge movements consider how architecture signifies meaning from ecological, social, and cultural systems and supports the PKP community in constructing architecture that responds to the relationships between people and their ecologies- as communicated through narratives of Indigenous knowledge.

As a discursive tool, the Tong Tong provides an opportunity for the PKP community to re-connect to, re-conceptualise, and re-tell Indigenous Knowledges that are deeply connected to land and ecologies. This is related to the Tong Tong's original use within the *subak* irrigation system and its communication of the primary Balinese principle of the Tri Hita Karana. Berkes (2018) defines such connections between land and culture as a 'knowledge-practice-belief' complex. Generally, these complexes can be defined as four levels of knowledge available to any one individual within a community.

Level 1, the first and foundational level, is local knowledge of animals, plants, soils, and *landscapes*- both natural, man-made, literal, or metaphorical. Level 2 describes resource management that involves local environmental knowledge, practices, tools, techniques, and understanding ecological processes and performances. Level 3 involves community and social institutions who can offer coordination, cooperation, and governance. Level 4 contains worldviews that help guide and interpret our observations of the world around us, including religion, ethics, and other general belief systems. Each level signifies meaning from other levels, so that knowledge of landscapes can signify knowledge of practices, institutions, or beliefs within an Indigenous community. Therefore, stories of landscapes can signify and teach many other aspects of Indigenous knowledge in the present and future.

These levels of knowledge are also temporal (changing over time) and situated (occurring

differently in different Indigenous communities), and do not adhere to Western universal categorisations or movements. In architecture, these align to categorisations such as classic architecture, renaissance architecture, or modern and post-modern architecture. Indigenous architecture requires a broader and Indigenous chronology that co-opts these 'universals' to reflect Indigeneity (Matunga in Grant et al., 2018). Matunga suggests that Indigenous architecture should be built in response to the Indigenous narrative of knowledge- about the relationships between people and their ecologies- and by understanding its expression through time and across space.

Ibu Sari focuses on the transmission of knowledge through narrative practices that align with inter-generational storytelling. These are guided by the knowledges of others ('Life Maps' that teach knowledge from people's lived experiences, including their understandings of Indigenous mytho-historical stories), slowly learning through trial and error ('Bali Time' where people do not 'take it or leave it', but 'take it or take a little more time' to reflect, learn, and try again- similar to Indigenous archetypal figures depicted in stories), and considering seventh generational learning ('3 P's of Passion, Patience, and Perseverance' that sustain teachings through time from generation to generation).

Watson (2019) describes a similar process in design practice called 'Design by Radical Indigenism', where design innovation can be found within Indigenous mythology. This process teaches us to "remember to remember" Indigenous stories, specifically ones about our natural or man-made ecologies, in order to create new knowledge or innovations for the future (Watson, 2019). Watson (ibid) describes the importance of her terminology, where 'radical' is derived from the Latin *radix* meaning 'root', highlighting the focus on bottom-up Indigenous philosophies and sustainable, climate resilient frameworks.

Similarly, Watson describes this as a "Lo-TEK" process, where Lo-TEK stands for a combination of 'Local Technologies', 'Traditional Ecological Knowledges', and a redefinition of 'lo-tech' that sees the primitive as sophisticated. Here, technology refers to *techne*, the knowledges of making and doing. The Balinese *subak* system is a celebrated Lo-TEK system (ibid). I draw particular attention to Watson's terminology because it is reminiscent of Derrida's 'radical hermeneutics' and 'deconstruction' of architecture, as well as Derrida's use of language.

Derrida considers 'deconstruction' a process of subverting hierarchical oppositions by proving that the privileged term does not stand up to critical analysis, usually by returning to its irreducible origins, and then reducing the them into a singular term that does away with the opposition entirely (Wigley, 1997; Coyne, 2011; Vitale, 2018). Applied to architecture, Derrida returns to Plato's opposition of the philosopher (the lover of wisdom with access to ideas) being privileged over the tradesperson or *tekton* (the builder and copier of ideas)- (Plato, 1941; pp.331-332).

This reflects the etymological origins of 'architect', *arkhitektonikos,* which describes architecture as a purely materialistic function with no application of ideas, cosmos, knowledge, wisdom, meaning, or a medium of transcendence for the human spirit (Coyne, 2011). In order to subvert this hierarchical opposition, Derrida applies the prefix *arche* to the deprivileged term in the opposition, *tekton*, to elevate it above the opposing term (ibid). Here we derive the term *arche-tekton*, a new term that grounds philosophy within architecture, accepting both terms as complementary and contrasting whilst privileging the actual 'doing' of building over the 'thought' of building. The term Lo-TEK takes on a similar role as *arche-tekton*, by swapping the suffix of 'tech' with TEK, to subvert the original hierarchy of high-tech over lo-tech. At a deeper level, both Derrida and Watson are Deconstructing the opposition of Western philosophy over Indigenous mythologies. For Watson (2019), Lo-TEK is a way to deconstruct and re-write the 'white mythology' of technology- or the application of philosophy through craft- by prioritising Indigenous mythologies of technology.

2.3 Research Questions

My research on the settings of this study pose my first research question:

1. Can the application of Indigenous Research Methodologies within architectural fieldwork support new critical perspectives of Balinese culture within the PKP community by: revealing colonially derived values, institutions, laws, and symbology within their architectural spaces and, instead, help to honour pre-colonial lifeways that support a re-discovery of themselves.

The strategies of this research study, which consider the PKP community's parameters and goals for this project, pose my secondary research question:

2. Can critical architectural perspectives of Balinese culture guide the PKP community's project for a new community centre by supporting their goals of:

    - Self- determined Indigeneity through architecture's responsibility to alterity?
    - Reconceptualising their architectural autonomy?
    - Reflecting upon and retelling their Indigenous/ ancestral teachings through architectural discourses?

These parameters, goals, and values of the PKP community should be addressed in the creation of an architectural charge- a responsibility given to the architecture of the PKP Community Centre by the PKP community themselves- as a substantial contributing factor to the creation of a design brief for the future PKP Bale Tong Tong building(s). This building is intended to continue the PKP community's current role as an Indigenous Tourism organisation and shelter for marginalised groups on their own terms through emancipatory actions of self-determinism, architectural autonomy, and the transmission of new knowledges. It is hoped that these projects can contribute in some way to future architectural spaces that allow people to show up and dwell at the PKP Community Centre based on their own conditions of identity, autonomy, and knowledge.

To facilitate the study around this task, I employ the following supporting research questions framed in each subsequent chapter. I attempt to answer these questions in relation to the three research strategies identified in this chapter: Chapters 3 and 4 develop these strategies by building on the content of each preceding chapter(s) to construct an Architectural Storywork methodology, whilst Chapters 5 and 6 consider the application of this methodology within my fieldwork with the PKP community, and Chapters 7 and 8 evaluate the impacts of this methodology.

3. Chapter 3 considers *why is it necessary to centre Indigenous metaphysical concepts within architectural fieldwork? What are the Indigenous Research gaps within current architectural theory and practice?*

4. Chapter 4 considers *what Indigenous metaphysical concepts can inform an Indigenous approach to architectural fieldwork in Bali? How, if at all, can Indigenous metaphysical*

concepts fill some of the Indigenous Research gaps in current architectural theory and practice?

5. Chapters 5 and 6 consider *what specific interventions can be made using a Balinese Indigenous Research approach to current architectural theory and practice at the PKP Community Centre?*

6. Chapters 7 , 8, and 9 consider *how, if at all, might these interventions inform the development and implementation of new approaches to architectural fieldwork by members of the PKP Community Centre?*

Part 2: Literature

3.0 Theories and Practices

Or **Architectural Storytelling**

Part 2 is not a traditional Literature Review but, instead, engages with relevant literature thematically based on the three core strategic threads of this study; metaphorical movements of Identity, Politics, and Knowledge (Bellamy, 2022). This chapter returns to Research Question 3, answering why it is necessary to centre Indigenous metaphysical concepts within an architectural framework by considering similar methods within decolonial or Indigenous design practice and comparing them to emergent processes in architectural practice. I exemplify Tristan Schultz's (2019) 'critical mapping as an articulatory design practice', in which he applies a combination of aboriginal Yarning, Indigenous visual dialogues, and Respectful Design practices within the production of a design brief. I treat this as the closest formalisation of Indigenous methodologies within the design discipline because his work establishes a replicable visual practice, complete with guides and templates, which has been applied within multiple communities across different locations as a 'decolonising design' act- see Schultz et al. (2018) for an introduction to the decolonising design project and Tunstall (2023) for recent applications of decolonising design and Indigenous Research Methodologies.

The structure of this chapter can be seen below:

- Sections 3.1 and 3.2: Build on Strategy 1, Identity Movements, by considering who, where, and when architectural discourses comes from, and the development of architecture to someone else, somewhere else, and somewhen else. Section 3.1 considers Schultz's (2019) articulatory design practices as an example of situated and 'redirective' design intent, in which past colonial experiences are redirected into possible decolonial futures, which are then compared to similar, emergent architectural practices.
- Section 3.2 then considers how these practices might support the PKP community in redirecting colonial experiences by, firstly, tracing the colonial philosophy of architecture back to an irreducible origin and exposing its heterogeneous nature, with no singular knowledge, truth, or perception (Lawlor, 2022) and, secondly, disrupting our anticipations of the future by establishing diverse worldviews and Indigenous philosophies of design through Austronesian philosophy and Indigenous visual dialogues. Visual dialogues

describe the making and sharing of imagery as a deeply productive and significant interaction that engages us relationally with other humans and other ecologies, encouraging people to relate to each other through design.

- Section 3.3: Builds on Strategy 2, Political Movements, by considering the development of new design cultures at the PKP Community Centre that might help to deconstruct colonial constructs of architecture and improve the PKP community's experiences and expectations of architecture. This section explores spaces or sites of architectural discourse in which encounters between diverse worldviews could happen, most notably in the interplay between the architectural charge and design brief. Different forms of 'siting' can occur outside the normative brief by "selecting places for project work that allow for the development of alterity in discourse, technique and design and- as it often turned out- even a lexicon [language or vocabulary] with which to be able to articulate it" (Toffa in Troiani and Ewing, 2020, p.63). This includes a consideration of 'de-spacing' and deconstructive techniques that aim to allow the PKP community, who are restricted from certain architectural discourses, the chance to produce them instead. This frames the architectural charge as a site for visual dialogue within and between the diverse worldviews of the PKP community.

- Section 3.4: Builds on Strategy 3: Knowledge Movements, in an attempt to support the PKP community in constructing architecture that responds to the relationships between people and their ecologies- as communicated through narratives of Indigenous knowledge. This section considers Storywork as a discursive practice akin to Schultz's (2019) use of Yarning as an articulatory practice, and explores its possible role in the construction of an architectural charge that can define some of architecture's responsibilities to the PKP community. Taking precedents from design and art-based applications of Indigenous Storywork, I consider how this process can potentially enrich the design process, constitute 'new cultures' of architectural knowledge, and demonstrate new ways of questioning existing norms (Kanekar in Pssara, 2019, p.161). Importantly, it also re-frames the charge as the intention to question, explore, and transcend normative restriction on the outcome of a design, offering the capacity for polyphony within spatial discourses.

3.1 Articulatory and Discursive Design Practices

3.1.1 A Comparison

The strategies implemented within this thesis are constructed using situated, place and people specific discursive design practices. They originate from within the PKP community as a space of Indigenous Tourism, are developed through stories of Indigenous realities, histories, conditions, or knowledges, and aim to share these stories polyphonically- where multiple, diverse, worlds are voiced simultaneously without being reduced, redacted, altered, or judged by another authoritative voice (Kenniff in Gosseye, 2019). This process builds upon articulatory design practice- which is concerned with changes to the meaning of individual design discourses within a singular but shared speculative, future, or fictional world- and discursive design practice- which considers the impact of articulatory practices in the real social world and its built environments, exploring interrelations between multiple speculative, future, or fictional worlds- see Table 3.1.

Table 3.1. Articulatory and Discursive Design Practices

Articulatory Design Practices (Keshavarz, 2016)	Discourse Products (Fromin, 2019)
• Explores how diverse realities, histories, conditions, or knowledges connect and combine to produce effects that are not necessarily identical to the original elements being articulated. • Is theoretical articulation that can be classified as 'research for design' (Frayling, 1997, p.5) where "thinking is embodied in an artefact" or discourse.	• Describes a concrete form (physical or tangible instance) of social and cultural practices (an articulation of diverse realities, histories, conditions, or knowledges) performed in a particular setting. • Are based on a set of rules that specify who can claim to produce, know, receive or understand meaning, and how, when, and why meaning is produced and received (Hodge & Kress 1988).
Limitations or Opportunities: The combination of different realities, histories, conditions, or knowledges and their embodiment into a singular concrete form (or artefact) excludes the alterity of polyphony.	
Practice-Led Articulatory Design Practice (Schultz, 2019)	Production Sites of Architecture (Psarra, 2019)
• Engages in 'spatial articulation', which aims to situate connections or combinations of realities, histories, conditions, or knowledges through the visual philosophy of Indigenous Knowledge and Respectful Design (Sheehan, 2011).	• Aims to articulate the spatial realities, histories, conditions, or knowledges that we unconsciously perform everyday by engaging at the intersection between 'ideas we think of' (natural, symbolic, and discursive languages) and the 'ideas we think with' (formal and non-discursive languages) in architecture (Hillier, 2007).

• It has ambitions to support people to think, talk, and articulate their way out of conditions of oppression and uncertainty by connecting (articulating), recognising disconnections (de-articulating), or speculating reconnections (re-articulating) realities, histories, conditions, or knowledges. • Asserts a 'research through design' approach (Frayling, 1997) in which the researcher reflects on their own design practice and positionality, leading to further experimentations of discourse. The researcher remains cognisant of their positionality- neither there to 'harvest' Indigenous stories or to relate to their experiences of marginalisation and oppression- but to listen and assist in people's reflections through process-enabling articulation tools.	• It considers how people make, use, and articulate their experiences of space through the creative tensions between multiple systems of discourse and the reconciliation between the multiplicity or simultaneity of these discourses. • Reflects on discourses often used within the researcher or architect's own practices, from 'written' or fictional architecture to briefs, plans, and drawings. • The 'space in-between' discursive/ non-discursive language and between multiple systems of discourse opens possibilities for new knowledge and articulations of knowledge.

Limitations or Opportunities: These practices recognise and include multiple voices, discursive systems, and ways of (de/re)articulating in space (physical, oral, aural, visual, or written space) and of space. The combination or reconciliation of these multiple voices into a singular discourse- i.e. where the original discourses can no longer diverge again- still limits the extent to which alterity or polyphony is accepted. This includes the alterity and polyphony of the researcher's practice and positionality.

Practice-Led Articulatory Design Practice (Schultz, 2019)	Discursive Space (Gosseye, 2019; Kenniff in Gosseye, 2019; Toffa in Troiani & Ewing, 2020)
Schultz's 'Practice-Led Articulatory Design Practice' sits somewhere between 'Production Sites of Architecture' and 'Discursive Spaces' by: • Privileging Indigenous methodologies and knowledges over colonial ones; • Aiming to create 'processes' that empower marginalised communities and speculate on Indigenous Design Futures in the real-world using articulatory tools. • Considering the positionality of the researcher at the intersection of articulatory practices, establishing ethical understandings around how the researcher receives, is shaped by, and re-articulates the realities, histories, conditions, and knowledges shared with them	• These are diverse techniques and methods of architectural representation that are discursively engaged; meaning that they are concerned with how discourse allows for the articulation and construction of meaning using semiotic resources (discourses such as speaking, writing, drawing, facial or hand gestures etc.)- (Rodriguez, 2012) • Engages with the tensions between multiple systems of discourse as a series of situated and 'lived' encounters between diverse realities, histories, conditions, or knowledges. Each encounter assembles different discourses in relation to one another, remaining heterogeneous but temporarily whole and situated in a specific place and moment, before diverging once again. Each encounter produces a discursive space that multiplies the architectural object- revealing it to be polyphonic, pluriversal, and continually remade (Kenniff in Gosseye, 2019).

	• Employs imaginative acts towards the empowerment of the most vulnerable through the development of new design cultures and tools. • Aims to create discursive spaces in which oral, aural, visual, and other semiotic resources are not always distinct entities but shift between states; writing that reads as if speaking, or from orality to writing and back again (Stewart, 2015; Kelly in Gosseye, 2019). • Focuses on privileging Indigenous methodologies and Indigenous ways of knowing by following Indigenous ethics. These not only consider the alterity and/or multiple identities of others to the researcher, but also recognise the researcher's alterity and/or multiple identities in relation to others. • Values the presence, performance, and alterity of interactions between the voicing subject (research participants) and the reporting subject (the researcher) that are always at risk of being lost through academic rigor. It accepts contradiction in the interplay that occurs as various narratives are woven, untied, and retied through dialogue (Kenniff in Gosseye, 2019).

Limitations or Opportunities: Discursive Space encourages design researchers to consider the alterity of others and proposes possible ways for the redirective or decolonial methods of Articulatory Practice to maintain and celebrate a polyphony of voices, which Western conceptions of design often reduce into 'universal stories' (San Pedro & Windchief, 2019).

Schultz's own articulatory practice of 'Critical' or 'Cognitive Redirective Mapping' co-produces a complex 'map' with research participants, combining multiple discourses and diverse knowledges together in a decolonising cartographic act (Schultz, 2018; 2019). Whilst not necessarily polyphonic, as contradictory discourses and ways of knowing are slowly formulated into a singular design brief and 'responsible design action', Schultz's articulatory practices are pluriversal- simultaneously considering the many different worlds of his participants and the co-existence of their unique cosmologies, understandings, and constructions of possible futures. These futures are not achievable in the present but can be designed back from, i.e. used as prompts for designing processes in the present that contribute to an arrival at a desired future. Imagined futures that can be designed back from

are called ‘design fictions’ (Willis, 2014). Schultz (2019) and Willis (2007) believe that ‘design fictions’ based on past scenarios can position people to begin a process of redirective design, which aims to redirect past colonial experiences into possible decolonial futures.

3.2 The Original Production Site(s) of Architecture

I take the definition of “architectural production sites” from Sophia Psarra (2019, p.1); where ‘sites’ refer to the physical and conceptual constructs of architecture, and ‘production sites’ refer to the intersection of physical and mental, individual and collective, or material and social constructs of architecture. By recognising the pluriverse of worlds in which we live, ‘production sites’ recognise the many different technologies of architecture. These ‘technologies’ account for the different knowledges around making, doing, and discussing architecture; how people make, use, and articulate their experiences of space through many discursive systems of knowledge including speaking, writing, drawing, photographs, materials, objects, models, maps etc. This approach considers the different ways that architecture is described discursively, and sets precedents for how I can apply discursive design practices within my own data collection methods and tools (see Table 6.4). Adrian Forty (2000) describes architecture as a system of the building, its image, and an accompanying critical discourse- mirroring the “story”, its performance, and the metaphorical layers of meaning held within its retelling (Liu et al., 2019; Archibald, 2008). Forty (2000) recognises that the metaphors conveyed by different discourses do not reproduce every detail of the architectural system they describe, and not all knowledge embodied in buildings can be expressed through discourses or even the building itself (Stead, 1996; Psarra, 2019). Significantly, these authors are not only describing the metaphors within the production sites of architecture, but also describe the ‘irreducible’ discursive production of architecture- as we understand it from Plato (1941)- that is itself a metaphor of metaphors (Wigley, 1997).

3.2.1 Western Philosophy’s Metaphor of the House

To consider who, when, and where architectural discourses come from, I refer to the seminal works of Mark Wigley’s (1997), who first detailed Jacques Derrida’s philosophical appraisal of architecture, Richard Coyne (2011), who considers the practical application of Derridean architectural philosophy, and Francesco Vitale (2018), who examines the impacts of Derridean

philosophy on architectural theory and practice. In these works, each author refers to, what Derrida believed to be, the irreducible origin of discursive architectural production in Western metaphysics; Heidegger's use of the architectural metaphor of the Greek oikos, or dwelling, to describe philosophy.

Heidegger's metaphor cannot express all of the knowledge embodied within architecture because it excludes what came before, what other ways of knowing architecture exist in the present, and what is still to come. By binding the origin of philosophy to the architectural metaphor of the house, Heidegger assured that 'the house' became inseparable from philosophy- it is not simply another metaphor that can be discarded but, instead, determines the very conditions of Western philosophy itself (Wigley, 1997, p.102). If philosophy attempts to depart from the metaphor of the house (to claim that architecture is 'outside' of, or inferior to, philosophy) it will inevitably return to the metaphor of the house to justify itself. Heidegger exemplifies this throughout his works by continually returning to spatial metaphors or discussions on 'housing' and 'inhabitation' (Ibid).

Because architecture is 'cut from within' philosophy, it is also 'infected' by the same metaphor of the house (Wigley, 1997). The metaphor of the house establishes the idea that everything represented 'inside' is secure, familiar, and domesticated, whilst everything 'outside' it is uncanny, unfamiliar, and violent (Ibid, p.97-121). This not only defines the spatial metaphors of 'inside' and 'outside', but privileges interiority over exteriority- cementing 'inside-outside' as the primary opposition within both philosophy and architecture. Derrida (1981) argues that to exclude or banish something by placing it 'outside' is a form of control that must originate from the inside- simultaneously including the outside within the domain, laws, and logic of the inside. These architectural metaphors significantly influence self-identity within Western philosophy by embodying the 'self' with 'inside' and 'masculine', and the 'other' as 'outside' and 'feminine'.

Wigley explores Derrida's readings of Rousseau, who establishes the house as the mechanism of man's mastery over women- "The sexes, whose manner of life had been hitherto the same, began now to adopt different ways of living." (Rousseau, 1973, p.80). Since the conception of the house, the woman has become a double figure: the perfect example of domestication

within the house, and the perfect example of wildness when outside the house- untamed. Derrida agrees that philosophy, the master of the house, has become the patriarchal authority that labels anything unfamiliar, untamed, or threatening as something feminine that must be domesticated (Wigley, 1997). Vitale similarly describes the house as being built in defence of the patriarchal family according to precise spatial distributions of roles- where the man is open to the outside whilst the woman is closed inside, domesticated and tamed (Vitale, 2018, p.31).

Whilst Ibu Sari is not a 'western' feminist, she does not agree with the current Balinese obligations of female subservience (Yu, 2015, p.117). Her personal feminist philosophy aims to create harmony between men and women, as well as with other people, the environment, and the universe. This approach does not champion equity between genders, but describes a cohesion between all members of the community, inclusive of gender, sexual orientation, religion, social status, etc. This reduces the binary opposition between men and women into a new term, 'community', that brings together Balinese (and Indonesian) under the Balinese philosophy of the Tri Hita Karana- or 'three causes of wellbeing' (Yu, 2015; Sariadi, 2022- personal communication). This is situated within Ibu Sari's definition of Balinese Indigeneity, as the preservation and application of pre-colonial knowledge, passed down by her ancestors, with the purpose of maintaining harmony in life (Sariadi, 2022- personal communication).

Ibu Sari's approach to self-determined Indigeneity reflects Derrida's 'radical hermeneutics', which attempts to reconceptualise the architectural dichotomies between interior/ exterior and self/other; so that people can show up, dwell, and live according to their own circumstances, calling for respectful relationships between the self and the alterity of the other to construct a sense of 'being together'. (Vitale, 2018; Coyne, 2011; Wigley, 1997; Derrida, Brunette, & Wills, 1994). Vitale (2018) and Wigley (1997) both conclude that an 'architecture of deconstruction' must treat the root cause of Western philosophy's "sickness"; the discursive architecture of dwelling. In an extended passage of text, Vitale (2018, pp.33-43) demonstrates the importance of Derrida's temporal perspective in tackling the dichotomies of self-other and interiority-exteriority.

Vitale later questions Wigley's application of architectural deconstruction, undermining his philosophical grasp on deconstruction and suggesting that he overlooks the temporal

dimension of Derrida's work (2018, p.113). Here, Vitale is referring to Derrida's detour from Heidegger's (1927) 'being-towards-time' philosophy (that humans exist temporally in the time between their birth and death, so Being is finite and presence is reducible) towards Levinas' (1963) 'immemorial trace' (a temporality that extends into the past beyond the reach of memory, record, or tradition, indefinitely ancient and infinite) that stretches into an none foreclosed future- where Being is potentially infinite and presence is irreducible). What both authors do not fully consider is Derrida's own claims to working at the edge of "white mythology" (Derrida, 1974), and how concepts of inside/ outside that pre-date Heidegger's oikos, beyond the discursive production site of Western philosophy, may help to deconstruct architecture in a decolonial fashion (de Schryver, 2022; Ambroz, 2022; Ó Fathaigh, 2022).

3.2.2 Indigenous Knowledge's Metaphor of the Cave

Sheehan et al. (2010) exemplify this by describing the Indigenous Knowledge of Austronesian-speaking nations using a version of the inside/ outside dualism, which describes the relational significance of being. The metaphor of the cave becomes the origin of discursive architectural production within Austronesian Indigenous Knowledge; the 'inside' is depicted as the interior of a cave, rather than the house of Western metaphysics, recognising humanity's relation to our environment through a long history of imitated interactions with places that offer shelter. Differing from the Western notion of inside/ outside, this relational model reflects an internal bodily sensibility (inside) and external positioning agency (outside) that, together, help to structure our perceptual understanding and construct our culture so that physical, mental, and social structures draw us in and shelter us (ibid, p.101). Indigenous Knowledge proposes that the relationship between inside embodiment and outside positional agency describes all living beings within a natural system, in relation to one another (ibid). In this way, the cave can be seen as water and geology interacting in the environment of a place that influences the positioning of other things; it may repel us with fear or draw us in with warmth, just as it does with other living beings. The cave is a living, moving, and positioning agent that communicates moods or emotions to us through its spatial form, interior conditions, and ambiances that instigate and organise external positioning of other things. The cave is seen as an individual system of inside/ outside that is part of a larger whole (ibid).

Similar to Western metaphysics, the Indigenous metaphor of the cave and its inside/ outside duality affects the social structure and self-identity of Indigenous peoples across countless generations. However, the most significance differences are that Indigenous Knowledge, a) recognises how social groups can impact their surroundings in ways that go beneath individual or group awareness, and b) understands that the outside environment is related to us and will inform us about any unintentional consequences caused by a groups internal social structure or self-identity. Just as we position ourselves, we are also positioned by the movement of other things and position other things through our own movement- both within and beneath our conscious awareness. Indigenous Knowledge demands that we become respectfully aware of our own positionality, understanding that the deeper impacts of social structure and self-identity are only evident in the movement of others, so that we can recognise and address the often-concealed power within the inside/ outside duality (ibid). The view of Indigenous Knowledge that each being exists only in relation to others makes space for otherness and alterity to show up and dwell in accordance with their own place, time, and circumstances. These knowledges articulate an Indigenous understanding that Western sciences are only recently catching up to (Schultz, 2018), which recognise both gene-culture coevolution (Goldman, 2014; Laland et al., 2010; Sasaki, 2013; Creanza et al., 2017) and mimetic theory (Girard, 1978; Mitchell, 1988; Oughourlian & Girard, 2010; Oughourlian, 2016) as being genetically bound up in land; the land is a source of law, the land has us embodied in it and has thrown us up, we take up the characteristics of land itself (Graham, 2017). This is seen as a sovereignty to land (ibid).

3.2.3 Visual Dialogues

The metaphor of the cave is also a way of representing or externalising Indigenous beliefs, cultures, or concepts of the inner self, as entwined with issues of identity, storytelling, and rituals of the everyday (Jones, 2006; Spankie in Psarra, 2019). This can be visualised through the creation of marking on cave walls, which are considered by some as an architectural ornamentation that mark the beginning of humanity becoming ‘other than’ nature (Bataille, 2009). Western philosophy’s approach to ornamentation within architecture, such as Kant’s (1952) attempts to tame it and Rousseau’s (1973) attempts to reject it, aim to domesticate representation as a form of expression still tied to nature. In contrast, Indigenous Knowledge

celebrates the intrinsic relationship between the representation of self and the 'other than human' ecologies of nature and the spiritual.

Indigenous Research Methodologies have a long history of exploring these relationships through visual storytelling practices that Sheehan (2011) terms 'visual dialogues'. Visual dialogues lean heavily on the visual philosophy of Indigenous Knowledge, where making and sharing imagery is a deeply productive and significant interaction that engages us relationally with other humans and other ecologies- animals, plants, spirits etc. (Sheehan, 2011). Visual dialogues do not describe singular 'images', but refer to larger curations of objects or symbols that signify a greater collective meaning. Imagery allows humans to view something together, sharing experiences in a way that support us to understand them better (ibid).

Such imagery might allow the PKP community to question how their day-to-day experiences of architecture have been constructed in relation to socio-cultural heritage- including the colonial impacts caused by tourism and institutionalised architecture. This is because visual dialogues encourage people to relate to one another and their ecologies through 'design' (Sheehan, 2011). In the context of visual dialogue, 'design' is treated as an external and autonomous mind that depicts the ever-evolving shared consciousness of a collective. 'Design' is not just producing, changing, or enabling something, but is the connective process that allows people to externally visualise the relational systems between humans and their ecologies (ibid). This echoes Dalla Costa's (in Grant et al., 2018) assertion that the 'process' of Indigenous design should include everyone- including ancestors and future generations- so that possible biological, cultural, social, economic, or political relations can be revealed.

Therefore, this study focuses on the PKP community's articulation of architectural design as a connective process that visualises the relational systems between the community, their architecture, and wider biological, social, economic, or political systems. Section 3.3 considers the use of visual dialogues in both articulatory and discursive design practices, highlighting my own adaptations and implementation of this process within this study.

3.3 Siting Architecture within Discourse

3.3.1 Metaphors of Visual Dialogue

Schultz (2019) structures his articulatory design practices around mental mapping, sometimes referred to as cognitive mapping or cognitive cartography, and Sheehan's (2011) visual dialogues. Mental mapping sits somewhere between the Western forms of cognitive mapping and cartography in design practice, which can sometimes prescribe a pre-determined and 'universal' worldview, and Schultz's (2019) cartographic metaphors of cognitive mapping. The latter is a mental mode of spatially arranging ideas, knowledge, and virtual or real landscapes before practically expressing them in an articulated form. This is an Indigenous practice that engages with storytelling and cartographic metaphors as artistic and designerly descriptions of experience and knowledge.

I adapt this concept within the construction of my own Architectural Storywork Methodology (see 4.1 and 4.3), by creating a 'discursive landscape' that spatially arranges ideas and knowledges surrounding the origins of the Tong Tong drum (see 2.2) as geographical, architectural, and ecological landscapes. These landscapes articulate a set of theoretical and ethical principles derived from my situated study of Balinese architectural philosophy and Indigenous Storywork practices, which are practically applied within my fieldwork study (see Sections 5.3.1, 6.1.1, and 6.4.1 for the application of theoretical principles and Tables 5.3, 6.5, and 6.7 for applications of ethical principles).

Schultz's mostly applies Sheehan's (2011) visual dialogues to produce visual stories with multiple co-authors. Each co-author draws words or images on individual cards, which are then placed in the middle of the group and are always connected adjacent to another card. The overall visual arrangement, which Schutlz treats as a 'cognitive cartography', is then reflected upon to produce knowledge that often fits with the actions and intentions of the co-authors (Sheehan, 2011)- see Fig 3.1 on next page.

This outcome is self-evident because "a visual and relational outcome will emerge from a visual and relational process in a way that reveals a visual and relational world" (Sheehan, 2011, p.74). This reflects Couchez's (in Psarra, 2019) description of 'burning the knowledge map', where the function of cartographic metaphors are transformed from a didactic top

down approach to a situated one, leaning towards lived practice where the making of meaning, values, and knowledge occurs through experience.

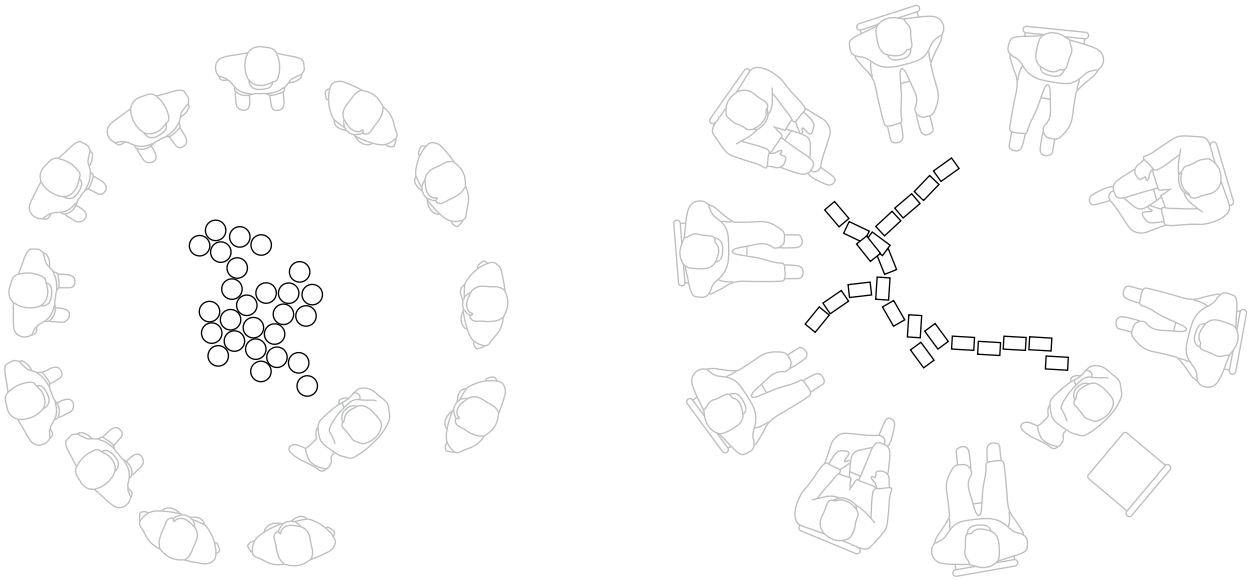


Fig 3.1 Illustrations of Visual Dialogue 'Mapping' Workshops conducted by Schultz (2019)- Alastair Brook 2023

Architectural 'boundary objects' (Martinez, 2021) are an architecturally specific instance of visual dialogues used as a method of data collection within this study. Boundary objects are curated architectural works that carry and communicate connective stories across different contexts, giving meaning to diverse participants who might have disparate practices, competences, tools, or languages (Star & Griesemer, 1989). My data collection methods attempt to create various boundary objects with the PKP community through structured workshops using 'playful triggers'- objects provided to stimulate the participants' imagination (Akama & Ivanka, 2010)- or other ethnographically-found items- personal objects that hold metaphoric meaning to the participants (Cabrero et al., 2016)- instead of cards.

These objects are used to articulate the participant's experiences of architecture, representing themselves, their architectural environments, and the ecologies they are situated within by modelling architectural spaces, describing their interpretations and experiences of architectural spaces, or depicting their various roles within architectural spaces (see 6.1.1 and Table 6.1). These practices produce imagery that aims to articulate the PKP community's collective experiences of architecture as a collection of visual stories curated in a context appropriate format (see Table 6.6).

Other variations of visual dialogues are implemented with the PKP community to formalise fieldwork outputs (see Table 6.6, Output 3 and Appendix F). Participating members of the PKP community were provided with storytelling cues- such as descriptions of characters, settings, and events- based on their previous articulations of architectural experience. Each participant was invited to visualise these characters, settings, and events within blank square frames and then use these cues to create five short stories that describe, in some way, the tensions experienced within the current architectural spaces of the PKP Community Centre and, over the course of five visual frames, describe actions that can be taken towards a resolution of these tensions. These stories represent the PKP Community Centre's architectural responsibility to the community based on the actions and intentions of each author. These stories are arranged in a circular format, allowing different narratives to be created by reading up-down, left-right, or an arbitrary combination of the two (see Fig 6.19).

3.3.2 'Repair' and 'Return' Briefs

Schultz (2019) uses visual dialogues to connect the diverse worldviews of multiple people and support them in articulating their way out of conditions of oppression. He achieves this by reflecting on design discourses often used within his own practice- such as design thinking tools and the design brief. However, I question the prescriptive nature of the 'design brief' as it has been defined from within Western conceptions of design that might limit the PKP community's opportunities to develop new design cultures or articulate their architectural experience away from colonial influences.

As with many terminologies, it is unclear where or when the term 'brief' began to be used in architectural practice. The American Institute of Architects (Evans & Wheeler, 1969) is cited as providing the first clear definitions for what has become known as a 'brief' or 'briefing' process. They describe an 'emerging technique' of architectural practice called 'architectural programming', defined as:

> The process by which criteria are developed for the design of a space, building, facility, physical environment, and/or any unit of the environment. The term programming in its generic sense can be applied to any planning of future procedures… It is the means through which data about the needs of the ultimate building user are determined and expressed for the instruction of the architect in the development of a design solution.
>
> (Evans & Wheeler, 1969, p.9)

This frames the brief as the ‘how’ of a project, constituting the more specific mode of design exploration. The brief is what the architect develops, affecting design decisions and considerations that include the formal and spatial language of the work (Kanekar in Psarra, 2019). Derrida suggests that the development of alterity in architecture can best occur within the negotiations between an architect and “all the powers that prevent them from building” (Kipnis & Leeser, 1997, p.106)- i.e. the elements that are outside of their control. This requires, as Derrida suggests, the inclusion of other philosophies and practices of architecture that differ from traditional Western thought and challenge the primacy of the Western notion of the ‘brief’.

Articulatory design practices, epitomised by Schultz (2019), reimagine the normative notion of the brief as a ‘repair’ or ‘return’ brief. The ‘repair brief’ creates a visual representation, a ‘meshwork’ or ‘meshworlds’ of interwoven narratives (Ingold, 2011), that describe the problems they face and their potential for repair. The relationships between different narratives indicate power vacuums, suggest missing narratives, or highlight room for action. This ‘repair brief’ also aims to locate these ideas within timescales according to how long it could take to change the problems that are uncovered- and designing short, mid-, and long-term timescales for possible future projects. A ‘dominant’ design opportunity is then outlined ready for implementation, including different stakeholders, specific actions that need to be taken, and appropriate timeframes for each.

A ’return brief’ describes an updated iteration of a brief, rigorous enough to take a project in a more responsible or redirective direction, that is returned to the original brief giver (such as a client). The purpose of a ‘return brief’ is to engage with a client in ways that prompt them to think seriously about sustainment and modify their existing brief by taking up options presented to them in said brief (Fry, 2012). The creation of both the ‘repair’ and ‘return’ briefs is described as a participatory process. However, Schultz (2019, p.249) does suggest that a ‘return brief’ can also be “an open-ended brief written from scratch by the designer in a self-directed context”, echoing the normative Western approach to the brief. Instead, Schultz leans on his articulatory practices to guide any such brief-making as ‘redrafting post-participation’ (ibid).

3.3.3 The Architectural Charge and making Responsible Decisions

The design brief is often given discursive primacy as a 'production site of architecture'. However, different forms of 'siting' can occur outside the normative brief that allow for the development of alterity in discourse (Toffa in Troiani and Ewing, 2020). One such site is the architectural charge. The charge is the 'expressive potential of a project', often linked to a building's typology, and is what the architect is given prior to the brief (Kanekar in Psarra, 2019). Kanekar is discussing a responsibility or task given to an architect by someone else, somewhere else, somewhen else. The architect must then define the boundaries, criteria, and procedures of this responsibility within a design brief. Derrida believed that the general charge or responsibility of architecture, given by the alterity of the other-to-come, is to task the architect to make 'responsible decisions' (Vitale, 2018).

Derrida recognises the complexity of conditions in which an architect must make a design decision- many of which are outside of their control and, therefore, unknowable. A 'responsible decision' is where an architect accepts this state of not knowing and does not try to reduce it to a well-known generality or project their own knowledge onto it. Derrida believes that every responsible decision by an architect must be grounded in a state of not knowing because it must always be taken towards others to-come in a respectful relationship that is able to account for their irreducible alterity (Vitale, 2018).

Based on these comparisons (see Table 3.2 on next page), I establish the architectural charge as the preferred site for implementing visual dialogue with the PKP community. This is because an architectural charge should, in some way, be co-produced with/ from/ by the PKP community, and further define the PKP Community Centre's architectural responsibility to their self-determinism, autonomy, and transmission of new knowledge (as established in 2.2). This should not be limited to the prescriptive assumptions of a design brief or my own familiarity in producing one, but be open to new imaginative ways of knowing, doing, and articulating architecture. The architectural charge is the main output of this study's fieldwork practices (see Chapters 5 and 6) and is co-produced by the PKP community and myself through visual dialogues and boundary objects (see 6.1.1).

Table 3.2 The Characteristics of the Architectural Charge and Design Brief

Characteristics of the Charge	Characteristics of the Brief
• Refers to a critical, imaginative, and ethical stance towards dominant power structures through an interaction between design knowledges and discursive languages (inspired by, based upon, or sharing conceptual ideas with works in other arts)- which can help us to understand architecture and formulate design intent (Kanekar, 2002; 2015; in Psarra, 2019). • A visual, tangible, or oral performance of all that is materially and memorably possible, hypothetical, that which never existed, or perhaps will never exist but might have once existed (Calvino, 1997). • Situated within interrelated narrative elements capable of imaginative stimulation, that are authored or collectively produced through oral, aural, and visual works (Psarra, 2018). Tschumi (1994) stimulates architectural imagination through the interplay between three key elements: Space, Event, Movement. These equate to the narrative elements of Setting, Event, and Character (Chapman, 1978). • Explores the relationship between ordinary spaces of human settlement (commonplace, vernacular, speculative buildings of unconscious design intent) and the spaces of architectural invention (buildings with conscious design intent)- (Psarra, 2018). • Focuses on the practices that create architecture through a) the exchange of ideas within everyday activities and socio-cultural and political interactions between individuals, b) the fictional representations of architecture in mytho-historical stories, and c) the definitions of creativity and imagination within individual and collective spatial processes (Psarra, 2018).	• The development of criteria for the design of an architectural space based on information about the building's inhabitants (Evans & Wheeler, 1969). • Non-performative and passive discourses that structure future procedures rather than showing 'design in the making' or serving the 'immediate practices of design' in the here-and-now (Yaneva, 2009, p.73). • The architect's approach to a critical, imaginative, or ethical problem, including design decisions and considerations that include the formal and spatial language of the work (Kanekar, 2002; in Psarra, 2019). • Structures a particular kind of engagement with a client based on the understandings and design knowledges of the architect, and serves as a point of reference throughout a project for everyone involved, to bring a design into existence (Fry, 2012; Schultz, 2019). • Outlines a 'dominant' design opportunity that is ready for implementation, including who is involved in the project, the specific actions those people need to take, and appropriate timeframes for those actions that can be categorised as short, mid-, or long-term (Schultz, 2019). • Can also become a site of preproduction as structural, metaphorical, and spatial aspects are explored (within programmatic boundaries) that can become formalised in design development (Kanekar in Psarra, 2019).

As the researcher and primary facilitator of this process, I am also charged with a general responsibility to make respectful design and research decisions. As part of this responsibility, I engage in critical reflexivity.

3.3.4 Critical Reflexivity

The co-production of the architectural charge with the PKP community, and the ethical considerations this requires, situates the charge as a moment of critical reflexivity that implies greater responsibility in the ways that 'self' and 'other' are represented (Harrison, 1994; Toffa in Troiani and Ewing, 2020). This type of reflexivity acknowledges that the architect/ author is always 'written' into the design 'text', drawing attention to the ways meaning and value are made in the architectural process and by whom. By recognising that architecture is always for others, critical reflexivity involves a decentring of power and power-knowledge of the architect and a collapsing of distance between the architect and others, where all stakeholders are participants and partners in the making of meaning and value within space (Toffa in Troiani and Ewing, 2020, p.69). Toffa describes a three-step process of substantive reflexivity (within the self) and methodological reflexivity (within a discipline) that I attempted to engage with in this study:

1. Consider inward fears, presuppositions, prejudices, access, knowledge, and familiarisations of dissonances related to architecture. I developed my own set of ethical principles for respecting and sharing Indigenous Knowledge, adapted from established Indigenous and architectural practices (see Table 4.1), and ensured that these principles are practiced within my fieldwork (see Table 5.3, Table 6.5, and Table 6.7).

2. Consider how others operate within social, spatial, and physical structures. The data collection methods of this study were also produced through my interactions with Ibu Sari and the PKP community, attempting to understand their own experiences of architecture by integrating the PKP rules, the PKP community's values and goals, and the participant's feedback into my fieldwork practices (see Table 5.2).

3. Records tensions between the two through a progressive projection of experiences and engagements between different discourses, realities, histories, conditions, and knowledges. By situating Sheehan's (2011) visual dialogues and Martinez's (2021) boundary objects within the creation of the architectural charge, my fieldwork also invited the PKP community to co-produce and co-curate a collection of discursive architectural works that form a larger image of their interconnected architectural experiences, expectations, and needs (see Table 6.1, and Table 6.6, Output 3).

3.3.5 De-spacing

Various architectural theorists have attempted to 'site' architecture using critical reflexivity through a method of de-spacing. Spacing describes a separation between the production and the reception of spatial discourse, in which access to a space is only possible through specific discourses created and managed by dominant systems. Such discourses give 'de-spatialised' access to 'other places', without giving access to the spaces in which the discourse is produced (Couldry, 2002). As the production of spatial discourse changes, so to do the production sites of spatial discourse. This can reduce the distance between the production and reception of discourse in a process of 'de-spacing', allowing people who were once restricted from certain discourses the chance to produce them- blurring the line between fictional worlds and people's realities (Brown, 2018; in Psarra, 2019). This process has the potential to allow people who were once restricted from the design brief, the chance to produce it through critical engagements with the architectural charge- blurring lines between design knowledges and discursive languages, between what is possible and what never existed, between imagination and reality, and between the individual self and collective other.

Derrida alternatively uses the term 'spacing' to describe the writing of space- in which writing is freed from the model of the book but is closer to the production of architectural discourse that make place for alterity (Derrida, 1986; Vergani et al., 1987). This is a technique of composition that allows writing to be spoken or visualised, drawings to be spoken or read, and spoken word to be read or visualised- opening the discourse up to different ways of production by different people (see Figs 3.2 - 3.6 for examples and Appendix B for a more detailed description). Of these practices, I adapt Tshcumi's (1994) visual technique of 'de-spacing' within the formulation of an architectural charge with the PKP community (see Table 6.6).

I found that written and spoken data collection techniques limited the quantity of detailed and complex descriptions of the PKP community's architectural experiences. This was due to language barriers, as the PKP community did not feel confident in using English (UK or US) to articulate their experiences. In contrast, visual and tangible data collections techniques produced richer discussions around the participant's experiences as they were able to

articulate themselves in imaginative ways with the support of images, drawings, or objects. In this way, the participants were able to visualise their written or spoken data. Tschumi's (1994) visual discourses continue this process and open up new ways of producing an architectural charge.

Lykourioti (in Psarra, 2019) discusses how specific parts of these works and their composition act as crossroads between oral, aural, and visual modes of understanding, inviting the reader to become a co-author in the 'writing' of the design 'text'. The readers choose the connections, becoming a philosopher (Derrida), dissident (Karami), architect (Tschumi) or poet (Perec, Bachelard, and Mallarmé), by bringing into reality something that did not necessarily exist before their interaction with the text.

This process can be further democratised by inviting other voices to co-produce the original text itself, so that no singular author has total claim or control over it. For example, the discursive methodology that I compose in Chapter 4 has been guided at each stage by the PKP community's own goals and values (see 2.2.1) and Ibu Sari's use of the Tong Tong as a discursive tool (see 2.2.2). This co-production allows the voices of the PKP community to be woven alongside mine- my interpretations, perspectives, and assumptions as a researcher- to produce a discursive space in which different possible realities can be brought into existence.

Toffa (et al., 2015; Toffa in Troiani and Ewing, 2020) describes these types of spaces as discursive projects located at the intersection between the explicit political discourses of communities and the institutions they wish to change, often collapsing disciplinary boundaries and developing new knowledge and skills. This aims to dispel territories that imply belonging/ repelling (self/ other) or inclusion/ exclusion (inside/ outside) by locating possibilities for change and supporting strategies for collaborative action. These descriptions utilise cartographic metaphors, such as 'crossroads' and 'territories', that are mirrored by (or taken from) the texts themselves (see Figs 3.2 - 3.6 on next page spread).

Each of the following figures depicts a page, or pages, from corresponding texts. Each page is bounded by a black line. Page spreads are connected whilst single pages remain independent. Each grey block represents a sequence of letters, words, or lines of text on a page or, in the case of Fig 3.4, represents the sequencing of visual images.



Fig 3.2 Derrida's (1986) 'Writing Architecture'; the page is divided into two columns (represented by light grey to the left and dark grey to the right) that contain text of varying sizes and fonts. The reader must read the two columns as architectural artefacts themselves; each independent and seemingly unrelated- yet sustaining another building, another text, another architectural artefact within their composition.

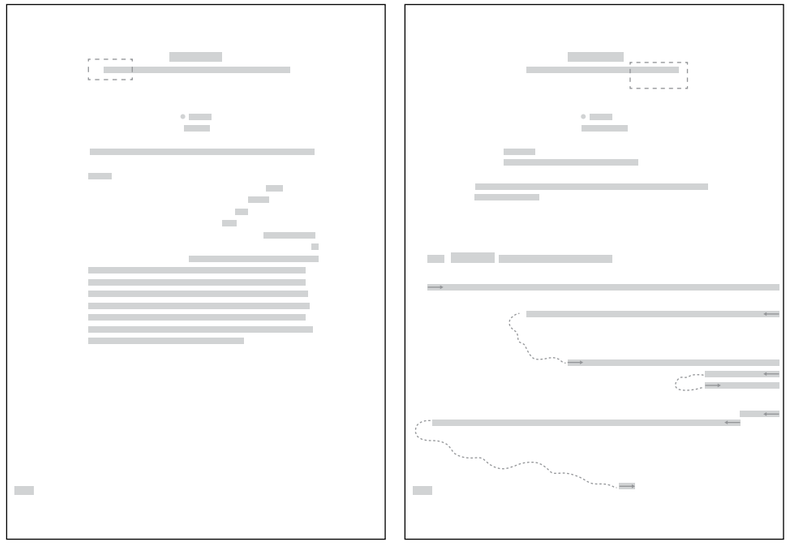


Fig 3.3 Karami's (2018) 'Writing Dissident Architecture': Karami duplicates real architectural space in writing, forming a fictional site of architecture that fictional characters and real readers can 'critically inhabit', exploring and transforming in unconventional ways through their movement through the text. The left page visualises light spilling over the steps of a stairway, depicted line by line to shape the stairwell (p.280). The right page visualises a maze represented by lines of text, some written upside down (see arrows for text direction), that are connected by a hand drawn line (p.286).

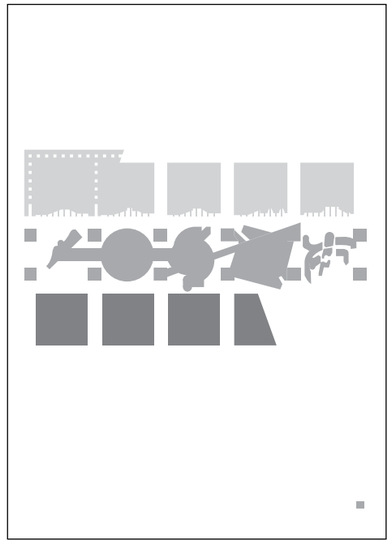


Fig 3.4 Tschumi's (1994) 'Sequencing': Each horizontal sequence (light, medium, and dark grey) visually represents the fictional deconstruction of architecture. The space in between frames is turned into something solid and tangible as part of the architectural discourse; becoming a corridor, a threshold, a doorstep, or other symbols inserted between each event.



Fig 3.5 Perec's (1974) 'Space': In the foreword, Perec explores both the space between letters and their positioning within the spaces of a page, such as margins and footers. These explorations are demonstrated by each grey line- representing letters, words, or lines of text. Moreso, Danielewski foreword to Bachelard's (1957) 'Poetics of Space' describes the latter's ideology that words and letters themselves are spaces to inhabit, losing oneself down distant corridors of history and memory.



Fig 3.6 Mallarmé's(1897) 'Mapping Textual Landscapes': This poem allows the reader to inhabit the spaces between and within words. As the reader moves to another section of text, Lykourioti (in Pssara, 2019) describes how an afterimage can be momentarily seen in the blank spaces of the page; connecting or sequencing sections of text that might not otherwise have been connected. In this way, we can physically see how the in-between space can be inhabited as doorways or corridors between text.

The next section considers how Indigenous Knowledge and Indigenous Research Methodologies can support the co-authorship of these visual, relational, and situated practices for discursive design. In particular, it will discuss how the Storywork methodology provides an opportunity to expand or abstract stories in the ways described, building on the practices of articulatory design to inform new discursive practices to support a polyphony of voices that are not superseded, reduced, or redacted by the architect as the primary author.

3.4 Storywork as a Discursive Practice

3.4.1 Voicing through Indigenous Research Methodologies

Articulatory design practices focus on gathering together stories of experience to design in-time; past experiences are shared by participants through the Indigenous methodology of Yarning and the anticipation of future experiences are shared as 'design fictions' or 'possible futures'. In these processes, contesting personalities have to negotiate as experiences are drawn together in the co-creation of story (Schultz, 2019, p.155). As stories of experience converge, relational patterns are identified and speak back to participants as new narratives that describe alternative histories and possible futures. Schultz calls this "a way to synthesise multiple peoples' knowledge in a way that contributed to a whole experience" (2019, p.58). This section considers how the Indigenous methodology of Storywork provides an opportunity to expand or abstract stories rather than synthesising them- supporting a polyphony of voices.

Toffa (in Troiani & Ewing, 2020) suggests 'voicing' as a method of supporting a polyphony of voices within architectural discourse. It is a method of siting that aims to tackle the 'epistemic inferiority' of non-Western knowledge within architectural discourses (Grosfuguel, 2013). Voicing is the process of bringing normative disciplinary discourses into a dialogue with differing value bases and ethical foundations from varied views, positions, and lived experiences that have limited space for authentic expression within current architectural and academic contexts (Toffa in Troiani & Ewing, 2020). This is a process in which the architect actively searches for the inclusion of new voices within architectural discourse, as well as suitable visual and verbal languages to articulate them.

Multimodality offers a range of mediums- oral, textual, graphic, models, etc.- through which these voices can be articulated, often going beyond the comfortable and accepted norms associated with them (Toffa in Troiani & Ewing, 2020). It cannot be expected that Indigenous communities will 'do the work' of bringing alterity into architectural and academic discourses, or that Indigenous communities will accept the alterity of new and unknown methods of design that threaten their Indigeneity. Instead, voicing requires architects and researchers to learn Indigenous modalities, nurturing the alterity of other and unknown knowledges into architectural discourses (ibid).

Stewart (2015) exemplifies this in his work when bringing the voices of Nisga'a First Nation Indigenous architects together to discuss the use of Indigenous Knowledge in design. This work was originally written in the Nisga'a language which, with minimal punctuation, brought together an oral/ aural/ visual design context true to the multi-modal discourse of Indigenous design that reads as if speaking and seeing (Gosseye, 2019). Stewart was later asked to translate his work into English in an attempt to universalise Indigenous knowledges that were neither standard nor conventionally academic- causing critics to call his work "outlandishly deficient" and "an intellectual affront" (ibid).

Indigenous Research Methodologies, with their own languages and ways of constructing meaning, have become more prevalent across Indigenous studies and education (Windchief & San Pedro, 2019). Indigenous scholars have turned their attention to the application of Indigenous Research Methodologies with 'others' outside of Indigenous communities- with activists, protectors, and allies alike (ibid; Archibald et al., 2019). Arturo Escobar's (2018) seminal *Designs for the Pluriverse* highlighted key discussions around decolonisation at the intersection between anthropology and different design disciplines, situated within the author's Colombian ancestry. However, the tangible inclusion of pluriversal Indigenous knowledges into design discourses, through situated Indigenous Research Methodologies or otherwise, is a task mostly taken up by Indigenous scholars as a protective act (De Santolo in Smith, 2021).

De Santolo (in Smith, 2021) describes this as a process of survival and renewal through self-determination, autonomy and legitimacy; "if there is no scope for storying our own truth, then there is little hope for reimagining Indigenous self-determination beyond racist

institutional rhetoric" (in Smith, 2021, p.XX). De Santolo concludes with a call on practice-based professions, such as design and architecture, to activate Indigenous story through decolonising methodologies that challenge and spark new ideas and new modalities as creative transformational praxis.

3.4.2 Storywork and its Principles

Many Indigenous Research Methodologies are intrinsically situated and are used primarily by certain Indigenous communities and groups. Schultz (2019) utilises Yarning, an Indigenous Research Methodology situated within the Aboriginal communities of Australia. Storywork, whilst having a rich history of use with Indigenous Australian communities, is a methodology of storytelling that can be applied in many situated contexts with Indigenous communities around the world by following a set of ethical and relational principles- exemplified in Archibald's (2008) *Indigenous Storywork* and (et al., 2019) *Indigenous Storywork as Methodology*. Different stories imply different ontologies, epistemologies, and cosmologies, functioning as a process of joint world-building in an inter-relational manner between different story tellers and listeners (Barcham, 2021). This creates a space for new perceptions of what is possible, whilst still being connected to what has come before, within the specific contexts of different Indigenous communities and their unique worldviews (ibid).

Indigenous Storywork is a fluid and organic process by which Indigenous scholars, activists, protectors, and allies of Indigenous people treat 'scared', as opposed to 'historical', Indigenous stories as a 'theoretical anchor' in their research methodology (Simpson, 2014). 'Sacred stories' include myth-like and origin stories that can take a long time to gain the authority to learn and perform through various discursive means including physical artefacts, whilst 'historical' stories refer to the lived experiences of a community in the past and present (Archibald, 2008). A 'theoretical anchor' refers to metaphors within a story that are used to communicate methodological or ethical principles to the researcher. In this way, the knowledges held within different stories can be utilised as situated epistemological frameworks for the development of people and place specific research methodologies. It is not uncommon for Storywork metaphors to refer to or develop Archibald's (2008; 2019) Seven Principles of Storywork (see Table 3.3), which place emphasis on the researcher to be 'story-ready', i.e. listen to stories with respect, develop responsible story relationships,

treat story knowledge with reverence, strengthen the impact of a story through reciprocity, and enhance the meaning-making process of 'scared' and 'historical' stories through a deep relationship to the characters, settings, and events or actions within them. Being 'story-ready' supports a researcher to better ground their methodology within their own interpretations of people and place specific epistemologies.

The Seven Principles of Storywork adapt the 'Four Rs' of Indigenous research (Kirkness and Barnhardt, 1991) to include 'Reverence' instead of 'Relevance' and add three other principles for Indigenous storytelling (Archibald, 2008; 2019; Wikkerink & Cruikshanks, 2012; Archibald & Parent in San Pedro & Windchief, 2019).

Table 3.3. A Summary of the Seven Principles of Storywork

Respect	Where we must prepare ourselves to receive knowledge by learning the diverse protocols surrounding intergenerational teaching that give people's unique voices and perspectives the spaces to heard.
Reverence	Involves making time and space for people to subjectively connect to their inner-being and consider their kinship to the people and Land around them.
Responsibility	To develop positive relationships with those sharing Indigenous Knowledge and to faithfully copy those teachings whilst taking into consideration the colonial impacts of translating, digitising, or otherwise processing Indigenous Knowledge.
Reciprocation	Where we must understand that all types of Indigenous Knowledge reflect social structures through time and that we have a responsibility to pass this knowledge on to future generations.
Holism	Where a) empathising with characters from Indigenous stories strengthens our emotional development, b) new understandings from Indigenous stories can strengthen our intellectual development, c) relating to the actions of characters within Indigenous stories can strengthen our physical development, and d) as an Indigenous story triggers our feeling we can reflect on our inner-being and strengthen our spiritual realms of development within.
Interrelatedness	Where two or more realms of the holistic approach interact, causing us to think about some idea or meaning that comes about from an Indigenous story
Synergy	Like a spark that occurs from the ideas of someone else that triggers a new thought or deepens an existing idea- this is an extension of Holism and Interrelatedness, as two realms of Holism interrelate and cause us to consider new ideas or deepen existing ideas as ways to learn from the characters of the story.

I treat the Balinese origin stories of the Tong Tong drum as theoretical anchors within my Architectural Storywork methodology (see 4.1). This practice creates a discursive cartography

of architectural space (see 3.4) based on the real-world geographies and ecologies of Bali as described within stories. This 'discursive landscape' is a mental mode of spatially arranging my own methodological and ethical principles (see Table 4.1 and Table 4.2 respectively), which have developed from and include Archibald's (2008) seven principles, and practically express them in an articulated form (see Fig 4.2).

Archibald (2008) also identifies the use of 'historical stories' within Storywork practice, which include true stories that depict the real experiences of peoples' lives, such as the author's own experiential story. Historical stories are just as important to Indigenous Research Methodologies as sacred stories, as they are a way for Indigenous peoples to articulate their world, understand their own knowledge systems, name their experiences, guide their relationships, and identify themselves (Archibald et al., 2019). For this reason, Davidson (in Archibald et al, 2019) treats the stories of her participants with the same respect as sacred stories. Other Indigenous scholars have also recently called for Indigenous research to be co-authored by different stakeholders in an effort to develop meaning through shared stories and strengthened relationships (Windchief & San Pedro, 2019). This is because Indigenous stories can be portrayed in a way that makes one think, feel, and reflect on one's actions by interpreting their embedded teachings (Archibald, 2008).

I also attempt to treat the PKP community's stories of everyday architectural experiences with the same respect as I treat other Indigenous stories or academic works. I apply my own ethical principles (see Table 4.2) to my fieldwork practice, ensuring that each principles is applied within the relevant phase: initiation of fieldwork (see Table 5.3), data collection and data analysis (see Table 6.5), or co-creation of fieldwork outputs (see Table 6.7). Through the application of these principles and my efforts to treat the study participants as co-researchers, I hope that I have developed stronger relationships with the PKP community and articulated more authentic and truthful meaning within the study findings (see a detailed consideration of this within Chapter 7).

3.4.3 Storywork as a Discursive Practice

Indigenous stories are told with the purpose to teach and learn with others the power of particular knowledges held in stories, so that those knowledges can continue- respectfully

and responsibly- in new spaces, with new people (Archibald, 2008). As outlined in this chapter, respectful and responsible design calls for the 'being together' or 'coming together' of different worldviews (realities, histories, conditions, and knowledges) in a way that accepts the alterity of otherness and does not try to reduce it to a 'universal' or well-known generality. Indigenous stories can be articulated through many different discourses, including spoken word, music, dance, images, and cultural artefacts.

Martins (2014; in Archibald et al., 2019) exemplifies the lessons shared with her through the physical properties of the *Secwepemc* hand drum, including its form and materiality, whilst Davidson (2016; in Archibald et al., 2019) exemplifies the lessons shared with her through the musical frames and dance choreography within a situated telling of an ancestral story. Storywork methodologies can emerge from a researcher's situated understanding of stories that are related to, communicated through, or told by physical artefacts.

González (2020; 2022a; 2022b; González & Wilson in Rodgers & Yee, 2023) describes a design-based articulation of Storywork practices in Mexico, in which she aimed to develop a mode of decolonised design for Indigenous artisans. She anchored her research methodology around Mayan onto-epistemologies carried and communicated by the backstrap loom and its situated weaving techniques. This is a familiar Mayan cultural practice that has survived centuries of colonisation and modernity, carrying stories of ancestral, collective-social memory and resistance into the present day. It has become a living manifestation of Mesoamerican culture linked to individual and communal well-being, expressed through ritual chants that occur before/ after weaving, and in the movements of the weaver's body and hands within the performance of weaving (González, 2020; González &Wilson in Rodgers & Yee, 2023).

Gonzáles (2020) also adapts the Indigenous textile patterns created by backstrap loom weaving into a cartographic metaphor (that spatially arranges ideas and knowledge and practically articulates them as a discursive space) for Mayan cultural principles; embedding Indigenous principles into her work represented by the movement of people and knowledge through the three worlds of the gods, the living, and the departed (Gonzáles, 2022a; 2022b; González & Wilson in Rodgers & Yee, 2023).

These guiding methodological principles of Mayan culture gave Gonzáles the distinct

perspectives to frame multiple design methods within her work, such as 'visual-digital-sensorial ethnography' and 'co-design', in open collaboration with Mayan weavers. These practices encouraged weavers to design and embroider unique textile stories that depict Indigenous characters that are based on their own Indigenous worldviews, knowledges, and experiences. This practices is described as 'innovation as resistance' by the participating Mayan people (Gonzáles, 2022a; 2022b).

Similarly, this study anchors a research methodology around Balinese onto-epistemologies as carried and communicated by the Tong Tong drum, its uses as a discursive tool by the PKP community (see 2.2) and its origin stories (see 4.3). The Tong Tong similarly connects to the individual and communal wellbeing of the Balinese people and is used by Ibu Sari and myself as a way to "remember to remember" (re-telling or re-remembering) pre-colonial and decolonial principles in a form of 'resistance' (see 2.2.2).

I similarly construct my own cartographic metaphor, or 'discursive landscape' (see 4.1) from the origin stories of the Tong Tong drum, which signifies situated theoretical and ethical principles of this study (see Table 4.1 and Table 4.2). These knowledges and principles allow me to frame various design practices, data collection tools, and data analysis techniques within my fieldwork with the PKP community (see Chapters 5 and 6), supporting the participants to create transformation stories about their architectural environments and define an architectural charge for the future PKP Bale Tong Tong (see Table 6.6).

Storywork methodologies like these are longitudinal in nature, as they can take an extended period of time to acquire the principles for interpreting Indigenous stories respectfully and responsibility (Archibald, 2008). My study was implemented over a two-and-a-half-year period in order for me to faithfully engage and collaborate with the PKP community throughout all phases of fieldwork, from the remote development of data collection workshops with the participants during the SARS-CoV-2 pandemic to the creation of fieldwork outputs on-site in Bali. This length of engagement was crucial for me to acquire and implement the principles for interpreting the participant's stories of architectural experiences, and to understand these stories at every level.

This is because the lessons held within Indigenous stories are not meant to be understood

at all levels immediately. Each story is metaphorical and contains several levels of metaphor that can only be unlocked by understanding the “surface story” in its entirety. The ‘surface story’ is a narrative composed of a ’story’ and its discourse, or “the text and the things one has to know about the performance of it for others” (Archibald, 2008, p.84). When a listener understands the narrative sequence of a story, they can hear another story contained within that story- like a completely different explicit or embedded text (ibid).

Archibald states that the embedded story, itself, contains the clues or directions to interpret another embedded story within it. Each level of metaphor can only be understood as each story unfolds. As such, the interpretation and understanding of an Indigenous story ‘unfolds’ in the space between the teller and listener (Kinloch & San Pedro, 2014) through a process of synergy, as described in Table 3.1, between the story, the context in which the story is used, the way that the story is told, and how one listens to the story.

As the teller, listener, or the context of the story changes, so do the metaphorical levels of the story and the lessons that they teach (Kinloch & San Pedro, 2014). Storywork recognises and celebrates the polyphony of voices, lessons, and worldviews that are shared, understood, and constructed through Indigenous stories. The researcher’s own understandings of Indigenous stories are woven together with others, grounding the researcher’s theoretical and methodological approaches in a relational practice that makes it possible to responsibly tell new stories in new spaces with new people.

This is exemplified in the discursive practices of researchers using a Storywork methodology in design-related projects. Barcham (2021) employs Storywork as, what he calls it, an ‘asset-based’ approach to ‘radically inclusive design’. ‘Asset-based’ approaches create methodological frameworks that better centre the experiences of Indigenous people and other marginalised groups around issues of participation, voice, and respectful engagement (Barcham, 2021).

This provides a discursive space that facilitates interactions between non-Indigenous peoples and Indigenous peoples (as well as between Indigenous and Indigenous or non-Indigenous and non-Indigenous peoples) that enable design actions anchored around the concerns and issues of the marginalised group. The ‘discursive landscape’ of my Architectural

Storywork methodology (see 4.1), helps to facilitate interactions between members of the PKP community and myself through Storywork ethics and architectural theories that originate from the PKP community's architectural concerns of self-determinism, autonomy, and the transmission of new knowledge (rooted in Balinese Indigenous Tourism movements- see Chapter 2) and their use of the Tong Tong drum as a discursive tool (rooted in Balinese mytho-historical and geographical stories- see Chapter 4).

'Radically inclusive design' is a storytelling practice that actively works to bring together multiples worldviews and create a new shared world that is inclusive of, and flowing from, the weaving of its constitutive worldviews. Importantly, new design processes are developed through the weaving, untying, and retying of worldviews rather than one worldview subsuming, superseding, reducing, or redacting others. Gothe and De Santolo (2022) also apply Storywork as a discursive investigation of Indigenous research approaches, focusing on design-led research to reframe design methods (including practice-led visual and material exploration, social and participatory methods) informed by Indigenous principles voiced through storytelling.

My fieldwork practices develop new design processes with the PKP community that, firstly, engage in design workshops that bring the different worldviews of each participant into contact with each other (see Table 6.1) and, secondly, develop an architectural charge by weaving together these different worldviews into a new shared, discursive, world (see Table 6.6).

Dalla Costa (in Grant et al., 2018, p.194), asks the probing question "Where does one begin a discussion of crafting an Indigenous story in architecture?". In answer, she tasks architectural researchers and practitioners to develop a deep understanding of how a culture's innate 'undercurrents' affect architecture, before considering how typologies relate to those understandings.

These undercurrents are described by Matunga (2013) as multi-layered materiality and memory; where materiality refers to the physical quality, presence and structure of architecture, and memory refers to the recollection of experience and existence. Dalla Costa (in Grant et al., 2018) further suggests that this task can be met through 'process'; the inclusion

of everyone, including ancestors and future generations, in contributing to the final product so that the outcome represents and benefits all by revealing all the biological, cultural, social, economic, and political factors that have the potential to impact the spatial environment. In this way, process also allows for vital links between ancestral places and the inhabitants to emerge (ibid). This moment of 'process' within design practice aligns with the architectural charge; the expressive potential of a project, often linked to a building's typology, that has the potential to question, explore, and transcend normative restriction on the outcome of a design and offer the capacity for the inclusion of multiple diverse worldviews within spatial discourses.

3.5 Implementing Storywork

Storywork enables the crafting of Indigenous story within architecture through discursive design practices. It supports the emergence of discursive spaces in which ancestral and lived stories can be extrapolated, expanded, and abstracted in an architectural charge, so that multiple voices and diverse realities, histories, conditions, and knowledges can engage in:

- Polyphonic practices, where multiple, diverse, worlds are voiced simultaneously without being reduced, redacted, altered, or judged by another authoritative voice.
- Respectful relationships between the self and the alterity of the other to construct a sense of 'being together'.
- Responsible decision making, in which individuals can accepts a state of not knowing and do not try to reduce alterity to a well-known generality or project their own knowledge onto it.
- Redirective design actions, which aim to redirect past colonial experiences into possible decolonial futures through urgent but sustained actions.

This builds upon existing articulatory design practices at the intersection between design theory and Indigenous Research Methodologies, with the aim of de-privileging the design brief as a site of architectural production. By engaging with specific analogies and metaphors creatively adapted and abstracted from and within Indigenous stories, researchers and practitioners can expand the expressive potential of an architectural project so that it may

go beyond the narrowly defined boundaries of normative architectural requirements.

Chapter 4 details the construction of my own Architecture Storywork methodology through discursive design practice, formalising a novel research methodology by applying Storywork through an architectural lens. This methodology borrows from the cartographic metaphors and visual dialogues of Austronesian Indigenous Knowledge to create a discursive landscape as a mental mode of spatially that arranges my own theoretical and ethical principles (see Table 4.1 and Table 4.2 respectively), and practically expresses them in an articulated form (see Fig 4.1).

4.0 Methodology

Or **Architectural Storywork**

This chapter describes my Architectural Storywork methodology by returning to Research Question 4, considering what Indigenous metaphysical concepts can inform my approach to architectural fieldwork in Bali and how this might fill some of the Indigenous Research gaps related to discursive and decolonial practice in architectural research. This methodology is situated within Balinese socio-cultural realities that interweave both Austronesian and Indic worldviews, and is place, people, and time specific to the goals and values of the PKP community throughout the duration of this study (between 2020 and 2023).

As described in section 3.4, scholars implementing Indigenous Storywork methodologies treat Indigenous mytho-historical stories as a 'theoretical anchor' in their research methodology (Simpson, 2014), in which layers of metaphor are unlocked within a story and are used to communicate theoretical or ethical principles to the researcher (Archibald, 2008; et al., 2019). In this way, the knowledge held within stories can be utilised as a situated epistemological framework for the development of a research methodology. As such, Storywork is a methodology of storytelling that can be applied in many situated contexts with Indigenous communities around the world by developing and following a set of ethical and relational principles that aim to build authentic relationships and take actions that are anchored around the concerns and issues of the marginalised group (Barcham, 2021).

The structure of this chapter can be seen below:

- Section 4.1: Details my own Storywork methodology through an architectural lens and describes the core theoretical and ethical principles embedded within this methodology. This methodology is abstracted from layers of metaphor within four stories depicting the origins of the Tong Tong drum, following Ibu Sari's use of the Tong Tong as a discursive tool (see 2.2.2) to articulate the three strategies of this study (see 2.2.3 - 2.2.7). The stories describe geographical, architectural, and ecological landscapes that I adapt into metaphysical metaphor in section 4.2.
- Section 4.2: Builds on section 3.2 to consider the 'sickness of the house' within a Bali-specific context, where the Western metaphysical metaphor of the house has appropriated

Balinese architectural principles. Taking Sheehan et al.'s (2010) Austronesian metaphysical metaphor of the cave as precedent, I attempt to define an equivalent Balinese metaphysical metaphor that weaves together Austronesian and Indic worldviews. Based on Reuter's (2002; 2006; in Vischer, 2009) seminal works on Bali's physical and spiritual landscapes, I suggest the Banua or 'sacred landscape' as a Balinese metaphysical metaphor that has geographical and discursive links to the PKP Community Centre and the future PKP Bale Tong Tong.

- Section 4.3: Builds on Section 3.3's explorations of visual dialogues and discursive spaces to construct my own 'discursive landscape' using the Storywork methodology. This section practically demonstrates the construction of my own Architectural Storywork methodology (see 4.1), which intentionally identifies stories with architectural narratives and purposefully searches for architectural, geographical, and ecological metaphors within them. This is a deliberate decision, which allowed me to develop a situated set of theoretical and ethical principles that focus on the PKP community's architectural experiences and expectations, and help to define architecture's responsibilities to the PKP community.

- Section 4.4: Builds on Section 3.4 to define the core theoretical and ethical principles of my Architectural Storywork methodology. These principles are constructed through my situated understanding and interpretation of Balinese architectural theory and precedents of design and art-based applications of Storywork. They are purposefully constructed to guide my practical fieldwork by: facilitating interactions between myself and the PKP community in ways that enable design actions anchored around their goals and values, creating a new shared world that is inclusive of (and flowing from) the weaving of our multiple worldviews, and empowering the PKP community through the development of new design cultures and tools.

4.1 My Storywork Methodology

4.1.1 A Discursive Landscape

I treat four Balinese origin stories of the Tong Tong drum as theoretical anchors within my Architectural Storywork methodology. Two of these narratives are re-told and interpreted

by non-Indigenous scholars (Howe, 1980; MacRae in Reuter, 2006) and two are told by Indigenous peoples (Sertori, 2014; Karinata, 2022- Interview). Further information was collected about the recent history and practical uses of the Tong Tong drum from the Head of Customs and a village Elder in Banjar Selasih, where the PKP Community Centre is based, alongside in-depth studies on the Tong Tong drum through a review of Balinese literature. This process was undertaken to ground my abstraction of stories, some of which include Western interpretations, within the knowledges of the Balinese people. These knowledges, held within stories, are abstracted to identify common patterns that are utilised as a situated epistemological framework for the development of my Storywork methodology. This follows Ibu Sari's use of the Tong Tong as a discursive tool (see 2.2.2) that articulates the three strategies of this study (see 2.2.3 - 2.2.7).

This anchors my epistemic and methodological frameworks within the PKP community's architectural concerns of self-determinism, autonomy, and the transmission of new knowledge (rooted in Balinese Indigenous Tourism movements- see Chapter 2), and supporting a relational accountability to the PKP community's goals and values (Davidson in Archibald et al., 2019). Due to a lack of documented knowledge from the first centuries AD, is unclear if or how the Tong Tong could have been used in Bali before Hindu influences (Tomasz, 2007). Many stories related to the origin of the Tong Tong drum are entwined with the arrival of the Hindu sage Rsi Markandeya to Bali, who is known for introducing the *subak* irrigation systems to the Wos valley region between Taro and Ubud- a geographic area within which the PKP Community Centre operate, with buildings situated in Ubud (at the bottom of the ridge) and around both Tegalalang and Payangan (East and West of the ridge peak)- see Fig 2.1 for reference.

The PKP Community Centre is part of one such *subak* community, allowing them to divert water onto their land to help sustain the PKP community. This is a minor, but important, distinction for the PKP Community Centre, articulating and validating their integral position within wider Balinese society through contributions to the *subak* community- widely regarded as the foundation of Balinese civilisation and integral to the survival of the Balinese way of life (MacRae in Reuter, 2006; Lansing in Watson, 2019).

Some of these stories describe the real-world geographies, architectures, and ecologies of Bali related to Rsi Markandeya's arrival in this location. Therefore, my Storywork methodology unlocks layers of metaphors within the geographical, architectural, and ecological landscapes described in the Tong Tong origin stories to create a 'discursive landscape'. This discursive landscape depicts important architectural structures and geographical locations related to the *subak* irrigation systems in the region, such as *subak* water temples built in Taro and Ubud, the peak of a mountain ridge toward which these temples are orientated, and the surrounding villages of Tegalalang and Payangan that are connected to Taro and Ubud through a ritual network.

These architectural and geographical markers are oriented faithfully around the mountainward-seaward and sunrise-sunset axes that define the 'Dewata Nawa Sanga'- an octagonal mandala with the Eight Guardians of Direction, or eight gods, placed at the eight cardinal directions and guided by the god Shiva at its ninth central point (Damayanthi, 2017; Satria, 2019). Each of these locations and orientations is given metaphorical significance within my discursive landscape, following Schultz's (2019) cartographic metaphor of cognitive mapping (see 3.3.1) that spatially arranges ideas and knowledge and practically articulates them as a discursive space that can be 'inhabited' by the authors or readers.

This discursive landscape weaves together linear Austronesian geographies and circular Indic geographies to depict a *mandala*, an architectural and spiritual formation that has been utilised in some instances within Bali as a symbolic political resource against colonial systems by reconstructing, reinventing, or reimagining the material practices and foundational worldviews of Balinese architecture (MacRae in Reuter, 2006; Reuter in Vischer, 2009). Each metaphor of this discursive landscape describes a theoretical or ethical principle that has been abstracted from either Balinese stories, Balinese architectural theory, or precedents of design and art-based applications of Storywork. This can be viewed in Fig 4.1 (on next page), whilst its associated theoretical and ethical principles are summarised in Table 4.1 and Table 4.2 respectively. Subsequent sections of this chapter detail the underpinning concepts of this landscape, describing why they are applicable to this work and how they are applied within this study.

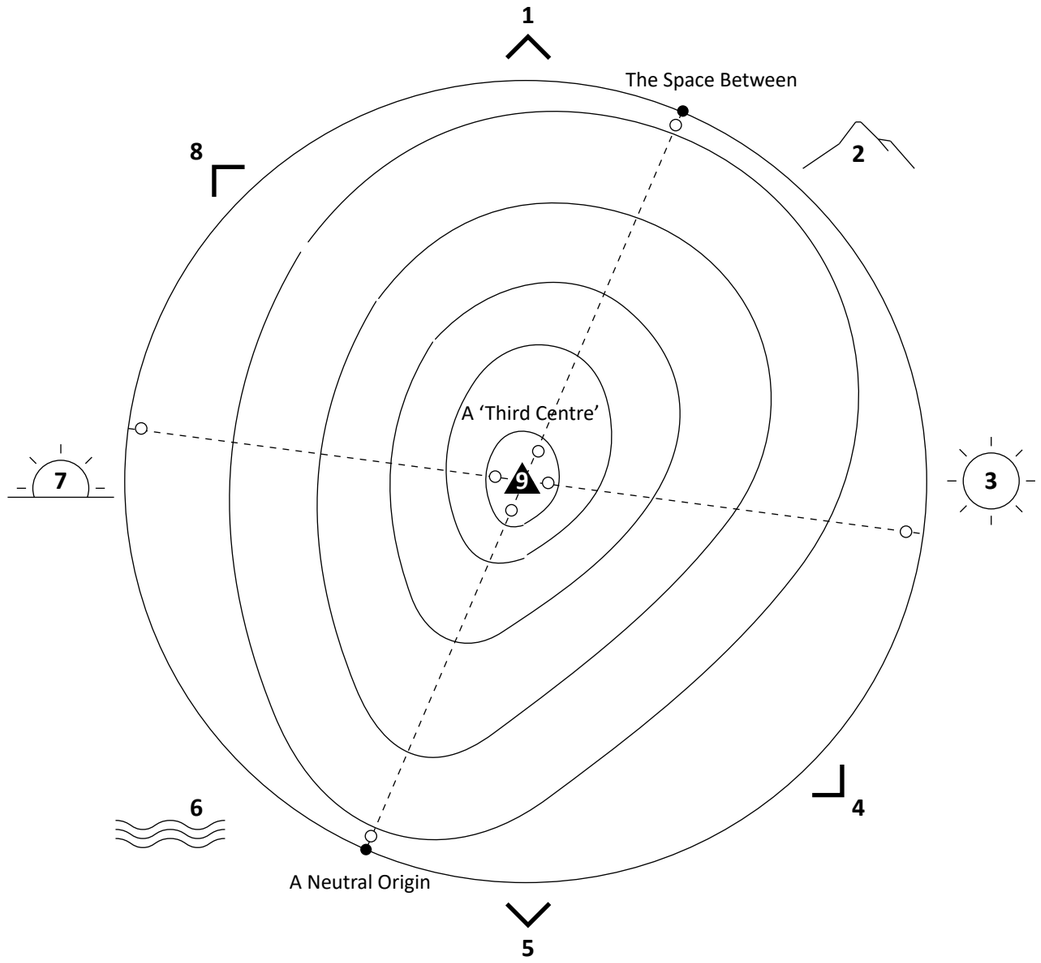


Fig 4.1 The Discursive Landscape of my Situated Architectural Storywork Methodology as adapted from MacRae (in Reuter 2006) and Watson (2019)- Alastair Brook 2023

The Mandala Landscape

1	Creating and Respecting Data within Stories	Applied in Fieldwork Initiation (see 5.3.3)
2	The Respectful Re-telling of Stories	Applied in Fieldwork Initiation (see 5.3.3)
3	Reverence Between Teller and Listener	Applied in Data Collection and Analysis (see 6.4.2)
4	Responsible Narratives	Applied in Data Collection and Analysis (see 6.4.2)
5	Relational Reciprocity	Applied in Data Collection and Analysis (see 6.4.2)
6	Holistic Transformation of Trauma	Applied in Fieldwork Outputs (see 6.3.3)
7	Sharing Interrelated Stories	Applied in Fieldwork Outputs (see 6.3.3)
8	Synergetic Actions	Applied in Fieldwork Outputs (see 6.3.3)
9	The Three 'Anchors' Axis	Applied across all phases (see 5.3.1, 6.1.1, and 6.3.1)

Gunung Lenah 'Peak'
A 'Third Centre'

○ Irrigation Shrines
Pura Hulu (Upstream)
Pura Hilir (Downstream)
Guiding Consciousness through the *Mandala*

Pura Gunung Lebah
Subak Temple
A Neutral Origin

Subak Irrigation

Pura Gunung Raung
Subak Temple & *Tong Tong*
The Space Between a Building and Its Inhabitants

Forests

Groundwater Aquifiers
The Flow of Consciousness

Forests

4.1.2 Theoretical Principles and their Metaphors

The theoretical principles are composed from the uniquely complex settings, strategies, and stories explored in this study and are not generalisable to other, equally uniquely and complex, contexts (see Table 4.1). These anchors are represented by the peak of Gunung Lebah ridge, acting as the central point of Dewata Nawa Sanga mandala along the Taro-Ubud (mountainward-seaward) and Tegalalang-Payangan (sunrise-sunset) axis, and the *subak* water temples located in Taro and Ubud. This tri-lexicon of two oppositions and a 'third centre' indicates a biological dimension that refers to the limbs of humanity and is spatially represented as a combination of a linear settlement (along the mountainward-seaward axis) or a crossroads settlement (between mountainward-seaward and sunrise-sunset axes)- (Samadhi, 2004).

Table 4.1 The Three Theoretical Principles of a Situated Architectural Storywork Methodology

1. A Third Centre
In the hopes of avoiding homogeny within the PKP community, any 'third centre' created between spatial dichotomies will focus on building respectful relationships with alterity that cannot be based on what we (myself or the PKP community) already know. Instead, we must account for the complete alterity of each other and unknown others, so that we might exceed what is already known and create something absolutely new (Vitale, 2018, pp.36-38).
2. The Space Between a Building and its Inhabitants
This study treats the *pengurip* (extra space added in Balinese building construction to allow the building to have life- transforming an inanimate artefact into a living entity with a 'soul' that can live in harmony with its environment) as an imaginative and liminal space between the buildings and the PKP community, into which multi-layered materiality and memory can be inscribed using discursive design practices (Matunga, 2013). This discursive space holds within it all that is materially and memorably possible, hypothetical, never existed, or perhaps will never exist but might have existed (Psarra, 2018).
3. A Neutral Origin
Situated within the context of colonial tourism and its impacts on vernacular Indonesian architecture, this study focuses on a return to an ecologically beneficial origin; prioritising the relational connections and impacts of architecture within larger social and ecological systems through a recovery of pre-colonial knowledge and critically reflected colonial experience (Fry, 2009; 2017). This attempts to neutralise negative experiences, expectations, or tensions with architecture- identified as architectural oppositions between a privileged and often oppressive architectural concept and its possibility liberating subordinate- in a process of 'deconstruction' that subverts the hierarchal oppositions and reduces them into a singular term that removes the need for the original dichotomy- see 2.2.6 (Wigley, 1993; Coyne, 2011; Vitale, 2018).

Spiritual movement through this discursive landscape is represented by the upstream and downstream shrines of the *subak* irrigation system, which physically guide the flow of water down through the *subak* fields and spiritually guide the unseen return of water to the mountain lakes. These shrines also represent a cooperative management of ecological resources that helps to sustain Balinese communities (Watson, 2019), a constant reminder of the collaborative nature of this study with the PKP community. See Sections 5.3.1, 6.1.1, and 6.4.1 for examples of how each theoretical principle is applied within my fieldwork.

4.1.3 Ethical Principles and their Metaphors

The ethical principles can be more generally replicated or adapted to other contexts, as they are composed from concepts related to (Cross-Cultural) Digital Storywork (Stanton et al., 2016), the Validity Criteria for Digital Storytelling (Sitter et al., 2020), the principles of Indigenous Projects of Digital Storytelling (Smith, 2021; Willox et al., 2012), and Transformative Storywork (Wheeler et al., 2020)- see Table 4.2. These principles are represented by the eight cardinal directions of the Dewata Nawa Sanga mandala. See Tables 5.3, 6.5, and 6.7 for examples of how each ethical principle was practically applied within my fieldwork.

Table 4.2 The Eight Ethical Principles of Architectural Storywork

1. Creating and *Respecting* Data within Stories
• Storywork and other Indigenous Research Methodologies are more impactful when the community invite the project in, set its parameters, and outline project goals that a)centre Indigenous Knowledges and, b) require oppressive structures to align with those goals through the creation of new policies, cultures, or practices (Sitter et al., 2020; Smith, 2021).
• When relaying a story, the relator must make efforts to;
• Understand the roles of stories in teaching and learning Indigenous Knowledges, be respectful of the people who own and tell these stories, and make sure that the information is recorded and retold truthfully- following the place and people specific protocols of storytelling (Archibald, 2008; Archibald & Parent in Archibald et al., 2019).
• Radically care and empathise with the everyday stigma and oppressions of marginalised communities, instigating dialogue between Indigenous and non-Indigenous peoples to tackle systemic injustices (Smith, 2021; Wheeler et al., 2020). 'Radical care' and 'radical empathy' engage in communal care that recognises what it means for individuals and groups to feel; providing care and taking actions that will not only help others survive, but even thrive in environments that challenge their very existence- improving society as a whole (Hobart & Kneese, 2020; Givens, 2021).

Table continues on next page

- Validate Indigenous ownership over the research data that is created within and through their stories. This requires a joint understanding that the academic researcher is not the sole person making or keeping research data; acknowledging that participants engage in the discovery, expression, and understanding of their own worlds, identities, and experiences as co-researchers (Stanton et al., 2016; Wheeler et al., 2020; Smith, 2021). This may contribute to a more equal balance of power within who owns, controls, and can use the lessons embedded within stories (Przybylski, 2020).

2. The *Respectful* Re-telling of Stories

- Storying methods aim to provide a platform for Indigenous community members to tell their own stories, in their own words, and in the way they want others to hear it (Smith, 2021). Stories share a wealth of interrelated ideas, events, and experiences, and should be treated as valued and legitimate contributions to an interdependent knowledge system that encompasses Indigenous outcomes as well as research and design outcomes (Brayboy, 2006; Edwards et al., 2008; Kovach, 2009).
- Listening to, recording, and relaying stories may require the use of translator to navigate barriers to a researcher's understanding of complex Indigenous value systems. Cross-cultural communication brings with it added responsibilities to mitigate impartiality, conflicts of interest, linguistic uncertainty, or misunderstandings when translating data. Working with translators who have an intimate knowledge and relationship with the community can provide a unique understanding of cultural and personal sensitivities, respect for the privacy of individual and communal data, and accuracy in comprehending and conveying personal stories (Drugan & Tipton, 2017).
- A nuanced understanding of institutional ethics is required when processing Indigenous stories under the observation of university ethics committees. As research data is processed, Indigenous teachings can undergo censorship or 'fabrication' (edited, translated, scrambled, rephrased, anonymised, cropped, or blurred) due to pre-determined institutional rules, timeframes, or funding (Markham, 2021; de Seta, 2020). Transparency about the biases, limitations, and agendas of data processing are integral to the relationship between a researcher and community co-researchers. Where possible, Indigenous ethical frameworks should be implemented to protect Indigenous Knowledge in ways that go beyond university standards (Davidson in Archibald et al., 2019).

3. *Reverence* between Teller and Listener

- Storytelling provides a platform for community members to connect to themselves, their realities, histories, conditions, and knowledges- including ancestry and ecologies- and weave together multiple worldviews through shared narratives (Willox et al., 2012).
- Time should be devoted to tracing the mundane trajectories of individuals as they move through and experience space. However, it is not the researcher's responsibility to decide whether spatial experiences are more important to a person's daily life than their culture, or if their culture explains how their spatial experiences are constructed (Yaneva, 2009).
- The researcher has a responsibility to work with the storyteller to consider the extent that each spatial experience has relevance to their lives or to the lives of others who are directly connected to the study (Sitter et al., 2020). This focuses on seeing a smaller ethnography well, whilst still recognising the broader values, contexts, and cultures present within the Indigenous experience of space (Yaneva, 2009).

Table continues on next page

4. *Responsible* Narratives

- By preferencing the shorter stories of everyday experience over the grander narratives of culture and society (which may be culpable to oppression and stigmatisation), it is possible to foreground non-universal truths, pluriversal worldviews, and a polyphony of voices that can give greater meaning to a shared cultural narrative (Ramakers, 2002). This purposefully usurps the grander references to architectural theory and Western metaphysics as the dominant standards of explanation and, instead, focuses its attention on tracing the ordinary forces and everyday actions of individuals as they make sense of their own world building activities (Yaneva, 2009).
- Objective rules to world building are given arbitrarily within socio-cultural norms. The final experience of space depends, instead, upon the subjective application of these rules by individual people (Tschumi, 1994). Only by understanding the world building processes of individual people can we evaluate the otherwise 'random' application of socio-cultural rules (Bandoni, Meroz, & Paz, 2010). Stories provide Indigenous people with the opportunity to share their own world building processes, interact with the world building processes of others, and give voice to ideas not previously shared (Willox et al., 2012).
- It is the responsibility of all storytellers and listeners, including the researcher, to practice ethical care to their fullest extent by sharing, listening, teaching, or learning with compassion and attentiveness, and take accountability for any errors that may occur within these processes (Archibald, 2008; Sitter et al., 2020; Wheeler et al., 2020).

5. Relational *Reciprocity*

- When engaging with multiple mediums of storytelling, it is possible that the storyteller may articulate multiple personas and worldviews that can leave the listener feeling 'deceived' (Przybylski, 2020). When researchers engage in the double hermeneutic approach (making sense of the participants whilst they make sense of their own world building activities), they are engaged in a dual conversation- one with the storyteller and one inside their own head engaging constantly in a meta-analysis of the story. It is important to understand that this meta-analysis can put the researcher in a state of doubt or mistrust in relation to the storyteller, which must be overcome (Hendry, 2007; de Seta, 2020).
- Whilst additional data points can be used to cross-examine and cross-reference multiple stories to find common narratives (Przybylski, 2020), the researcher must also accept contradiction and not attempt to assert authority by superseding, reducing, or redacting multiple voices. It is important for the researcher not to become lost in their own analysis and, instead, to take time to connect with their inner self, to the storyteller, and to the Indigenous topic being discussed, in order to appreciate its true meanings (Archibald & Parent in Archibald et al., 2019).
- The reciprocal sharing of stories between the researcher and Indigenous communities also helps to build trust, connect to others, and also connect to our own individual and collective histories (Willox et al., 2012). Sharing stories with Indigenous people allows the researcher to locate themselves within the context of the research, giving more credibility to the knowledge that is shared and disseminated through their research practices (Sitter et al., 2020; Smith, 2021).

6. *Holistic* Transformations of Trauma

- Storying is an educational process with the purpose of teaching, protecting, preserving, and learning the power of particular Indigenous knowledges in new spaces with new listeners (Archibald, 2008; Garcia & Shirley, 2012). This process can challenge how certain ways of seeing and knowing are privileged over others by, firstly, recognising oppression and, secondly, instigating actionable change by authoring new

stories and teaching new lessons 'between the lines' of oppressive structures; creating spaces that can communicate multiple meanings (Karami, 2019).

- This process involves remembering, accepting, and celebrating trauma by bringing it into the present as a healthy transformation in relation to oneself, family, or community (Willox et al., 2021; Sitter et al., 2020; Smith, 2021). Rather than 're-living' trauma by telling stories that have already been told, this is about harnessing the performative potential of telling new stories, constructing new spaces, and introducing new characters into those spaces that engage in new design culture around spatial experience (Archibald, 2008; Karami, 2019).
- By inviting participants to co-author transformative stories in the space between academic research and Indigenous Knowledge, new methods of knowledge production and articulation can evolve with, and from within, the community- moving towards actionable social changes and new design cultures that emerge from reflexive, critical, and discursive learning practices.

7. Sharing *Interrelated* Stories

- Sharing Interrelated stories is a catalytic process where community members have opportunities to;
  - Re-examine and re-story their lived experiences as shared topics.
  - Learn the core values, beliefs, and essence of shared stories which could transcend time and place.
  - Recognise interconnections across many core areas and experience between members of their own community and between Indigenous people throughout the world (Archibald, 2008; Willox et al., 2012; Sitter et al., 2020).
- To better enable this process, as much research data as possible, including meta-data such as algorithms, tools, and workflows, must be accessible to Indigenous people so that they can openly share replicable data with each other and other Indigenous communities. Similar data should, as much as possible, be made available to other researcher and the general public for reproducibility purposes (Wilkinson et al., 2016).

8. *Synergetic* Actions

- Ultimately, research is conducted to trigger new thoughts or deepen existing ideas around emancipation, by learning from the characters, and the events that occur within the discursive spaces of stories (Archibald et al., 2008). This process can be more impactful when project stakeholders listen deeply and reflexively to what cultural knowledge holders are saying, how they are saying it, in what context, and with what purpose. 'Deep listening' (Scharmer, 2016) aims to authentically connect with the experiences of Indigenous people as co-researchers, going beyond the trappings of a relators self and ego to genuinely focus on helping to bring Indigenous goals and values into being.
- Bottom-up, participatory practices allow the iterative development of research processes based on the reflexive experiences of the community (Wheeler et al., 2020; Escobar-Tello et al., 2021). Group reflection does not focus on reporting individual interpretation, as they are not readily separable from the interpretations of the community (Sim & Waterfield, 2019), but thoughtfully considers how different experiences are woven together to re-construct diverse worldviews towards new possibilities of public action and improved quality of life (Lather, 1986; Sitter et al., 2020).

See Appendix C for a more detailed composition of each theoretical and ethical principle based on material discussed within this chapter.

4.2 The Mandala Philosophy of the Balinese Banua

4.2.1 Appropriation of Indigenous Architectural Principles

Western metaphysic's 'sickness of the house' (see 3.2.1) outlines the colonial qualities of architectural metaphor as the discourse of philosophy, centred around the continuation of inside/outside, self/other, patriarchal/matristic dichotomies. Indigenous philosophies contain their own metaphors of discourse, such as the Austronesian 'cave' metaphor, centred on relational worldviews that view inside/outside and self/other as internal to one another whilst remaining heterogeneous (see 3.2.2 and 3.2.3). Bali has its own unique philosophy that weaves together both Austronesian and Indic worldviews, which traditionally follows the philosophy of Rua Bineda, "two that are different"- a belief that accepts that things are both themselves and other things at the same time, causing binaries to undergo constant adjustments to form a sense of balance (Dibia and Ballinger, 2004). There are no inner or outer, self or other, conditions that can be separated from each other, nor are the dualities transitive where inside is self and outside is other (Duff-Cooper, 1985).

This is a notion that Western philosophy still struggles with, as it diverges from the Aristotelian Law of Identity or Western logic's grounding principle of noncontradiction- which says that a thing is what it is and nothing else (Brunette & Wills, 1989). Rua Bineda more closely resembles Levy-Bruhl's (1926) "Law of Participation" or Lederach's (2005) "Paradoxical Curiosity", which have no ambition to deny difference or resolve tensions by permanently uniting or separating them and, instead, move past "dualistic categories of truth" (Yu, 2015) to accept that things are both themselves and other things at the same time.

However, the colonisation of Balinese architecture through tourism (see 2.1.1) has led to shifts in architectural education and practice within Bali (Yu, 2015) that gatekeep knowledge (Alit, 2003; MacRae & Parker, 2002; Suryawan & Juniantari, 2021) and threatens to erode traditional architectural roles (Dwijendra & Mahardika 2018; Dwijendra et al., 2020; Kurniawan et al., 2020; Dwijendra & Adhika, 2022) and values (Aryani & Tanuwidjaja, 2013; Idham, 2018; Satria, 2019). Arthana (2019, p.174) exemplifies this shift when he diagrammatically articulates the architectural knowledge of the Asta Kosala Kosali as a metaphorical house (see Fig 4.2 and Table 4.3). The Asta Kosala Kosali is the guiding literature of Balinese architecture,

written in the old Balinese language (with scarce translations) and inscribed within 'sacred' *lontar* manuscripts made from dried, treated, and bound palm leaves.

The composition and arrangement of traditional Balinese architecture is guided by anthropological metaphors of the head as a sacred or upper zone, body as neutral or middle zone, and feet as profane or lower zone. Arthana's diagram exemplifies the concept of Tri Angga, in which an individual building is divided into sacred, neutral, and profane zones in elevation (see Fig 4.2).

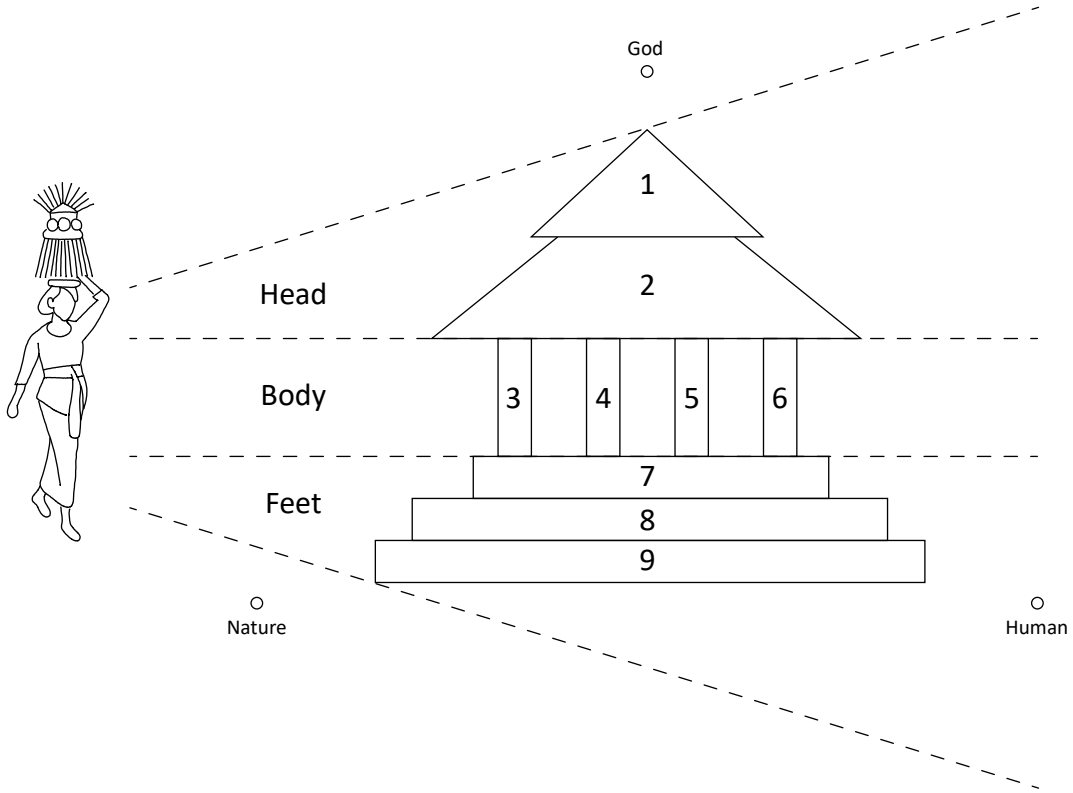


Fig 4.2 Metaphorical Diagram of Balinese Architectural Knowledge as adapted from Arthana (2019)- Alastair Brook 2023

These metaphors are not hierarchal, but teach architecture as part of a 'wholistic' body (referring specifically to the whole human body as opposed to holism which emphases the interdependent parts of any whole system)- depicting a unified system between humans, architecture, and their natural and spiritual ecologies such as the mountain, land, sea, and the sun (see Table 4.3 on next page).

Table 4.3 The Hierarchy of Arthana's (2019) 'House' Metaphor

Head	
1.	1. Harmony and 2. Balance, as prescribed in the Tri Hita Karana philosophy, in which the goal of the construction process is the harmonious relationship between humans, nature and the universe/ God. It treats the arrangement of the building as a whole with no contradictions between forms, parts, or elements, balancing structure and ornament, left and right, and quality and quantity. This oversimplifies the concept of Rua Bineda by reducing multiple differing and potentially contradictory elements into a singular unity that must be 'universal' and non-contradictory.
2.	
Body	
3.	Places the columns as the main component of the building structure, privileging the column over the beam within the structural frame system; termed the 'strong column- weak beam structural frame system'. Strong columns protect and enclose inhabitants and can support defective or damaged beams so that inhabitants can safely exit the building. This privileges the interior and self over the exterior and other.
4.	Following the privileging of the column, building construction starts assembling components from the 'body' of the building first.
5.	Building construction must consider material sustainability through the classification and regulation of wood use, referencing the 'return' of living wood to the soil through planting and dead wood to the sky through fuel for industry. This focuses on 'sustaining the unsustainable' over designed sustainment (Fry, 2009), by centring material and energy usages whilst ignoring the relational connections and impacts they have in larger social and ecological systems.
6.	Regular geometric beauty that refers to the arrangements of triangles and rectangles. Triangles are characterised as rational, sturdy, and stable when resting on a side, but not when resting on a point. Likewise, rectangles are characterised as simple, innocent, neutral, and static when resting on a side, but not when resting on a point. Geometries should be directed and arranged to maintain stability, rationale, neutrality, and innocence. This removes any integration of ambiguity or alterity by labeling them as undesirable others; 'irrational, 'unstable', 'complex', 'bias', 'sinful', 'dynamic' etc.
Feet	
7.	7. Truth, 8. Obedience, and 9. Pleasure are stated as the foundation of the Asta Kosala Kosali. Rational truth is viewed as a means to carry out sacred work, implying that it is sacred knowledge from God (gods or deities) intended to be obediently followed by humans. This includes the ritual or ceremonial processes involved- offerings of food, metals, and spoken *mantras* to God- that give pleasure or satisfaction that good work has been done. This removes the autonomous agency of communities to adapt architectural principles based on their own perceptions of truth- worldviews, realities, histories, conditions, and knowledges.
8.	
9.	

This not only groups buildings in elevation, but also orientates site plans and urban composition with the landscape through the principles of Tri Mandala (the grouping of space into three zones along a North-South axis) and Sanga Mandala (the grouping of space into

nine zones along North-South and East-West axes, where the Mountainward-Seaward axis emerges)-see Fig 4.3. Arthana (2019) unwittingly appropriates these values by aligning them with Western philosophy's metaphor of the house, creating a hierarchy of separation that instigates inside/outside (protection of inhabitants over those outside), self/other (stability and understanding over ambiguity and alterity), and patriarchal/matristic dichotomies (obedience over autonomy) that were not originally there.

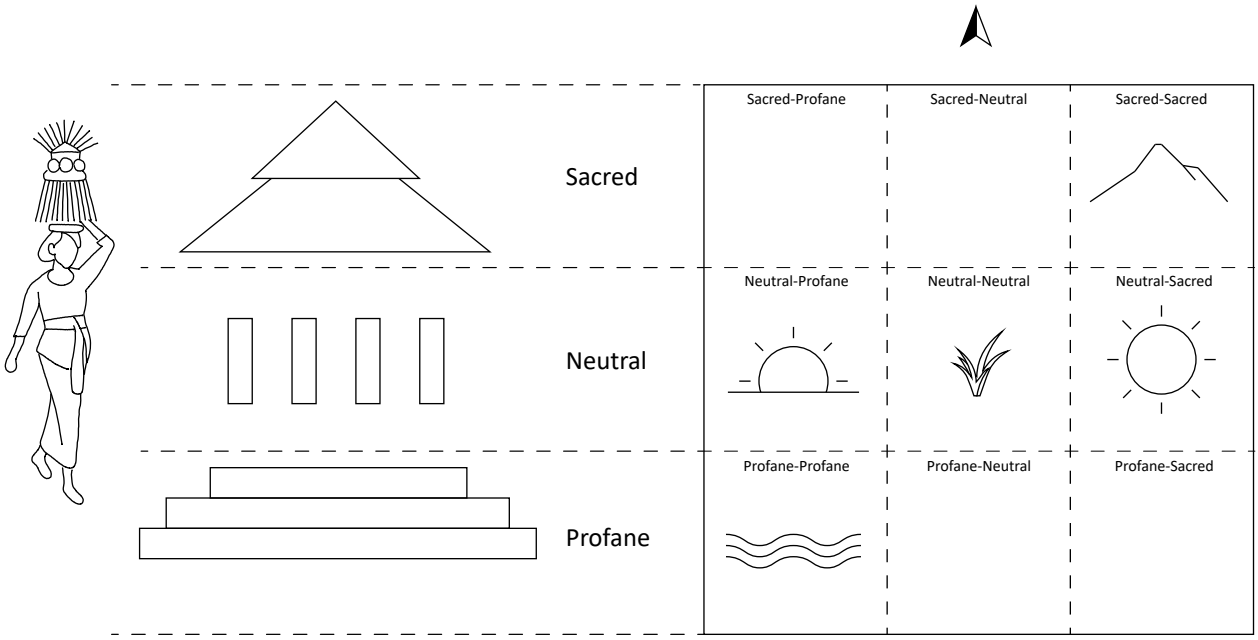


Fig 4.3 The Orientation of Balinese Architecture- Alastair Brook 2023

Taking Sheehan et al.'s (2010) Austronesian metaphysical metaphor of the cave as precedent, the remainder of this section attempts to define an equivalent Balinese metaphysical metaphor that weaves together Austronesian and Indic worldviews. Based on Reuter's (2002; 2006; in Vischer, 2009) seminal works on Bali's physical and spiritual landscapes, I suggest the Banua or 'sacred landscape' as a Balinese metaphysical metaphor that has geographical and discursive links to the PKP Community Centre and the future PKP Bale Tong Tong. From this origin, I establish the *mandala* as a discursive resource against contemporary colonial practices.

4.2.2 The Desa Banua: 'Source Village of the Sacred Landscape'

The Banua describes a ritual or spiritual territory inscribed by the continuing memory of human settlements and re-inscribed through origin narratives and ritual performances (Reuter, 2006). Reuter calls this a 'sacred landscape' or 'ritual domain'- for a detailed

investigation into the Banua, see Reuter's (2002) *Custodians of the Sacred Mountains* and chapter in Vischer's (2009) *Precedence*. A Banua is usually evidenced by a network of *desa*, or villages, linked by reciprocal ritual ties to a Desa Banua or 'source village' (MacRae in Reuter, 2006).

The concept of the Banua precedes Kingdoms and other forms of territorial division that have been imposed throughout Bali's history, but have been eliminated or obscured by colonial organisation (MacRae in Reuter, 2006). Traditional Banua have only been retained in 'Bali Aga' communities (Indigenous peoples of the highland regions) that were not explicitly placed under colonial rule. Other areas of Bali show evidence of contemporary village networks linked to a central *desa* or a shared temple, some of which purposefully uses the metaphor of Banua to confront colonial structures.

Desa themselves are responsible for the maintenance of ritual harmony between human and *niskala* communities in relation to spatial and ecological landscapes (MacRae in Reuter, 2006). *Niskala* communities refer to spiritual beings and include the highest deities of Hinduism, as well as local non-Hindu gods, ancestors who take on a deified (god-like) status, and smaller spirits that inhabit the landscape. Ritual offerings are given to various *niskala* beings at temples in individual villages or at *pura* Banua, the 'original' temple within the 'source village'.

In contemporary Bali, the *niskala* landscape of the Banua is utilised as a symbolic political resource against colonial tourism, that views land in terms of exchange rather than use or ritual value MacRae in Reuter, 2006). This 'neo-Banua' is formed by reconstructing, reinventing, or reimagining the material practices and foundational worldviews of Balinese architecture from both Austronesian and Indic worldviews. Table 4.4 and Fig 4.4 (on next page) describe the key characteristics of Austronesian and Indic worldviews that are present in neo-Banua, their network of *desa* villages, and the Desa Banua 'source village'. The harmonious polyphony of these two worldviews, internal to one another yet remaining heterogenous, forms the basis of my discursive methodology.

Table 4.4 Characteristics of the Neo-Banua from Austronesian and Indic Worldviews- adapted from MacRae (in Reuter, 2006) and Reuter (in Vischer, 2009).

Austronesian Characteristics	Indic Characteristics
Mountains are orientated linearly to the sacred landscape on a Mountainward-Seaward axis.	Mountains are orientated centric to the sacred landscape.
Buildings are orientated along a central axis (usually along the Mountainward-Seaward axis).	Buildings orientate outwards from a central crossroads.
Bale Agung, 'Great Pavilions' in which the gods associated with a village assemble, are located in a temple at the Mountainward end of a village's central axis and are usually orientated Mountainward.	Bale Agung or other sacred buildings are located at the central crossroads and are usually orientated towards the central mountains.
Tangible and unambiguous ritual networks of villages sharing obligations towards a sacred place of origin.	Intangible and ambiguous politico-ritual networks of villages and temples supported by a central *puri* (palace).
Maintained by a common obligation to the ancestral deities of the land and their temples. The source village does not interfere with the politico-ritual affairs of other villages, but communal co-operation generates a regional sense of identity.	Maintained by a set of ideas dispersed from the central palace through a diverse range of practices, stories, concepts of regional identity, and a system of local knowledge integrated into ritual practice and narrative.
Landscapes have an 'inner' magico-ritual aspect that is relational to a people's identity within a specific place and time, which is reinscribed continually through narrative and ritual performances.	

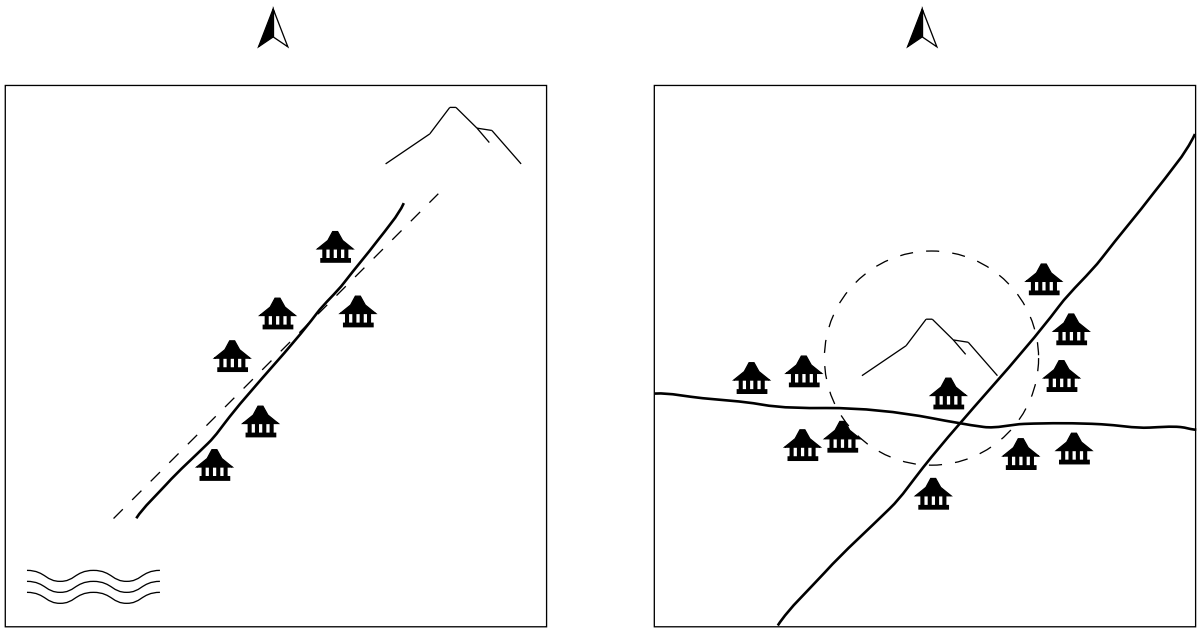


Fig 4.4 Austronesian (left) and Indic (right) Characters of the Neo-Banua, adapted from MacRae (in Reuter 2006)- Alastair Brook 2023

4.3 Constructing a Discursive Methodology

Storywork methodologies purposefully represent stories at a high level of abstraction in order to uncover layers of hidden metaphors and teachable lessons within them (Liu et al., 2019). Abstraction is unconcerned with the literal depiction of things but, instead, refers to 'building an object' that has been distilled from the real world. The process of abstraction can reduce the complex 'story' and performance of Indigenous narratives into a list of its most common elements in order to recognise underlying patterns. Understanding the 'story' and performance of Indigenous narratives in this way enables a listener to 'unlock' layers metaphors and lessons (Archibald, 2008).

In this way, the multiple knowledges held within stories can be abstracted and adapted into a situated epistemological framework for the development of people and place specific research methodologies. Indigenous stories are a way for Indigenous people to articulate their world, understand their own knowledge systems, name and give voice to their experiences, identify themselves, and guide their relationships with others (Archibald et al., 2019). Storywork makes transparent the way that these stories are created in the space between the teller and the listener and how meaning can change as the teller or listener changes (Kinloch & San Pedro, 2014).

In a research context, the researcher becomes the listener and facilitator of storytelling practices, adopting a stance where the storyteller (participant, Elder, scholar etc.) holds the power of sharing knowledge (Davidson in Archibald et al., 2019). As a listener, the researcher takes on a responsibility to promote, protect, and preserve Indigenous Knowledges (Garcia & Shirley, 2012) and contribute something back to the storyteller as a reciprocal and relational member of the storytelling process- fulfilling a role or obligation to participants by handing research back to the community, honouring their contribution, and publicly acknowledging their ownership over Indigenous Knowledge (Davidson in Archibald et al., 2019).

Based on the settings, strategies, and architectural focus of this study (see Chapter 2), I chose to purposefully select Indigenous stories related to the origin of the Tong Tong drum- a significant cultural artefact that has been used by Ibu Sari and myself as a discursive tool and guide for the architectural project being undertaken with the PKP community. Due to

the limited number of accessible stories related to the Tong Tong drum (caused by a lack of written records, limited access to archived material particularly online during the SARS-CoV-2 pandemic, and language barriers between old Balinese/ contemporary Balinese or Indonesian/ English), I decided to collate multiple stories that relate to the origin of the Tong Tong drum in Bali through the arrival of the Hindu sage Rsi Markandeya in circa 600 AD.

Rsi Markandeya is credited with establishing the 'original' Banua- the first documented example of a 'sacred landscape' that connects networks of *desa* (villages) and *subak* (irrigation systems) together in harmony (Reuter, 2002; in Vischer, 2009; MacRae in Reuter, 2006). The original Tong Tong drum is thought to have been brought with Rsi Markandeya to Bali (Sertori, 2014) and used to guide the ritual practices of the first *subak* system (Lansing in Watson, 2019; Karinata, 2022- Interview). The joint consideration of the Banua and Tong Tong drum reflects both macro and micro relations to the Balinese people and the PKP community respectively.

Through a process of abstraction based on my own observations of Indigenous practices and stories, these complex origin-narratives were reduced to their most common elements so that I might interpret underlying patterns and unlock layers of teachable metaphor (Liu et al., 2019; Archibald et al., 2019). I purposefully sought out architectural and geographic metaphors within these abstractions, in order to 'build' my methodology as a discursive 'landscape' through situated understandings of the 'multi-layered undercurrents of architectural material and memory'- understandings that are crucial to constructing an Indigenous story in architecture (Dalla Costa in Grant et al., 2018). This discursive landscape contains a metaphorical guide for my research methodology, embedding theoretical and ethical principles (see 4.1) that are derived from a situated understanding of Balinese architectural philosophy (see 4.2) in combination with general practices of Storywork (see 3.4 and Appendix C) and the research strategies articulated by the Tong Tong drum as a discursive tool (see 2.2).

The fieldwork processes developed from this methodology (see 5.1), their practical application through various methods and design tools (see 6.1 and 6.2), and the co-produced outputs of this fieldwork (namely an architectural charge- see Appendix F- and draft design brief-

see Appendix G) return this knowledge back to the PKP community who, based on my own ethical principles, are the rightful owners of the research data produced within my fieldwork practices.

The following sub-sections discuss the construction of my Architectural Storywork methodology based on the metaphor of the Banua, it's 'source' or 'original' village, and their connections with the Tong Tong drum.

4.3.1 The 'Original' Banua

The metaphor of the original village is most often expressed within origin narratives, told informally between community members during the quieter moments of a ceremony at a Banua temple (Reuter, 2006). Most narrative stories depict how a founder left the 'source village' to establish new cultivated land and hamlets that later become managed by the *subak* and Desa Banua respectively. How a particular village or Banua came to be in the hands of a particular people is 'history', and how this claim is maintained, challenged, and defended occurs through the commemoration or forgetting of particular ideas about 'history' in a ritual context. Bali Aga simultaneously conceive the present as; a) a self-evident product of the past, and b) also a not-so-self-evident product of a strategic remembering or reconstruction of the past. This fluid conception of time and identity leaves room for polite disagreement about an origin narrative's content and interpretation, and each narrative should be taken as a tentative consensus reached by a particular people at a particular time and place (ibid).

Whilst it is not clear how, where, or when the first Banua was developed, a well-known origin story concerning the Hindu sage Rsi Markandeya depicts Taro as the 'original village'. Markandeya is widely believed to have established the first temple (Pura Gunung Raung), *subuk* temple, and *desa* system that extends down the River Wos valley and the Gunung Lebah ridge to Ubud (Howe, 1980; MacRae in Reuter, 2006; Sertori, 2014; Karinata, 2022- Interview). Local variations of this story also credit Rsi Markandeya with creating the first Tong Tong drum, situated at the temple in Taro and used to guide the ritual cycles of the *subak* system (Sertori, 2014; Karinata, 2022- Interview). The PKP Community Centre headquarters in Banjar Selasih is situated in a neighbouring valley 3km West of Taro, whilst the buildings used by the PKP Community Centre extend into the Wos valley and down to Ubud. I develop

my methodology by expanding upon MacRae's (in Reuter, 2006) architectural exploration of the Wos Valley and other interpretations of the Rsi Markandeya's origin story (Howe, 1980; Sertori, 2014; Karinata, 2022- Interview), situating the PKP community in relation to the 'original' Banua.

I take Stake's advice (1995) and use triangulation to help identify a common narrative within the diverse realities of different Markandeya stories. This narrative story is used to ground my *mandala* Storywork methodology within many observations (Davidson in Archibald et al., 2019). It is also clear that many origin stories translated by non-native scholars may become the dominant and accepted version within academic circles, leading to inconsistencies with native retellings. Reuter (2006) suggests a compromised approach to interpreting the myths of origin narratives told by native and non-native storytellers alike: we must 'hear' them, as spoken discourse of specific authors with specific intentions and, simultaneously, we must 'read' them, as the testimony of a collective world of shared experience and knowledge. Within this approach, I also try to retain the polyphony of voices across various origin stories.

4.3.2. The Origin Stories of Rsi Markandeya

Extended stories of Markandeya's pilgrimage from Java to Bali (Howe, 1998; MacRae in Reuter, 2006) describe his first attempts to cultivate the land around Ubud. Many of his followers were killed by wild animals and diseases, caused by spirits who were angry at the desecration of their 'sacred land'. Markandeya fled to Java to meditate on these events, before returning to Bali to try again. In his second pilgrimage, he took appropriate ritual precautions. When they arrived again at the sacred land, he was asked by his followers to perform a *caru* ceremony to exorcise any malevolent forces by the saying of a *mantra*. Then, making their way to the slopes of Mt. Agung, they buried *panca datu* (a small parcel of metals called *tumbal*, consisting of gold or *emas*, silver or *slaka*, copper or *temaga*, iron or *wesi* and tin or *timah*), and established a small shrine, now Besakih Temples, at which Markandeya prayed to the god of the mountain for peace and prosperity. Markandeya also asked the god to be allowed to build villages at a place near to the present village of Taro, becoming the first instances of *desa*- tasked with maintaining the ritual harmony that had been established between human and *niskala* communities in relation to spatial landscapes,

such as the villages, and ecological landscapes, such as *subak* and general natural systems (ibid). Taken together, Markandeya's journey is said to have begun in Ubud, moving *kaya* (mountainward) to Mt. Agung, before returning *kelod* (seaward) to Taro- see Fig 4.5.

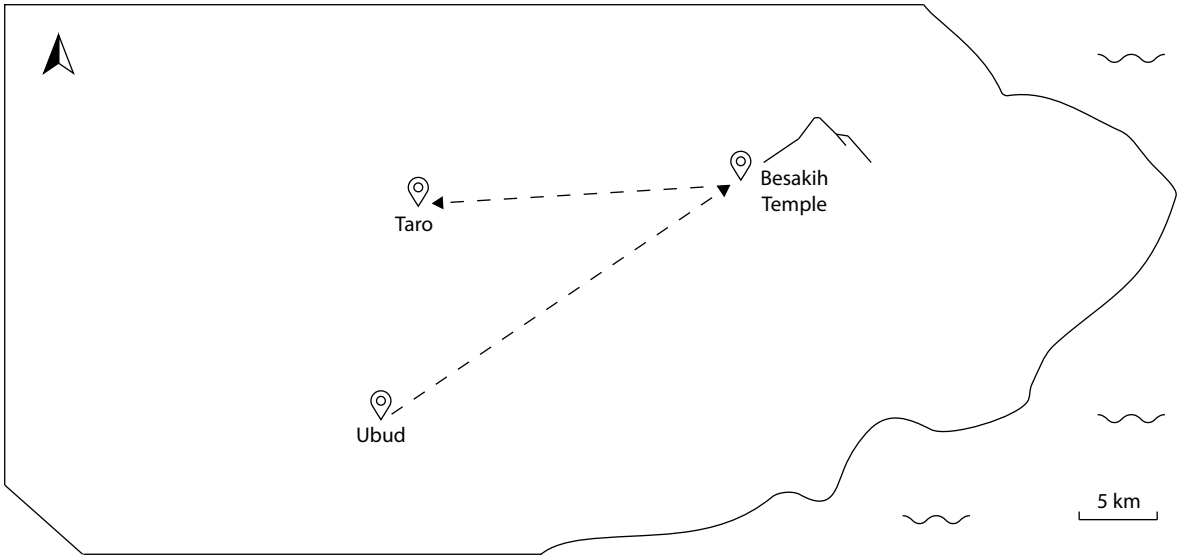


Fig 4.5 Markandeya's Mythological Journey- Alastair Brook 2023

One oral version of the Markendeya story, spoken by Taro natives Made Dharma, Ketut Niki, and Pak Jero Magku Gede (Sertori, 2014), speaks of Java being re-joined with Bali by a great *Seleguwi* tree. The origin story describes how a giant flower stem from this tree was taken and used to create the three-meter-long Tong Tong drum that sits in the Gunung Raung temple at Taro. Despite having this history researched by the Balinese government, the people of Taro feel that their version is clearer, because they are closer to the source and have been handed down this knowledge for centuries. Karinata, an Indigenous Balinese scholar, studied ancient stone inscriptions that support the claim of Taro's Tong Tong drum being made from a giant Seleguwi or Liligundi tree, which are one and the same (Karinata, 2022- Interview). Whilst both trees are small today, casting doubt in Karinata's mind on the validity of these stories, Chinese accounts from the *The Old History of the Tang Dynasty* in the 800's AD mention the Javanese cocoa-nut tree that has flowers more than three feet long and as large as a man's arm (Majumdar, 1937).

At this point, some stories diverge. Stories retold by Western scholars describe how Markandeya instructed his followers to build dwellings in rows and call them *banja.* Karinata (2022- Interview) explains how *Rsi* Markandeya established the first *subak* irrigation system

in circa 632 AD. The *banjar* organisational systems weren't established until circa 1007 AD by a different sage, *Rsi* Kuturan.

The establishment of the *subak* system also entails the first use of the Tong Tong drum in Bali as part of the *desa*'s responsibility to maintain and protect the harmonious cycles of agriculture started by Markandeya's followers. The *subak* system is treated as the foundation of Balinese civilisation (MacRae in Reuter, 2006) and its maintenance is seen as integral to the survival of the Balinese way of life (Lansing in Watson, 2019). Only after the arrival of other *Rsi* around the 10th century did the Tong Tong drum become associated with different organisational systems such as the *banjar*, and later the temple (*pura*) or palace (*puri*) compounds. To this day, Tong Tong drums related to the village *banjar* are privileged over and given more reverence than the Subak Tong Tong (Karinata, 2022- Interview). This is exemplified by the size and placement of the Subak Tong Tong in Banjar Selasih (see Fig 2.2), which is much smaller than the Banjar, Male, or Female drums and is unceremoniously tied to a supporting column of the Bale Tong Tong, whilst the other drums are hung from the beams of the Bale Tong Tong.

These narratives contextualise the region between Taro and Ubud as an 'original' Banua, within which the first *desa* and *subak* systems were supposedly established. They also link the 'original' Banua to the Tong Tong drum, used in this study as a strategic discursive device to support the construction of new architectural representations of the PKP Community Centre (see 2.2). These narratives also help to construct the 'landscape' of my methodology.

4.3.3 *Mandala* Architecture

Mandalas are believed to originate from the Sanskrit word for 'circle', but have been used as spiritual tools in Indic religions for individuals to connect with themselves (Sabarathinam, 1995), their gods (Bühnemann, 2003), and their community (Dyczkowski, 2009). Most *mandalas* have a circular shape, with denotes the circularity of time. Some include a square with four 'gates' positioned inside the circle, which denote the earth and its five elements (Dokras, 2022; Batuan, 2009; Bryant, 2003). Usually, *mandalas* are constructed from a central point, in which a deity resides, and unfold themselves outwards (Bühnemann, 2003). This deity is able to bestow the 'essence of awakening' onto an individual as they return

to the central point of the *mandala*, progressing through various stages of enlightenment (Sabarathinam, 1995).

Batuan (2009, p.3) describes Balinese *mandalas* as a space where "we see others from inside out; they see us from outside in; our mutual perceptions form a shared circle". These *mandalas* are uniquely connected to the Balinese mythologies and histories surrounding origin and orientation (ibid), which are explored in this section.

Mandalas are not always two-dimensional entities but can contain their own three-dimensional architectures- exemplified by the Kalachakra *mandala.* The Kalachakra *mandala* is based on *Dharmic* religious beliefs, from which both Hinduism and Buddhism originate, and is representative of the diverse spirituality of the Balinese people who strongly believe in *dharma*, a set of "ethically right actions" (Yu, 2015).

The Kalachakra *mandala* is composed of five concentric mandalas that constructs a five-levelled 'palace'. The outer three *mandalas* are composed of a 'parapet' with four entrance 'gates' facing the four cardinal directions- North, East, South, and West. Each 'gate' has its own architectural construction, further composed of a 'fence', 'beam', 'chamber', and 'roof' (Bryant, 2003)- see Fig 4.6 on next page. The architectural metaphor of the mandala is purposeful, requiring the consciousness to 'inhabit' it as a discursive space, being guided through the 'gates' to attain enlightenment.

4.3.4 *Mandala* Landscape

To avoid 'falling sick' of the Western metaphor of the house, I draw on the Banua origin-narratives to construct a 'landscape' for my methodology that better represents the original discursive production sites of Balinese architecture (see 4.1). Localised variations of *Rsi* Markandeya's origin story further establish the important of Ubud and Taro. One story describes how Markandeya's followers were cured of their diseases by bathing in the waters of the River Wos, whose banks were covered in an abundance of medicinal plants.

This place was called Ubud, derived from *ubad* meaning medicine and healing. On the Western edge of Ubud, at a place called Campuan, is built the Pura Gunung Lebah *subak* irrigation temple. Another story describes how Markandeya was guided by a glowing light

emanating from a tree.

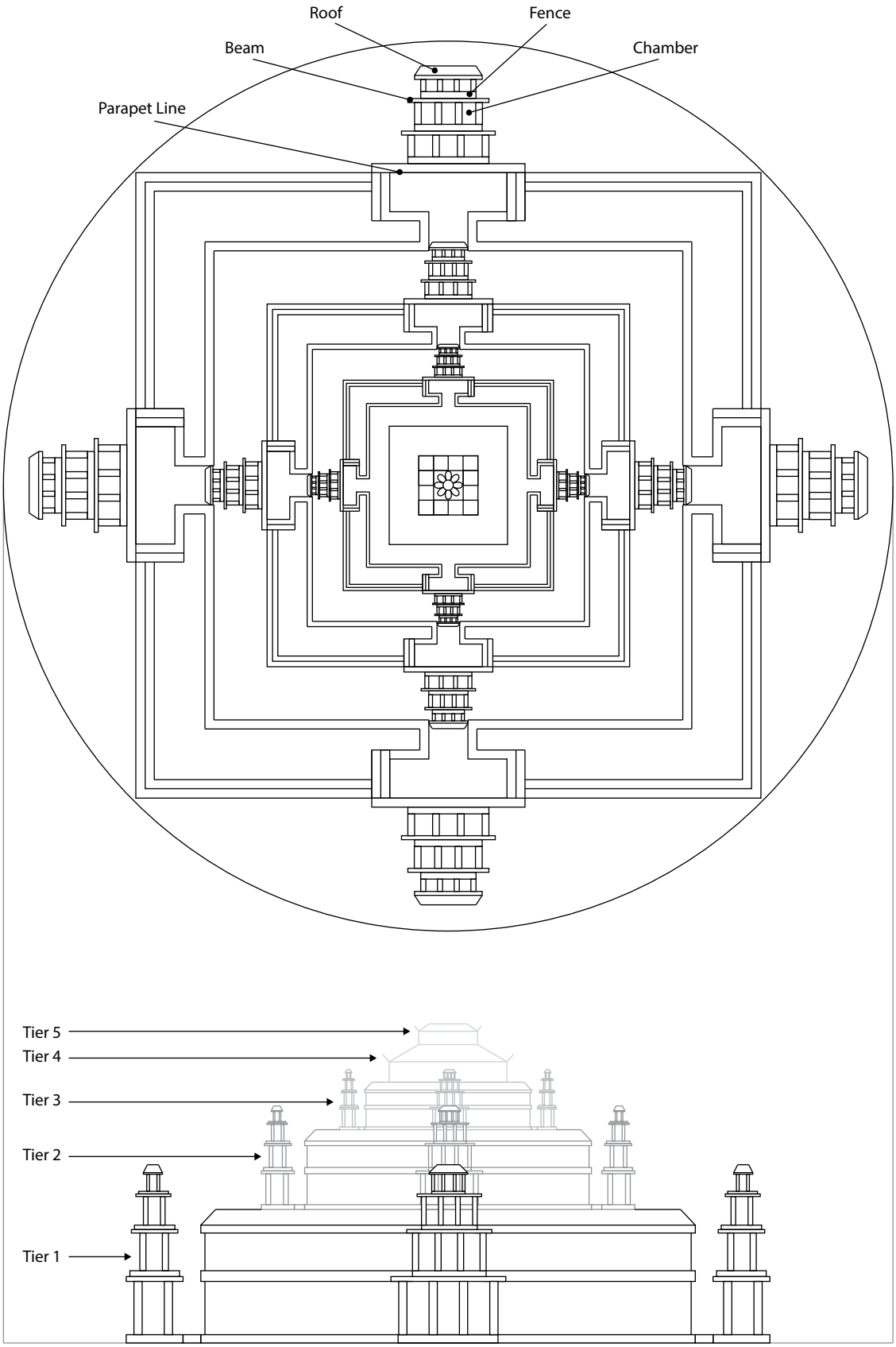


Fig 4.6 The Plan and Elevation of the Kalachakra Mandala, as adapted from Bryant (2003)- Alastair Brook 2023

He built the first temple, Pura Gunung Raung, at this place and hung the first Tong Tong drum here. This place was called Taro, derived from *taru* meaning tree. The first *subak* irrigation temple, Pulun Masceti, is also built here (Sertori, 2014). Ubud and Taro create a mountainward-seaward axis along the Wos valley and the Gunung Lebah ridge, with Gunung Lebah peak as its 'central' 'origin'. Village networks connected between Taro and Ubud form a second sunrise-sunset axis between Tegalalang and Payangan, intersecting the Gunung Lebah ridge and creating a 'crossroads'- see Fig 4.7.

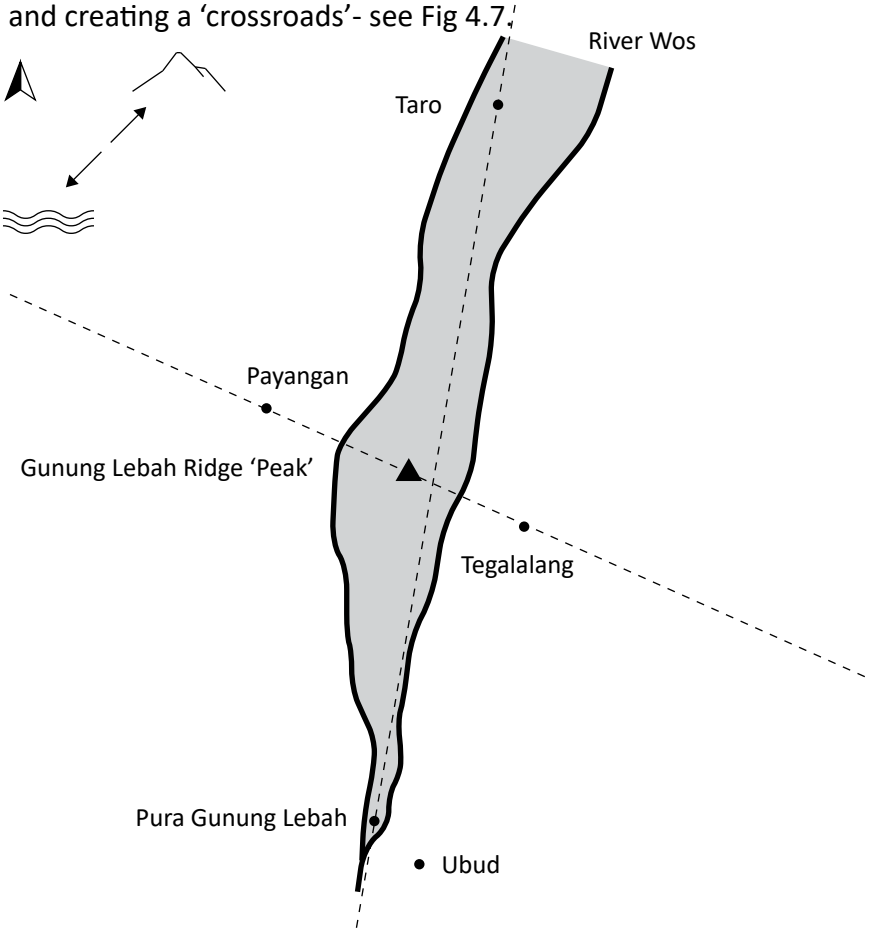


Fig 4.7 The Taro-Ubud and Tegalalang-Payangan Axes as adapted from MacRae (in Reuter, 2006)- Alastair Brook 2023

Most contemporary villages orientate their Bale Agung towards Mt. Agung (see Table 4.4 and Fig 4.4). However, MacRae (in Reuter, 2006) found that many villages in the Wos Valley orientate their Bale Agung towards the Gunung Lebah peak. According to local mythology, Gunung Lebah reflects the unseen return of water to the mountain lakes at a spiritual level. Reuter (2002), Lansing (1987) and Pitana (1993) detail how *subak* networks are based on

the concept of 'retracing' the flow of water back to its mountain source through several steps, marked by shrines or temples. These shrines and temples are a venue for cooperative ecological management that help to sustain Balinese communities (Watson, 2019).

Between growing cycles, upstream water temples release water into a network of tunnels that feed the rice terraces. Tunnel diameters determine the water flow into certain rice terraces, systematically managing the volume of water in both dry seasons (with little water) and wet seasons (with monsoon rains). Water flow is managed by damming the tunnels at certain points and redirecting water into canals. Dams are usually accompanied by a shrine, with some *subak* canals containing both a *hulu* (upstream) and *hilir* (downstream) shrine.

Redirecting water is a collective effort across multiple *subak* communities, optimised and ritually guided by irrigation temples and the Subak Tong Tong, in order to manage pests and drought across a vast agricultural system (Watson, 2019; Lansing in Watson, 2019). *Subak* farming follow a natural ecological cycle and benefits from situated ecological processes where; 1) rain leaches volcanic minerals from the soil into streams and rivers; 2) springs and canal irrigation networks then capture this water and transport dissolved minerals into rice fields, acting as an organic fertiliser; 3) a process of aeration and purification of water occurs; and 4) water returns to the mountain lakes through rain and through aquifers, a body of permeable rock that contains and transmits groundwater (ibid).

The irrigation temple of Pura Gunung Lebah, at the bottom of the Taro-Ubud axis, is spiritually responsible for the *subak* fields mountainward, whilst river dams managed by the *subak* temple at Pura Gunung Raung, at the top of this axis, are physical responsible for the *subak* fields seaward. I purposefully privilege the Tong Tong drum situated at Pura Gunung Raung, mytho-historically depicted as the original Tong Tong associated with the first *desa* and *subak* systems created by Rsi Markandeya. This is my attempt to recontextualise the importance of the Subak Tong Tong drum as well as a way to re-tell or re-remember the principles associated with it- see 2.2 (Watson, 2019).

This axis constructs the *subak* landscape depicted in my methodology, in which tiered rice terraces mirror the 'palace' of the Kalachakra *mandala* (see Fig 4.8 on next page). *Subak* temples and smaller irrigation shrines act as 'gates' to the rice fields, guiding the flow of

consciousness down through the *mandala* and then returning it back up to the *mandala*'s centre. This discursive landscape is situated within the origin-narratives of the Banua and Tong Tong drum, reflecting both macro and micro relations to the Balinese people and the PKP community respectively.

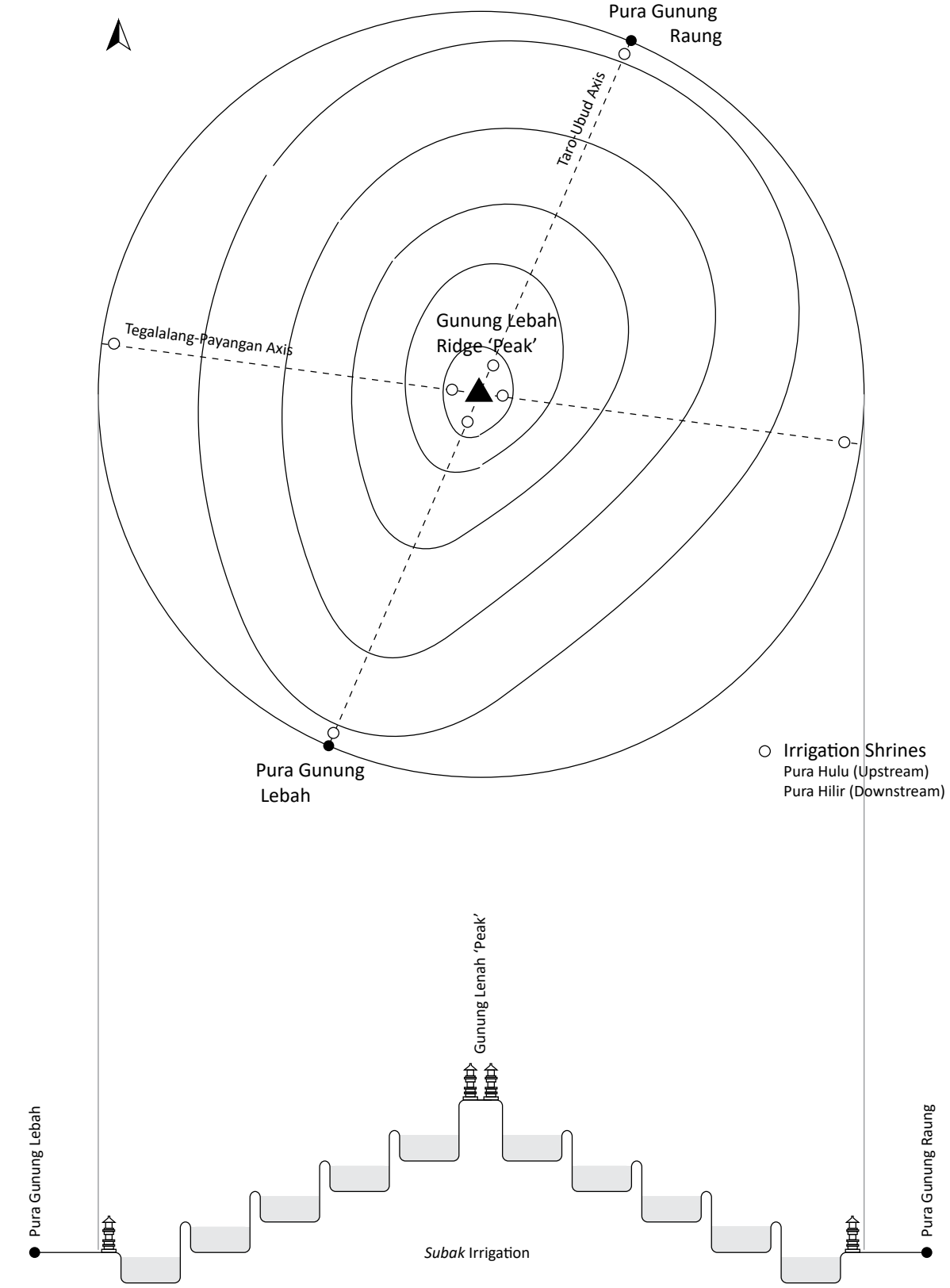


Fig 4.8 The Discursive 'Landscape' as adapted from MacRae (in Reuter, 2006) and Watson (2019)- Alastair Brook 2023

4.4 The Lessons of the Landscape

4.4.1 The Role of the Asta Kosala Kosali and the Undagi

The Asta Kosala Kosali, the guiding manuscript of Balinese architecture, is thought to have been introduced to Bali from the Javanese Majapahit kingdom sometime between the 13th and 16th century (Arthana, 2019). The later influences of Hinduism can be seen in the core lexicons used in the text;

Manik Ring Cucupu:	Harmonious interplay between building (macrocosm) and inhabitants (microcosm) at a 'centre', treating the macrocosm/ microcosm binary as both themselves and each other at the same time by reducing them into a singular term that contains them both.
Tri Hita Karana:	Spatial groupings that maintain relationships to the universe, other humans, or the environment.
Tri Angga:	Qualifies the spatial groupings of the *Tri Hita Karana* into a sacred upper zone (i.e. roof), neutral middle zone (i.e. walls or structure), and profane lower zone (i.e. foundations). Also refers to the spatial patterns of settlements, such as linear, crossroads, or a combination of the two.
Tri Mandala:	Classifies the spatial grouping of the *Tri Hita Karana* based on the *Tri Angga*; where scared spaces are known as the *Utama Mandala*, the dwellings are known as the *Madya Mandala*, and the profane spaces are known as the *Nista Mandala.*
Sanga Mandala:	Literally meaning the nine mandala, this divides the *Tri Mandala* into a 3x3 grid known as the 'nine-folded hierarchal space'- dictating the layout of Balinese architecture based on *Kaja-Kelod* (mountainward-seaward axis) and *Kangin-Kauh* (sunrise-sunset axis).

These lexicons map the anthropological metaphors used to describe architectural space (Damayanthi, 2017; Arthana, 2018), and how the language used to describe architecture's relationship to humans, nature, and the universe can contribute to their degradation or sustainment (Satria, 2019). The manuscript is laid out as a series of tales or narratives that share architectural knowledge and practical instructions in a form of inter-generational storytelling. Lessons focus on ecological sustainment through vernacular architecture built by the community and developed in the community (Satria, 2019). This affords architectural autonomy to Balinese communities in the design and construction of their spatial environments.

Traditional Balinese architects, called Undagi, have become gatekeepers of the engineering,

artistic, cultural, and religious knowledge of the Asa Kosala Kosali (Alit, 2003; MacRae & Parker, 2002; Suryawan & Juniantari, 2021); limiting access for the average Balinese community. To make matters more complex, the role of Undagi is now under threat from new architectural education and the modernisation of concepts, technology, materials and trends or styles (Dwijendra & Mahardika 2018; Dwijendra et al., 2020; Kurniawan et al., 2020; Dwijendra & Adhika, 2022). This 'abandonment' of local cultural values and vernacular architecture, coupled with the unsustainable use of non-local resources and energy intensive technologies, is weakening environmental sustainability. It is also eroding the harmonious relationships between a building and its inhabitants, as well as between humans, nature, and the universe (Aryani & Tanuwidjaja, 2013; Idham, 2018; Satria, 2019).

Whilst it is clear that Balinese architectural knowledge is written within the Asta Kosala Kosali and practiced by Undagi, both seem to be elusive and inaccessible (MacRae & Parker, 2002). In an extensive study, MacRae and Parker (ibid) found that the Asta Kosala Kosali appears in many different forms that often overlap with each other in context and content, most likely copied from each other. They also found many varied and contradictory definitions of Undagi, suggesting that the role is neither a clearly defined person or function, nor is it a required part of the design and construction process.

According to Howe (1983), the Asta Kosala Kosali texts are available for anyone to read but, in practice, this is not the case. Lontar manuscripts are considered as embodiments of supernatural power, despite being used equally for mytho-historical stories and the mundane and banal lists of livestock fertility cycles and villager debts (Austin, 2010; Gallop, 2019), so access to them is restricted not only through a literacy of ancient Balinese language but also by social or spiritual rank. Undagi are viewed as the patrons of Bhagawan Wiswakarma, the deity of craftspeople, and are therefore seen as holy and able to access the Asta Kosala Kosali texts (Dwijendra & Adhika, 2022). Even though there are translations of the Asta Kosala Kosali, these are often kept within the possession of individual families and guarded by their owners (MacRae & Parker, 2002).

However, the knowledge of the Asta Kosala Kosali is not often learnt through the reading of sacred texts, but is learnt by imitating the more experienced architects, learning basic concepts

through other literatures, and learning from their own experiences (MacRae & Parker, 2002; Suryawan & Juniantari, 2021; Dwijendra & Adhika, 2022). This can be characterised as "the inheritance of habits, beliefs, and ideas that involve communal engagement in a society" (Dwijendra & Adhika, 2022, p.1105). Dwijendra and Adhika (2022) believe that the role of the Undagi must be 'resilient', in the vein of the Latin *resilio* meaning 'to return to the beginning', by being based on the tradition of the Asta Kosala Kosali. They continue to describe tradition as a selective process of embracing new ideas, rather than reduplicating existing ideas (ibid).

This echoes Hillier (2007) and Khamdevi's (in Suartika & Nichols, 2020) move towards pluriversal architecture that embraces multiple understandings of architectural knowledge. These understandings can vary from village to village or individual to individual (Suryawan & Juniantari, 2021). This suggests a return to the most basic principles of architectural autonomy within the Asta Kosala Kosali, where the role of Undagi is more appropriately seen as the application of *keundangian*; a body of architectural knowledge that combines the spiritual, artistic, and practical dimensions of architecture through oral tradition (MacRae & Parker, 2002).

These authors suggest that this intermediate domain of knowledge is hindered by considerable conflicts between competing claims of 'ownership', rather than embracing the ambiguity, variability, and alterity of architectural knowledge. By weaving the core principles of the Asta Kosala Kosali with the 'radical hermeneutics', 'deconstruction', and 'chora' concepts of Derridean architectural theory, I attempt to celebrate Balinese architectural autonomy and embed key teachings around ambiguity, variability, and alterity into my methodology.

4.4.2 Digital and Transformative Storywork

My methodology weaves Indigenous and non-Indigenous concepts together in a decolonial action; selectively appropriating and redirecting value from non-Indigenous concepts whilst attempting to recover pre-colonial knowledge through critical reflections on colonial experiences (Fry, 2017). This task is achieved through my own positionality as a white, male, Anglo researcher, situated as an 'outsider' to Balinese worldviews.

This study treats the PKP community as the co-authors of my Storywork methodology (rooted in their goals, values, and use of the Tong Tong drum as a discursive tool- see Chapter 2)

and as co-researchers within my fieldwork practices (involved in the creation of fieldwork workshops based on the PKP rules and fieldwork outputs- see Chapters 5 and 6). I recognise that this process is similar to those described in Digital Storywork (Stanton et al., 2016) and Transformative Storywork (Wheeler et al., 2020), which apply practices from separate and distinct fields such as Participatory Action Research. However, this study grounds the PKP community's involvement as co-authors and co-researchers in the practices of Indigenous Storywork, which aims to develop meaning through the sharing of stories between and with Indigenous peoples, strengthen relationships between and with Indigenous communities, and to co-author stories using Indigenous Research Methodologies that speak to the healing power of Indigenous voices (San Pedro & Windchief, 2019).

Considering the importance of co-authorship within the Storywork methodology, I felt an urgency to confront my own implicit and explicit colonial perspectives and academic ideologies with, what Akama (2017, p.83) calls "reflexivity, responsiveness and sensitivity" to the diverse realities, histories, conditions, and knowledges of the PKP community. This is particularly relevant for this study for two reasons:

1. Firstly, I make use of 'cartographic metaphor' (see 3.3) and had to take steps to avoid the colonial traps of contemporary Western design tools, methods, and techniques, that are formed within Western concepts of space, geometry, and economy and risk 'un-mapping' decolonial options. This requires an effort from myself to; firstly, unlearn these methods and engage in relational, generative, and iterative design practices that allow for more voices to be heard in a polyphony, and; secondly, implement practical design methods such as sequencing, hierarchy, and flow that can structure visual or verbal complexity using appropriate and situated syntaxes or typologies. This can allow for more possibilities to be actualised in reality (Schultz, 2018; 2019).

2. Secondly, this research study is partially conducted online due to the SARS-CoV-2 pandemic, and I had to be aware of how the PKP community might portray themselves different through digital mediums and be mindful not to reduce, restrict, or redact complex and possibly contradictory information (Kenniff in Gosseye, 2019; de Seta, 2020).

The implementation of relational, generative, and iterative design practices can be seen

within my data collection and data analysis methods (see Table 6.1 and Table 6.4). Firstly, I attempted to gather as much information as possible from the PKP community through relational mediums (interchanging between visual, oral, and aural- see 3.3.5) and iterative workshops (see Workshops 3 and 4 in Table 6.1 as iterations on Workshops 1 and 2).

Secondly, I attempted to abstract multiple layers of meanings from within each participant's data to understand the complex personhood of each participant (see 5.3.1 and Table 6.4). The implementation of practical design practices- such as sequencing, hierarchy, and flow- can be seen within the co-authorship of my fieldwork outputs with the PKP community (see Table 6.6), in which we generated multiple narratives for each participant, which occasionally contradicted one another, before framing and sequencing these into an anthology of visual stories that composes the PKP community's architectural charge (see Table 6.6, Output 3 and Appendix F).

To support the application of these processes, I have woven the Seven Principles of Storywork (Archibald, 2008; 2019) together with (Cross-Cultural) Digital Storywork (Stanton et al., 2016) and Transformative Storywork (Wheeler et al., 2020) principles, creating my own ethical framework for conducting Architectural Storywork and embedding these teachings into my methodology (see Table 4.2). I use this framework to guide the creation and implementation of my fieldwork practices, co-creating workshops with the PKP community that are designed to provide safe spaces where participants can express their concerns, motivations and fears, and create collaborative relationships and learning experiences (Escobar-Tello et al., 2021).

Cross-Cultural Digital Storywork (Stanton et al., 2016) utilises Indigenous Digital Storytelling (Smith, 2021; Iseke & Moore, 2011; Willox et al., 2012), a decolonial application of Digital Storytelling which was coined by Atchley in the 1980s, developed by Atchley and Joe Lambert in 1993, and later formalised by Lambert (2018 [2002]). This aligns with Sheehan's (2011) Indigenous visual dialogues (see 3.3.1) and other Indigenous arts-based research practices that aim to; leverage the potential of arts-based methods to develop new research practices that contest hierarchies, increase polyphony of voices, and support the perspectives, needs, and interests of research participants in their place-based and cultural contexts (Seppälä et al., 2021).

Willox et al. (2012) found Indigenous Digital Storytelling to be suitable narrative method for preserving and promoting Indigenous Knowledge because it is guided by the seven Storywork principles. Stanton et al.'s (2016) study discovered that cross-cultural contexts can complicate understandings of the Seven Principles of Storywork, but suggest that this can be overcome by adopting community-centred participatory research tools that engage community members as co-scholars or co-researchers within research studies .

Similar approaches have also been integrated into Transformative Storywork (Wheeler, 2020; et al., 2020; in Shah & Jenson, 2011), which focus on instigating social change in marginalised communities. Such approaches help make it possible to co-create discursive spaces that articulate architecture from different perspectives, as involving participants as active researchers can create emancipatory knowledge by co-creating workshops using bottom-up participatory methods and tools that originate from, and are sensitive to, the context the research works within (Wheeler 2009; 2020; Escobar-Tello, 2021). I also attempted to include Indigenist Community-Based Participatory Action Research (Rix et al., 2019; Datta, 2022) approaches within my work by:

- Building longitudinal relationships with the community prior to the research beginning.
- Strongly using place-specific protocols that are based on how the PKP community want me to do research, how they want me follow their values and goals in my research questions, how they define the research objectives, and how they wish to create, process, and share their worldviews with me.
- Honouring Indigenous and community knowledges shared through story, both "sacred" and "historical", and using those knowledges within my practice.
- Co-producing knowledge with the PKP community so that it speaks to their needs and can be used to teach future generations.
- Always trying to speak up for the PKP community, honour their knowledges and practices, help develop self-learning and community capacity, and learning through the traditional Balinese ways of doing.

These characteristics are integrated into the ethical principles of this study (see Appendix C).

4.5 From Theory to Practice

Part 3: Fieldwork, will detail the practical application of Architectural Storywork by explicitly linking elements of my discursive methodology to practical research methods, workshops, activities and tools used within my discursive design practice with the PKP community. In line with the literature explored in Chapters 3 and 4, my fieldwork will implement the Storywork methodology with, for, and by the PKP community.

Chapter 5 details the initiation of my fieldwork including information on study participants, my institutional ethical approval, and the implementation of the theoretical and ethical principles of my methodology (see 4.1). Chapter 6 then details my data collection methods and tools, data analysis techniques and coding systems, and the output of the fieldwork. Data collection methods are adapted from articulatory design practices (Schultz, 2019) as well as Digital Storywork (Stanton et al., 2016) and Transformative Storywork (Wheeler et al., 2020). Data analysis techniques are adapted from the influences of Derridean philosophy on Discourse Analysis (Macleod, 2002).

Part 3: Fieldwork

5.0 Fieldwork Initiation

Or **Co-Authoring Architecture**

Chapters 5 and 6 have been separated for ease of reading but can be read as a singular narrative that outlines the practical dimensions of my methodology and fieldwork. These chapters return to Research Question 5, to consider the specific interventions that can be made using a Balinese Indigenous Research approach- my situated Architectural Storywork methodology- with the PKP community.

Therefore, Chapter 5 closely resembles a methodology chapter that describes key steps and practical methods related to Fieldwork Initiation. This includes an overview of the work already undertaken in previous chapters with supplementary, practical information on how I navigated my own positionality, met university ethics standards, and implemented my own ethical principles. Chapter 6 then describes the application of the fieldwork itself in a similar format, detailing Data Collection, Data Analysis, and Fieldwork Outputs with supplementary, practical information on the methods, tools, and activity sheets used to collect data, the coding systems and techniques used to analyse data, and the workshops conducted with the PKP community (Pusat Kegiatan Perempuan: *pusat*= centre, *kegiatan*= activity*, perempuan*= women community and their founder, Ni Komang Sariadi or Ibu Sari), to produce outputs from this research.

Each section describes examples of my fieldwork practice, exemplifying how I sought rigour and validity within my work with the hope of providing a template for replicability.

5.1 Methodological Overview

This research study follows critical qualitative research foundations by closely exploring the PKP community's identity in relation to any prejudices, stigmas, and tensions that they may have experienced in their architectural environments (Charmaz, 1995; Gray, 2018)- see Chapter 2 for a literary exploration and Table 6.1 for a fieldwork exploration. Qualitative research is highly contextual and strives for a depth of understanding that is richly descriptive (Bazeley, 2020; Merriam & Tisdell, 2016). This study has turned to Indigenous Storywork (Archibald, 2008; Archibald et al., 2019) to learn from Indigenous critical inquiries and apply them to architectural research fieldwork (see Chapters 3 and 4).

Critical theory has irrevocably changed the interpretivist categories and epistemological foundations of architectural theory (Leach, 1997); showing that architecture is directly tied to the conditions of race, gender, sexuality, class, politic, psychoanalysis, social space, and the ways in which meanings are created and transferred through experience, given both architecture's scale of cultural production and public use (Tafuri & Dal Co, 1979; Ockman, 1985; Borden & Randell, 2000). However, critical theory across design and architectural discourse often erects borders around the epistemic territories of design (Martinez, 2021; Escobar-Tello et al., 2021), avoiding critical intersectionality and reproducing colonial views on what people should aspire to imagine or change (Tlostanova, 2017; Escobar, 2018; Schultz et al., 2018). Intersectionality refers to the manner in which several different types of oppression can intersect and interact, defining one's social position. It is articulated and critically analysed in this study within the story narratives created by the PKP community; questioning how participants identity themselves in relation to their architectural environments, considering what aspects of identity are privileged within these interactions, and defining what tensions this can cause (see Table 6.4).

Calls for intersectionality within Indigenous Research Methodologies include critical, action-oriented, practice-based and decolonising inquiries within design and architecture disciplines that are aligned with traditional Indigenous knowledge (Brayboy et al., 2012; De Santolo in Smith, 2021; Gothe & De Santo, 2022). Such scholars recognise the importance of story as a counter-narrative to settler-colonial understandings (San Pedro & Windchief, 2019; Archibald et al., 2019; Smith, 2021) within design as an ontological, world-building act (Willis, 2006; Mignolo, 2011; Escobar, 2018). Architectural Storywork, a discursive design practice developed in Part 2, can be applied in fieldwork to create and curate discursive architectural works that: a) carry and communicate connective stories across different contexts, giving meaning to diverse participants who might have disparate practices, competences, tools, or languages (Star & Griesemer, 1989; Martinez, 2021), and b) reveal polyphonic and pluriversal stories of Indigenous realities, histories, conditions, or knowledges that are continually remade and voiced simultaneously without being reduced, redacted, altered, or judged by another authoritative voice (Kenniff in Gosseye, 2019).

Discursive architectural works are created by the PKP community through writing, speaking,

drawing, photography, videography, and/or physical model-making activities. These architectural works are then curated by the PKP community to produce an architectural charge and a draft design brief. The following sections detail the structure and individual phases of the fieldwork conducted with the PKP community to create and curate these architectural works.

5.2 Fieldwork Structure

This section details the structure of my fieldwork with the PKP community by identifying four key phases- Fieldwork Initiation, Data Collection, Data Analysis, and Fieldwork Outputs- and describing the key methods, tools, and ethical practices used within each phase. This outlines the practical application of Architectural Storywork, explicitly linking my fieldwork practices back to the theoretical anchors and ethical principles of my methodology. These four phases of fieldwork occurred over a longitudinal study between May 2020 and February 2023- see Fig 5.1.

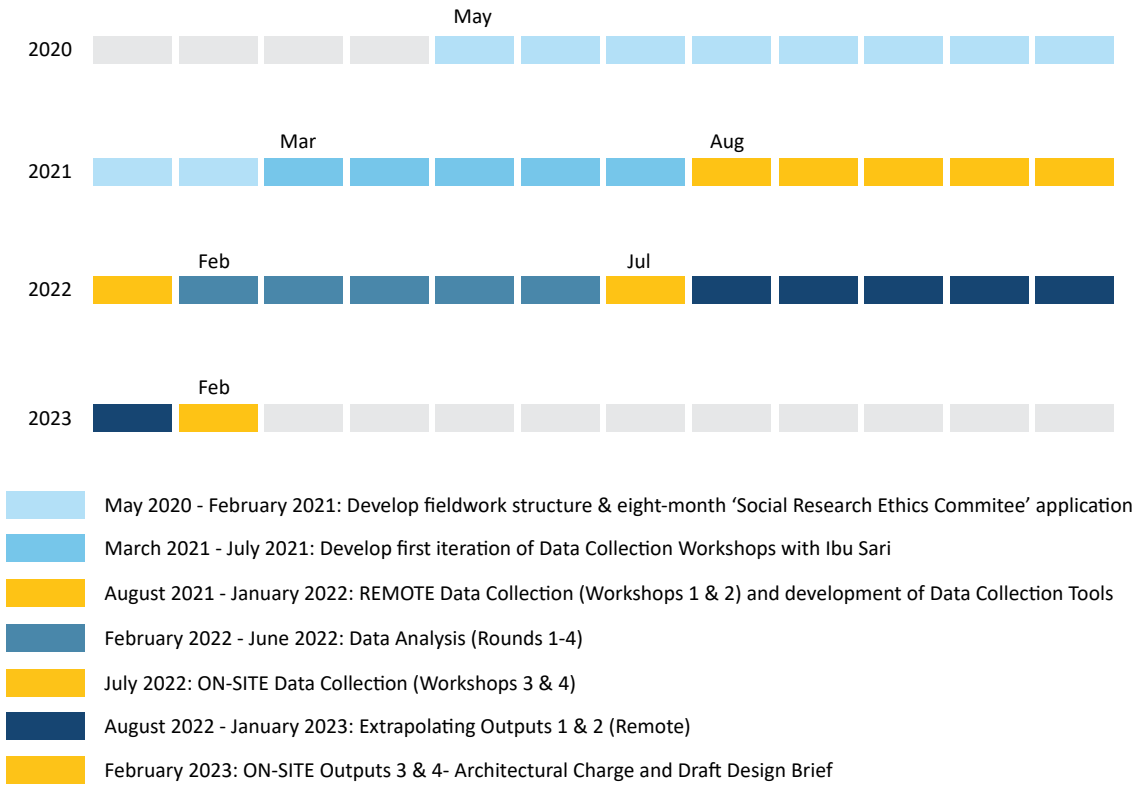


Fig. 5.1 Fieldwork Timeline

This length of time was required to a) navigate the rapidly changing circumstances surrounding the SARS-CoV-2 pandemic between 2020 and 2022, b) develop a long-term and sustained commitment to a research partnership between the PKP community and myself, c) understand, to the best of my abilities, the complex architectural settings and requirements of the PKP community (see Chapter 2), and d) to acquire, to the best of my abilities, the principles for interpreting Indigenous stories (see Chapter 4).

During all phases of the study I kept a 'Field Diary', a digital written copy of notes using Google Docs and stored on a secure UCC server. This diary describes: important conversations or topics of interest that arose between myself and other stakeholders (including thesis supervisors, Ibu Sari, or members of the PKP community), my concerns, ideas, and decisions related to the iterative development of the fieldwork (particularly within the initial months of remote work during the SARS-CoV-2 pandemic when multiple constraints were made obvious related to accessibility), and on-site field notes (originally noted in a sketch book or tablet).

This chapter details Fieldwork Initiation. This phase establishes a co-researcher relationship with the PKP community by co-producing a methodological framework (see Chapter 2 on formulating research strategies around the Tong Tong drum as a discursive tool and Chapter 4 on formulating a Storywork methodology around the origin stories of the Tong Tong drum), and outlines the collaborative process of seeking institutional ethical approval and recruiting participants.

Chapter 6 details Data Collection, Data Analysis, and Fieldwork Outputs. Data Collection describes the co-production of a fieldwork study with the PKP community based on the PKP rules and participant feedback- implemented both remotely during the SARS-CoV-2 pandemic and on site after restrictions were lifted. This includes data collection methods and the tools used to implement them, such as workshops and activity sheets. Data Analysis describes the development and implementation of an analytical framework based on Deconstructive Discourse Analysis and the coding system created through this process. Fieldwork Outputs describes the co-production of research outputs (namely an architectural charge alongside a draft design brief comprised of textual and visual material) with the PKP community using

discursive design practices and techniques towards architectural deconstruction, and co-assesses the rigour, validity, and success of the study through a group evaluation.

5.3 Fieldwork Initiation

5.3.1 The Complex Personhood of the PKP Community

In establishing a co-researcher relationship with the PKP community and producing a methodological framework in line with their values- parameters and goals- and anticipations of the study (see Chapter 2 and Chapter 4), I embrace the Balinese philosophy of Rua Bineda, which moves beyond dualistic categories of truth by accepting that things are both themselves and other things at the same time (Yu, 2015). This philosophy aligns with my own theoretical principle of a 'third centre' (see 4.1.2), which dictates that any data created in this study should focus on building respectful relationships with alterity that cannot be based on what we (PKP community and myself) already know. Instead, we must account for the complete alterity of each other and unknown others, so that we might exceed what is already known and create something absolutely new (Vitale, 2018, pp.36-38). I attempted to achieve this by focusing on the co-researcher relationships between the PKP community and myself.

When it comes to the 'dualistic categories of truth' in Bali, there is no traditional distinction between fact and fiction but, instead, they "co-incide" or co-reside in such a way that the qualities of one are made present in the other (Vickers, 2012). By embracing this philosophy, I accept the 'complex personhood' of the PKP community, where fact and fiction co-reside in "the stories people tell about themselves, about their troubles, about their social worlds, and about their society's problems [which] are entangled and weave between what is immediately available as a story and what their imaginations are reaching toward" (Gordon, 1997, p.4).

Tuck (2009) applies this concept by drawing on the Indigenous interdependence of the collective- where an individual is both themselves and the collective at the same time. This approach makes room for contradictory voices to remain valid and relevant within fieldwork practices by fostering a collective duty to diverse worldviews, realities, histories, conditions, or knowledges (Grande, 2004). This collective approach has been helpful in two key aspects of fieldwork initiation:

1. When establishing a co-researcher relationship with the PKP community that must be sustained throughout the fieldwork project with an ever-changing cohort of participants. This process began in Chapter 2 and includes trust building, situating the research, and clarifying the community's values and goals.

2. When co-producing a Storywork methodology with both Indigenous and non-Indigenous storytellers who have their own specific intentions whilst also testifying to a collective world of shared experience and knowledge- see Chapter 4. This process includes centering Indigenous teachings and co-researching with the community.

Whilst the core members of the PKP community stayed the same throughout the two-and-a-half-year study, many peripheral members came and went (see Table 5.1). Twenty-one community members participated in the study in total, but only nine participants completed all four phases of the study.

Table 5.1 Participant Numbers

Phase	**Start Number**	**End Number**	**Joined**	**Left**
Fieldwork Initiation	17	17	-	-
Remote Data Collection	17	11	-	6
On-site Data Collection	14	12	3	2
Data Analysis	8	8	-	4
Fieldwork Outputs	9	9	1	-

One new participant joined the study in the fieldwork outputs phase to continue discursive design work on the Shelter Building, arguably one of the most important spaces to consider at the PKP Community Centre, which had previously been studied by participants who could no longer complete the study. Ibu Sari also wished to include this extra participant to improve their personal development, social skills, and general engagement with the community.

This participant did not complete the previous data collection workshops as part of the research, as there was limited time to analyse their responses. However, they did complete the workshops in their own time to understand the process and have the opportunity to fully and authentically participate in the project. Therefore, nine participants finished the study

in its entirety.

Those who did not complete the study left the PKP community for a variety of reasons, including; returning to their villages/ islands to take care of family members, pursue new jobs or study opportunities, or no longer required the support of the centre. This meant that, on occasion, different members of the PKP community would continue the work of those who had left, making it impossible to view one output as the work of one participant. Instead, I treated each participant as both themselves and the collective at the same time- viewing each output as an expression of an individual participant's experiences and unique worldviews woven into the collective community fabric.

This takes precedent from Reuter's (2006) approach to interpreting Indigenous stories on the same topic, which may include subjective and contradictory information, in which we must both 'hear' the stories as the spoken discourse of specific authors with specific intentions and, simultaneously, 'read' them as the testimony of a collective world of shared experience and knowledge (ibid). This philosophy allows contradictory views to be equally representative of the community and can be seen within the iterative cycles of individual and collective data collection activities described in Sections 6.1- 6.3.

All bar one of the sources used to begin producing my Storywork methodology during the SARS-CoV-2 pandemic were authored by non-Indigenous scholars. I was unable to corroborate these stories with Indigenous sources until my first site-visit to Banjar Selasih post-pandemic, July 2022, where I was able to interview a village elder (unnamed), the *banjar* head of customs (Drs. Wayan Sudiarta), and a local scholar (Drs. I Ketut Karinata) on the functions and mytho-history of the Tong Tong drum and Rsi Markandeya's pilgrimage.

These insights helped to highlight inconsistencies and contradictions between the different re-tellings of similar stories by, firstly, understanding the different intentions behind each story as the teller or listener changes and, secondly, recognising the stories collective knowledge as a polyphony of voices from different worldviews (see Chapter 4).

5.3.2 The Practical Methods of Fieldwork Initiation

This section details the practical methods within Fieldwork Initiation. A summary of each method is provided below, accompanied by a detailed breakdown (see Table 5.2) for consideration by other researchers applying Architectural Storywork or similar methodologies.

1. Trust Building	Understanding the settings in which the PKP Community Centre provide care to their community and consider what actions they and other communities are already taking to improve their quality of life. This included three years of design and architectural collaborations with another Balinese Indigenous Tourism organisation prior to working with the PKP community, a pilot study to consider why Balinese community members might want to build new community centres as Indigenous Tourism destinations, meeting with Indigenous architects and material suppliers to better understand the practical considerations of building in Bali, and engaging with the PKP community within their daily lives.
2. Situating the Research	Situating the research within the micro-culture of the PKP Community Centre and Banjar Selasih by reviewing literature on relevant topics such as Indigenous Tourism movements, Indigenous Research Methodologies, applicable studies and stories for constructing an architecturally led Storywork methodology, engaging with local village Elders, Head of Customs and Indigenous scholars, visiting relevant local sites.
3. Value and Goal Clarification	Continually engaging in conversations with Ibu Sari (as main facilitator) and, where applicable, with participants to identify any changes in their goals and values related to the research and to vocalise any changes in my own research goals and values. This is essential in developing data collection workshops and fieldwork outputs that focused on communicating the participants' goals and values, as well as suggesting how those goals and values could be achieved

4. Centring Indigenous Teachings	Developing my own set of theoretical and ethical principles informed by relevant literature and prior precedents, which offer a platform for architectural inquiry to occur in the discursive space between the Indigenous storyteller and listener through architectural discourses.

Table 5.2 Practical Methods of Fieldwork Initiation

Fieldwork Initiation- Practical Methods
1. Trust Building
Key Steps and Characteristics:
• 'Radical Care'- a process of communal care that recognises what it means for individuals and groups to feel and provide care, survive, and even thrive in environments that challenge their very existence (Hobart & Kneese, 2020) • 'Radical Empathy'- taking actions that not only help other but may somehow improve society by understanding ourselves and opening ourselves up to the experiences of others (Givens, 2021).
Practical Methods:

Before engaging in any research activity with the PKP community, I attempted to understand the settings in which the PKP Community Centre provide care to their community and consider what actions they and other communities are already taking to improve their quality of life. To achieve this, I:
• Worked for three years (2017-2020) with another Indigenous Tourism organisation in Bali, who are working to combat the negative impacts of colonial tourism, to co-develop concepts for:
  • An international third-level design workshop in Bali to build a community centre (including architectural competitions, design development, budgets, and marketing materials).
  • A selection of design-based tour packages to support the funding of said workshop (including business plans, marketing materials and channels).
• Conducted interviews and cultural probes-activities with specific instructions or tasks for participants to complete (Gaver et al., 1999)- with Ibu Sari and other Balinese community members as part of a pilot study with University College Cork ethical approval in November 2019. That study aimed to better understand why Balinese community members want to build new community centres as Indigenous Tourism destinations and how they think this will help marginalised communities to improve their quality of life. I conducted an Interpretative Phenomenological Analysis that highlighted patterns of architectural need within the community's motivations. This process highlighted the PKP Community Centre's adherence to Indigenous practices and their appropriation of tourism as a vehicle for survival.
• Met with Indigenous architects (Chiko Living and Kayon Mas) as well as alternative building material suppliers (Bali Coco coconut fibre production, Eco-brick compressed waste and plastic bottle bricks, and Earthbag rammed earth construction) to better understand the practical considerations of building in Bali and, as a non-architect myself, to consider what architecture's role might be in improving the PKP community's quality of life.

- Engaging in the day-to-day activities of the PKP Community Centre outside of the research, including helping with the preparation of food and offerings for ceremonies, attending local banjar and larger regional festivals at the local temples, engaging with Elders and the heads of village duties, spending time with the families of the participants, accompanying members of the PKP community on charitable trips to donate supplies to marginalised communities, attending meetings between Ibu Sari and financial investors, donors, and clients, and joining self-empowerment and educations workshops with members of the PKP community.

2. Situating the Research

Key Steps and Characteristics:

- Reviewing place, people, and context specific literature.
- Respect the knowledge and teachings of Indigenous Elders.

Practical Methods:

I aimed to immediately situate the research within the micro-culture of the PKP Community Centre and Banjar Selasih, the village system it is situated in, by:

- Reviewing literature on Indigenous Tourism movements, which lack detailed inclusion of community initiatives in Asia (Bunten & Graburn, 2018), to consider what, if any, Indigenous Tourism practices the PKP Community Centre are already engaged in and how, if at all, architecture is related to these practices (see Chapter 2). This includes the PKP Community Centre's efforts to promote self-determined Indigeneity based on Balinese philosophy, the autonomy of Balinese women and other marginalised groups, and the creation of new knowledges and cultures that empower future generations to show up, live, and dwell by their own conditions.
- Reviewing literature on Indigenous Research Methodologies and design/ architectural practices to understand how, if at all, architectural research could support these practices within an architectural context (see Chapter 3). This includes the development of new design cultures and tools that aim to empower the most vulnerable and instigate actionable change in the real world.
- Reviewing literature that re-tells Indigenous stories related to the construction of a Storywork methodology, such as the origin stories of the Tong Tong drum and the *banua* sacred landscape (see Chapter 4).
- Following local protocols to hear, record, and share stories told by a village elder (unnamed), the *banjar* head of customs (Drs. Wayan Sudiarta), and a local scholar (Drs. I Ketut Karinata), as well as to access Banjar Selasih's Bale Tong Tong and conduct a site analysis (see 2.2).
- Continuing to engage with the PKP community in their daily activities.

Table concluded on next page

3. Value and Goal Clarification

Key Steps and Characteristics:

- Openly communicate the goals and values of both the researcher and co-researcher community

Practical Methods:

- I communicated regularly with Ibu Sari, the main Indigenous facilitator of this study, over the course of the longitudinal study. This dialogue aimed to identify any changes in her own goals and values related to the research and to vocalise any changes in my own research goals and values. During site visits to the PKP Community Centre, I would also engage in similar conversations with the participants to identify any changes in the goals and values of the PKP community related to the research.
- I ensured that most data collection workshops (Workshops 2, 3 and 4) and fieldwork outputs focused on communicating the participants' goals and values, as well as suggesting how those goals and values could be achieved- see Chapter 6. This provided me with a secondary data point from which to assess any changes to the PKP community's goals and values in relation to the research study.

4. Centring Indigenous Teachings

Key Steps and Characteristics:

- Adhere to Storywork principles to be guided by Indigenous teachings

Practical Methods:

- I have developed my own set of theoretical and ethical principles based on Indigenous Storywork, Digital Storywork, and Transformative Storywork, which are embedded within my own Architectural Storywork methodology (see 4.4.2). These principles centre the Indigenous Knowledge held within stories and support their re-telling in new spaces with new people.
- By identifying Storywork as a viable methodology for implementing Discursive Design Practices with Indigenous peoples, this study offers a platform for architectural inquiry to occur in the discursive space between the Indigenous storyteller and listener, in which Indigenous Knowledge can be performed and transformed within architectural discourse (see Chapter 4).

5.3.3 Ethical Methods of Fieldwork Initiation

This section details the practical application of Architectural Storywork ethics within my Fieldwork Initiation phase. These principles are inclusive of my University College Cork Ethics Approval (Log 2020-176)- see Appendix D. A summary of each method is provided below, accompanied by a detailed breakdown (see Table 5.3) for consideration by other researchers applying Architectural Storywork or similar methodologies.

1. Creating and Respecting Data within Stories	Ensuring that I only engaged with the PKP Bale Tong Tong project at the invitation of Ibu Sari and the PKP community at all stages of the research, and continually ensuring that the potentially changeable project parameters and goals are set and updated by the PKP community. I also continually adapted my own research parameters and goals to align with those of the PKP community, as best I could within the boundaries of academic rigour and university ethical standards. This included the re-framing of the participants as co-researchers within the study.
2. The Respectful Retelling of Stories	Producing a respectful criterion for participant inclusion within the study that aimed to safeguard vulnerable community members whilst also giving the PKP community agency over their own identification. I also implemented procedures within the recruitment process to ensure that prospective participants understood my own positionality as a researcher and my own parameters and goals for the research before committing to the study- including providing access to all information sheets, data protections notices, activity sheets and guiding documents. Extra safeguards were also put in place due to the use of facilitators and translators being required in the study, such as information sheets and consent forms for these roles.

Table 5.3 Storywork Ethics of Fieldwork Initiation

Fieldwork Initiation- Ethical Methods and Implementation
Principle 1- Creating and Respecting Data within Stories (see 4.1.3)
• I only engaged with the PKP Bale Tong Tong project after being invited to by Ibu Sari at the start of 2020 and ensuring, through Ibu Sari, that the PKP community had set clear parameters and goals for the project. These parameters and goals were initially provided by Ibu Sari as a traditional architectural brief for a single building to be constructed on a specific site with specific requirements related to running activities at the current PKP Community Centre location (see Appendix A). As the current PKP Community Centre became at risk of being displaced from Banjar Selasih by development during the SARS-CoV-2 pandemic (see 2.1.2), the parameters of the project were widened to include the design of an entire new PKP Community Centre, whilst the goals were made more acute to include: self-determinism for the PKP community who have little to no power over the events leading to their eventual displacement; architectural autonomy for the PKP community so that they might design, build, and take ownership of

a new community centre without risk of displacement; and to continue creating their own micro-culture by sharing the PKP rules and stories with new people in new places.

- As the primary researcher, I have a responsibility to produce, store, and process data related to my own research parameters and goals. The parameters of my research included the application of Indigenous Research Methodologies into architectural research and fieldwork within the context of Indigenous Tourism. The goal of my research was to understand if my parameters and goals could support the PKP community in revealing colonially derived values, institutions, laws, and symbology within their architectural spaces and, instead, help honour pre-colonial lifeways that support a re-discovery of themselves. The PKP community took on the role of co-researchers who also produced, stored, and processed research data related to the architectural project, its parameters, and its goals (see Principle 2 of this table). My own research questions reflected this by considering if my research could support the PKP community's parameters by creating an architectural charge and draft brief for a new PKP Community Centre, or support their goals of self-determined Indigeneity, architectural autonomy, and the transmission of knowledge through architectural discourses (see 2.3).

Principle 2- The Respectful Retelling of Stories (see 4.1.3)

As this study focuses on re-telling the stories of individuals who may have experienced trauma, oppression, and marginalisation, it is important to produce a respectful criterion for inclusion within the study that aimed to safeguard vulnerable community members whilst also giving the PKP community agency over their own identification. All prospective participants for this study had to be:

- Members of the PKP Community Centre: Whilst it is not vital that participants were born or raised in Bali, it is important that they have some understanding of the sociocultural values of Balinese society that are communicated by the PKP Community Centre, such as the Tri Hita Karana, and my Architectural Storywork Methodology, such as the philosophies embedded in the Asta Kosala Kosali manuscripts (see 4.3).

- Must be classified as 'Not Vulnerable': Whilst vulnerable community members should not be automatically excluded from studies, Ibu Sari and myself agreed that any vulnerable individuals at the PKP Community Centre should not be placed in a position where they may have to re-live harmful experiences related to abuse, stigma, and trauma. The vulnerability of potential participants has been considered by a) the completion of a Data Protection Impact Assessment cross-examined by the UCC Data Protection Officer and Ibu Sari, and b) placing safeguards within the participant selection process wherein I gave potential participants access to the University College Cork (UCC) Vulnerability Guidance Document (which defines vulnerability based on participant's characteristics, situational contexts, and the nature of the research) who were given the opportunity to identify themselves as vulnerable or not-vulnerable based on their own observations and interpretations of these criteria as co-researchers. Those members of the PKP Community Centre who can be classified as vulnerable for other reasons, such as those under 18 years of age and adults who cannot make decisions unaided, were excluded from the study. These procedures were approved by the UCC Social Research Ethics Committee (see Appendix D).

- Engaged with the Spatial Environments of the PKP Community Centre: Given that this research study focused on the relationships between participants and their spatial environment, it is important that they engage with their surrounding architectural spaces by living or working at the PKP Community Centre so that they might recognise colonially derived values, institutions, laws, and symbology within their architectural spaces.

- Contributing to the Study's Maximum Variability in Sampling: I intended to include individuals that represented a wide range of backgrounds and lived experiences in this study, forming a collective understanding of a polyphony of diverse voices in the hope that they would offer varying data sets and increase the validity and rigour of the final data analysis.

I also implemented the following procedures within the recruitment process, which occurred remotely in August 2021 due to the SARS-CoV-2 pandemic, so that prospective participants understood my own positionality as a researcher and my own parameters and goals for the research:

- Prospective participants were given access to all the resource documents, such as Consent Forms, Information Sheets, Data Protection Notices, oral/ pictorial/ video documents (see Appendix D).
- Consent Forms, Information Sheets, and Data Protection notices were all translated into Indonesian. Oral (English UK), pictorial (instructional illustrations), and video (mixture of oral English UK, pictorial illustrations, and live streaming) formats of the Consent Forms, Information Sheets, and Data Protection Notices were also made freely available to support prospective participants who may not be fluent in written English.
- I introduced the study through a live video stream, within which the overview of the study was given alongside the key points from the study Information Sheets and Data Protection Notices.
- Ibu Sari and I both made our motivations for the project clear, explaining our own values, parameters, and goals for the research individually as collective co-researchers.

As participant's stories are occasionally told through direct and summary translations, the selection of community translators and the inclusion of community ethics are important:

- Ibu Sari acted as the primary community translator. Her intimate knowledge and relationship with the study participants provided a unique understanding of cultural and personal sensitivities that may affect the vulnerability of prospective participants. Ibu Sari's unique understanding also helped assure participants that their data is respected, whilst also increasing my accuracy in comprehending and processing participant's data. Ibu Sari appointed a secondary community translator to translate verbatim text when she was unavailable.
- Remote audio and video data was recorded in English (US and UK) and remote written data was presented in English (US and UK), with occasional verbatim translations from Bahasa Indonesian into English (US and UK). Because most of participant's data is unaltered, i.e. not translated or edited, I have assumed that they authentically represent the participant's experiences of architectural space. Some of the on-site audio, video, and written data was recorded in Bahasa Indonesian with summary translations (non-verbatim and condensed translations) from Bahasa Indonesian into English (US and UK). These summary translations are transcribed verbatim. Each translator was provided with a separate information sheet in Bahasa Indonesian (see Appendix D) that stated their role will be:

> To accurately guide members of your community through these activities and/ or accurately and honestly document the information provided by your community members. This responsibility requires you to maintain he confidentiality of your community members and keep all of their information that you handle private and secure. This role requires you to agree to these terms and to not break the trust of your community.
>
> Excerpt from Data Protection Notice for Facilitators/ Translators/ Transcribers, 2020

Each translator also signed a form, provided in Bahasa Indonesian in which they must agree that:

> I understand that my relationship with the study participants may make me perceive and interpret information differently than was meant by the participant when translating or transcribing their data. I understand that this is a greater risk during live translations or transcription. I agree to do my best to correctly perceive and interpret the information of other participants when translating or transcribing their data. I understand that this role puts me in a position of trust, in which I will be handling the personal information and data of participants. This position of trust is not taken lightly, and I understand that I am responsible for keeping all information of other participants private, secure, and confidential.
>
> Excerpt from Translator and Transcriber Consent Form, 2020

- In most cases, I was present for the summary translations so was able to ask more questions if I felt that information was censored by the translator. However, despite the guarantees provided by the translator and my own presence to clarify summary translations, I acknowledge that some bias is still present in the translation process and/or that my presence may have changed the dynamic of conversation between the participant and translator- inadvertently impacting the data.

5.4 Implementation

The above practices of Fieldwork Initiation refer to my preparations for conducting both remote and on-site data collection. These methods correspond to my University College Cork approved ethics (SREC Log 2020-176) alongside my own ethical framework that is inclusive of, and extends beyond, university ethical standard to include practical ethical guides from general Storywork principles and situated architectural theories (see 4.1).

Chapter 6 firstly details the application of these principles within my Data Collection methods, before continuing to describe their application within rounds of Data Analysis and within the co-authorship of Fieldwork Outputs with the participating members of the PKP community.

6.0 Data Collection, Analysis, and Outputs

Or **Storying Architecture**

This chapter continues directly from Chapter 5.0: Co-Authoring Architecture, to detail my data collection methods and tools, data analysis techniques and coding systems, and the output of the fieldwork. Each section continues to exemplify my efforts to seek rigour and validity throughout my fieldwork, providing a template for future replicability by other researcher or communities.

6.1 Data Collection

6.1.1 Architectural Boundary Objects

The data collection methods outlined in this section attempt to create architectural 'boundary objects' (Martinez, 2021): discursive architectural works that carry and communicate connective stories across different contexts, giving meaning to diverse participants who might have disparate practices, competences, tools, or languages (Star & Griesemer, 1989). Boundary objects are created by the PKP community through writing, speaking, drawing, or physical model-making activities. Each activity is adapted from design thinking toolkits and implemented within workshops co-facilitated by Ibu Sari and myself. These architectural works are then curated by the PKP community to produce an architectural charge and a draft design brief within workshops that I developed and co-facilitated with Ibu Sari.

This process aligns with my own theoretical principle of the 'space between the building and its inhabitants' (see 4.1.2) that entails the creation of an imaginative space between the buildings of the PKP Community Centre and the PKP community, into which multi-layered materiality and memory can be inscribed using discursive design practices (Matunga, 2013). This discursive space holds within it all that is materially and memorably possible, hypothetical, never existed, or perhaps will never exist but might have existed (Psarra, 2018).

Boundary objects, as discursive architectural works or spaces, are not a design output but, instead, are imaginative acts that aim to develop new design cultures and tools by; articulating the spatial practices we unconsciously perform everyday; considering how people make, use, and articulate their experiences of space through the tensions and contradictions between

diverse methods of architectural representations; are concerned with how discourses allows for the articulation and construction of meaning in which oral, aural, visual, and other semiotic resources are not always distinct entities but shift between states, and; engages with design possibilities that are unownable and unknowable based solely on our encounters with other worldviews, realities, histories, conditions, or knowledges (see 3.1 for a detailed breakdown). In this way, I use architectural boundary objects to formulate an architectural charge (see 3.3.3) with/ from/ by the PKP community, tasking their future architectural spaces with a responsibility to their self-determinism, autonomy, and transmission of new knowledge.

Boundary objects are so called because they are situated at the boundary of different worldviews, realities, histories, conditions, and knowledges, and engage directly in 'not-knowing'; a reflexive (de)familiarisation process that centres others forms of knowledge and aims to make it possible to find what you did not know you were looking for (Martinez, 2021). The learning that ensues is a double hermeneutic approach to ethnography (Smith & Osborn, 2007), where;

1. I seek to make sense of the PKP community in the vein of Yaneva's (2009) ethnographic study of architectural models, exploring the ways in which the PKP community's architectural models come into being and gain meaning, whilst:

2. The PKP community make sense of their own world(s) in an auto-ethnographic approach to architecture, becoming authors of their own stories carried within their architectural models. This approach aims to engage in 'not-knowing with others', allowing both myself and the PKP community the chance to practice the acceptance of alterity whilst learning and co-producing new knowledge together.

Architectural boundary objects are co-constructed in the space between the community and the researcher as a form of sensory auto-ethnography; allowing participants to communicate stories and examine their own experiences of architecture by inhabiting or 'living in' their models. This creates a 'place-event', a term that describes how a community and a researcher are mutually positioned in relation to an architectural work as they literally and metaphorically move along its narrative (Pink, 2009; Martinez, 2021; Marco et al., 2021).

Marco et al. (2021) use architectural models as cultural probes to create place-events.

Cultural probes are tools or activities with specific instructions or tasks for participants to complete (Gaver et al., 1999). Recently, cultural probes have been applied with the intention of "understanding community member's social, cultural, and historical identities that underlie their sense of place, desires, and perceptions of change and can support reflexive dialogue and design co-creation with researchers" (Townsend & Patsarika in Comunello et al., 2022, p.37). Marco et al. (2021) place an architectural model inside a physical space, contextually selected based on the study, to create an event designed to provoke reflective dialogue between the researcher and participants in an 'ethnography of the design process'.

Albena Yaneva's (2009) ethnographic study of model-making in the Office of Metropolitan Architecture (OMA) provides a precedent for ethnographies of architectural design processes. She achieves this through a collection of short stories that depict place-events within the OMA:

- The story of a model-maker as she "dances" through the office with her model, catching the attention and inspiration of other designers as she does so (ibid, pp. 51-63).
- The story of the model as a "restless traveller", embarking on a constant journey through the office as they are made, exhibited, stored, re-found, and used again (ibid, pp. 64-74).
- The story of "two travellers"- the materiality of the model and the materiality of the building to-come- as they move towards each other, creating questions of representation, imitation, and reality (ibid, pp. 74-85).
- The story of an unnamed protagonist that follows the movement of old models, materials, and design elements as they are re-discovered and re-used (pp. 86-96).

These ethnographic studies of design processes return to Dalla Costa's (in Grant et al., 2018) call for architectural researchers to understand how a culture can affect the materiality (physical quality, presence, structure) and memory (experience and existence) of architecture (see 3.4.3). In this way, architectural boundary objects can be seen as epistemological devices that might produce new knowledge that is hard to predict or to control because it is always 'in the making' or 'in between'; escaping methodological essentialism through "discussions

of entanglements, hybridity and multidirectional trajectories, of separations, thresholds and dislocations, of indeterminacy, disorder and indiscipline" that can generate a polyphony of diverse ways of knowing and doing (Martinez, 2021, p.102).

I developed six workshops in which participating members of the PKP community could create their own boundary objects. These workshops take some inspiration from Schultz's (2019) articulatory design practices, which use relational, situated, world-forming, and future-orientated tools of design thinking. Design thinking is a set of congruent practices that aim to tackle complex, ill-defined, or unknown needs by re-framing problems in human-centric ways, in contrast to technology or organisation-centric (Kimbell, 2011).

Kimbell (ibid, p.287) and Schultz (2019, p.27) both recognise that design thinking is often practiced as a "disembodied and ahistorical cognitive style" towards neo-colonial or capitalist agendas without a situated or critical context. Schultz systematically considers and compares various design thinking methods to his own 'decolonising' and Indigenous-led design practices (see Shultz, 2019, pp.45-65), finding that many design thinking methods are not in conflict with his own practices if approached with a situated, critical context. Similarly, I adapt design thinking methods as relational, situated, world-forming, future-oriented, and critical tools for creating architectural boundary objects. These are described in detail in the following sections.

6.1.2 Data Recording and Storage During Data Collection

All data was recorded using storytelling techniques adapted from Digital Storywork (Stanton et al., 2016) and Transformative Storywork (Wheeler et al., 2020). Indigenous digital storytelling techniques have been found to be a suitable narrative method for preserving and promoting Indigenous Knowledge in cross-cultural studies, which can sometimes complicate understandings of Indigenous Knowledge, because they are guided by the Seven Principles of Storywork and are situated within the lifeworlds of specific communities (Willox, Harper, & Edge, 2012). Transformative Storywork draws upon existing story-based methods, including digital storytelling, that are bounded by principles of humanising practice, accountability, and emancipation (see Table 4.2). A combination of these principles guided my own Architectural Storywork principles (see 4.1.3) that are practiced within this study.

Usually, digital storytelling methods ask participants to create 3-5 minute videos on a particular topic, using an interrelated set of visual representations such as photographs, images, drawings, and audio. Participants are usually guided by researchers through in-person, multi-day workshops that use a variety of hardware and digital software provided by the researcher (Matthews & Sunderland, 2017). This study deviates from the classic approaches used in Digital Storywork as the PKP community do not have access to relevant technology or software to engage in video editing.

Instead, both remote and on-site data collection methods used situated design thinking tools as a relational approach to creative and emotional expression (see Table 6.1), where the PKP community could create boundary objects that carry and communicate connective stories in a complex and multi-modal group process- see 6.0 (Wheeler et al., 2020). Multi-layered forms of expression (through writing, speaking, drawing, physically modelling etc.) can bring unexpected or obscure knowledges to the fore, enabling the PKP community to articulate and reflect upon difficult issues that might otherwise have been hidden in the 'discursive' (ibid).

Participants then used mobile phones to film videos, take photographs, and record audio of their boundary objects. Rather than edit these into a singular video, their data was collated within an online depository (on a University College Cork server) as individual files that, taken together, represent an unedited digital story. Data was transcribed, anonymised, and stored in a separate online depository (a second University College Cork server on a separate storage system) so that any sensitive material extrapolated within analysis could not be linked to the original data (see Fig 6.1 on next page).

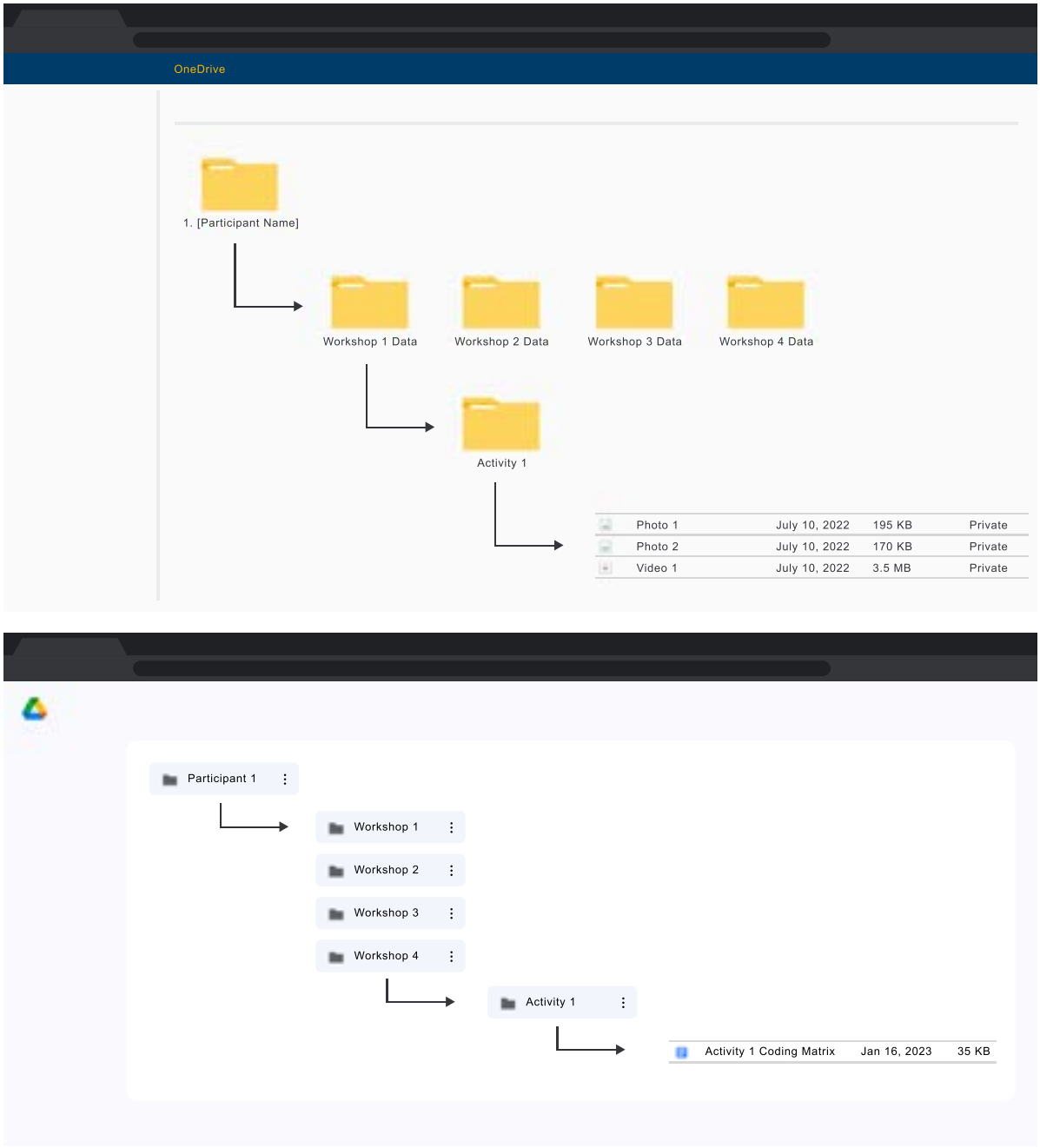


Fig 6.1 Example of Data Storage

6.1.3 Creating a Discursive Cartographic Guide

To help guide participants through the fieldwork, I created a guide, (see Fig 6.2), inspired by Sheehan's (2011) and Schultz's (2019) use of cartographic metaphor within visual dialogues (see 3.3.1) and my own *mandala* methodology (see 4.0). This, along with all the activity sheets, used simple black and white illustrations and diagrams for increased visual accessibility and printer friendliness. The data collection guide is made from six hexagons surrounding and connected to a single central hexagon. Each of the outer hexagons is divided into six segments, denoting one of the six activities conducted throughout Workshops 1-4.

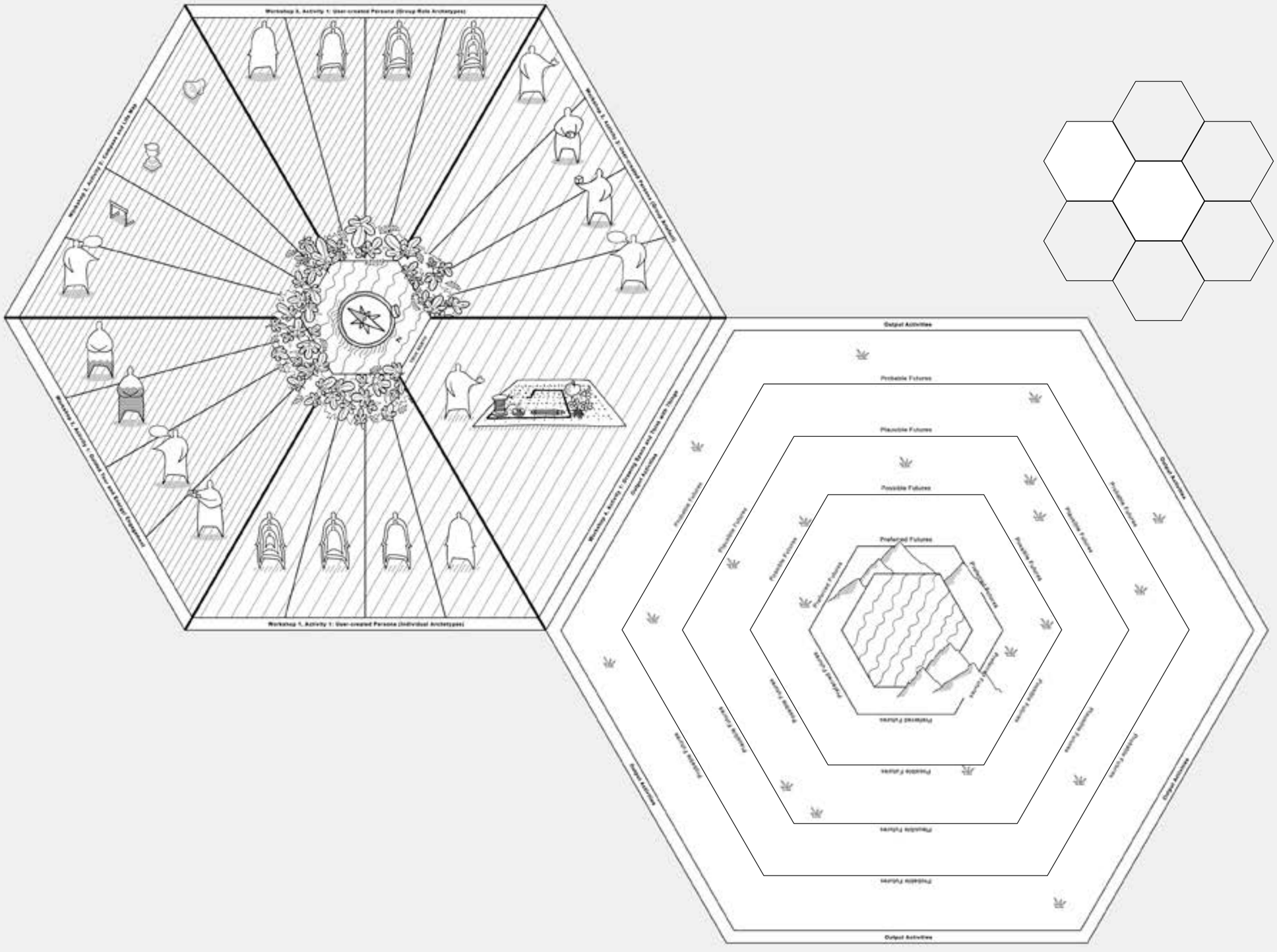


Fig 6.2 Discursive Data Collection Guide (for Illustrative Purposes Only)- Alastair Brook, 2023

Mirroring the *mandala* landscape of my methodology, these six activities guide the participants 'downstream' as they engage in the creation of their own metaphorical *mandala*. The illustration depicts the movement of *subak* water through the jungle landscape of Banjar Selasih to local rice fields, interacting with participants as they engage in activities. The PKP Community Centre is part of the local *subak* community, allowing them to divert water onto their land to help sustain the PKP community.

The central hexagon represents the coming together of all participating members of the PKP community to create the final architectural outputs of the study in collaborative sharing and joint meaning-making activities. Visually, this mirrors my methodological *mandala* landscape by 'returning' the participants to the central mountain source or 'neutral origin'. When I designed this guide, neither myself nor the PKP community knew what activities we would engage in during output creation, so the central hexagon depicts 'blank' *s*pace ready to be inscribed with imaginative discourse in the vein of Derrida's chora (see 4.2.2).

Just as Schultz (2019) adapts Dunne and Raby's (2013) 'cone of plausibility' into his articulatory practices, I also found that this tool helps to visualise possible futures in my practice. Dunne and Raby's cone visually describes four 'P's of the future; 1) probable futures that describe what is likely to happen, based on accounts of history, unless radical change occurs, 2) plausible futures in which a community explores alternative futures and prepares for them, 3) possible futures in which a community imagines difficult (but not impossible) and radical socio-cultural changes in the future, and 4) preferred futures, which overlap plausible and possible futures, in which a community makes a judgement about what alternatives or radical socio-cultural changes they want to project into the future (Dunne & Raby, 2013).

Shultz (2019) integrates this into his articulatory practice in a deliberately 'messy' cartographic act, mirroring the Indigenous understanding of navigating landscapes and embracing the complexity of the living systems humans exist within. Simplifying the visuals to be more easily understood by the participants as a physical activity, I also integrate the four 'P's as a situated and spatial diagram within my cartographic depiction of the *subak* system as a place and people specific representation of the complex living and spiritual systems within which the Balinese people exist. My decision to reframe Dunne and Raby's 'cone' into concentric

circles (or hexagons) is not arbitrary, but situates this tool within the Balinese 'knowledge-practice-belief' identified in this study (see 2.2.3 and Fig 2.3). In doing so, I consider the power of worldviews to suppress future possibilities by maintaining the prescribed rules of a dominant system or structure and perpetuating accounts of history into the future. I also consider the potency within local knowledge of ecologies- both natural, manmade, literal, or metaphorical- as an Indigenous energy that can transform possibilities into actualities; where historical accounts are intervened, redirected, are rearticulated (Berardi, 2017; Hunt, 2018; Schultz, 2019)- see Fig 6.3.

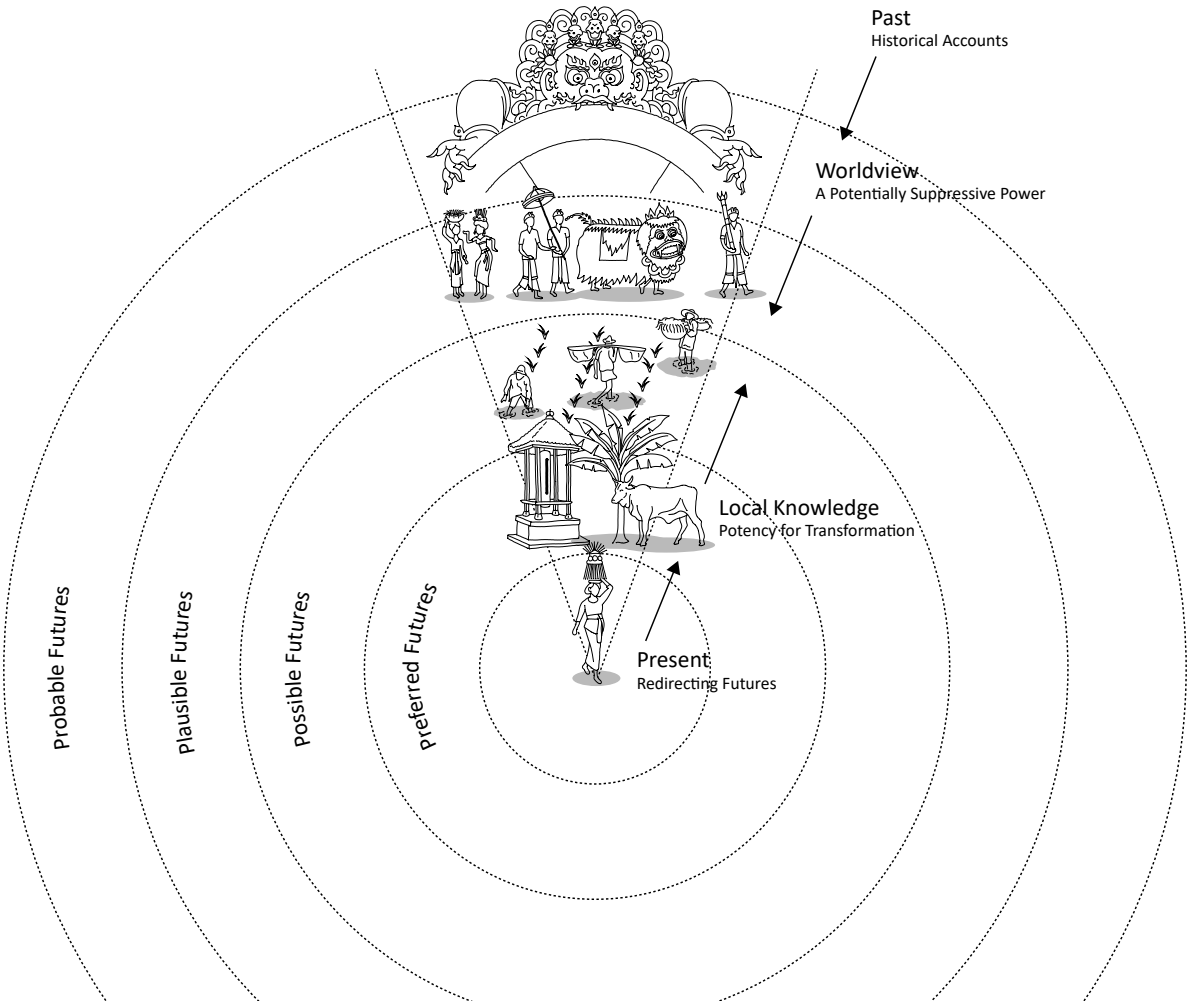


Fig 6.3 Ecologies of Plausibility (for Illustrative Purposes Only)- Alastair Brook 2023

As participants move through the final output activities, they move away from historic accounts that perpetuate colonial and capitalist tensions, towards a definition of their own preferred futures.

6.1.4 The Practical Methods of Data Collection

This section details the practical methods within Data Collection. Twenty participating members of the PKP community took part in both remote (between August 2021 and January 2022) and on-site (in July 2022) data collection. Only twelve of these twenty participants completed all four workshops. A summary of each method is provided below, accompanied by a detailed breakdown (see Table 6.1) for consideration by other researchers applying Architectural Storywork or similar methodologies.

Workshop 1 (Remote): Archetypes	Invites participants to create personas of themselves (Cabrero et al., 2016) framed in the context of 'archetypes'- universal mythic characters residing in the collective unconscious of people across the world (Jung, 1981)- using provided templates that they could adapt to create their own characters using coloured pens and pencils. Archetypes 'characterise' Indigenous Knowledge in order to teach lessons. Therefore, I provided a prompt to encourage the participants to consider archetypal behavioural patterns that might be shared by the group and asked participants to provide a short articulation of the critical defining values and perspectives that provide the basis for our understanding of life (Burnett & Evans, 2016).
Workshop 2 (Remote): Inhabiting Space	Invites participants to explore their own spatial practices and experiences of the PKP buildings they use on a day-to-day basis. Participants are encouraged to engage in reflective dialogue through video 'tour-guides' of architectural space and activity sheets that document their expectations, assumptions, and interpretations of architecture (Brunett & Evans, 2016). Participants also considered pleasant or unpleasant experiences of these architectural spaces and considered what obstacles, achievements and actions would be required to either maintain pleasant experiences or change unpleasant experiences (ibid).

Workshop 3 (On-site): Roles	Requires participants to reflect on the character 'archetypes' from Workshop 1, reconsidering them in relation to one another and to 'others'- whether that is people from outside of the PKP community, such as tourists, clients, political figures, historical or ancestral figures, or future generations. Participants were asked to visualise the different roles that they have at the PKP community centre using pre-designed templates, that they could adapt with coloured pens and pencils to create their own characters, and ethnographically-found objects- an object that was not provided to them by the researcher but is taken from their everyday lives (Cabrero et al., 2016).
Workshop 4 (On-site): Critical Inhabitation	Participants drew plans depicted the buildings they inhabit in their daily lives at the PKP Community Centre, as well as for a future building at the PKP Community Centre, based on their inherent knowledge over its space, its limits, boundaries, borders, and possibilities. I provided them with a simple grid template of A4 size, where each square represented a one metre squared area, containing a drawing of a person for scale. Drawings did not have to be accurate and included distorted spaces with changing scales and perspectives. Participants adapted their plans into physical architectural models using everyday objects to represent materials, objects, or spatial experiences using a collection of playful triggers- objects provided to stimulate the participants' imagination (Akama & Ivanka, 2010).

Table 6.1 Practical Methods of Data Collection

Data Collection- Practical Methods
Workshop 1 (Remote): Archetypes
Key Methods and Characteristics:
• Invites participants to create personas of themselves (Cabrero et al., 2016) framed in the context of 'archetypes'- universal mythic characters residing in the collective unconscious of people across the world (Jung, 1981). This method has previously been used in persona creation to combat stereotypical representations of community groups from Western or colonial worldviews by grounding community identity in self-representative research (Nielsen, 2013).

- Archetypes 'characterise' Indigenous Knowledge in order to teach lessons. This is exemplified by the Indigenous 'trickster' character who appears in Indigenous stories across cultures to guide listeners (Archibald et al., 2019). The trickster usually forgets or ignores Indigenous teachings about land, ancestors, families, and communities, subsequently getting into trouble at the end of the story. At this point, the listener is implicitly invited to work with the story and find meaning within the trickster's actions (ibid, pp.2-3).
- The personas created by the participants are a fictional representation of themselves that can inhabit stories and potentially teach them lessons about their own spatial practices and experiences.

Practical Methods:

- **'User-Created Persona' Individual Activity:** Participants created 'personas' (fictional representations of themselves using real data), which aim to convey their needs, requirements, aspirations, motivations and experiences, as linked to their socio-cultural context and their values- parameters and goals- for the research project (Cabrero, 2016; et al., 2016). After trialling various mediums of expression, such as 'playful triggers'- objects provided to stimulate the participants' imagination (Akama & Ivanka, 2010)- or other ethnographically-found item- personal objects that held metaphoric meaning to the participants (Cabrero et al., 2016)- Ibu Sari and myself agreed to stick to a paper based medium. Ibu Sari also suggested that the participants would need a guiding template (Sariadi, 2021- personal communication), so three blank paper templates of three persona designs (male, female, and non-binary) were given to participants- from which they could create their own characters using coloured pens and pencils (see Fig 6.4).
- **Archetype Behavioural Pattern Prompt:** This workshop included a prompt to encourage the participants to consider archetypal behavioural patterns that might be shared by the group. Pauline Clague (2019), an indigenous Australian storyteller and film producer, suggests that members of indigenous communities may share the same 'hero' behavioural patterns of: providing for your community, protecting and creating direction for other community members, offering insights and ideas on what needs to be done next in the community, have fears that you cannot adapt fast enough to incoming threats, or be fearful that people will suffer because of something that you do. This includes critical reflection on what participants like and dislike about their behavioural patterns, which can be listed in a like/ dislike table on the activity sheet.
- **'Lifeview' Prompts:** Burnett and Evans (2016) seminal book, *Designing Your Life*, considers various design thinking tools as a method of reframing situations to imagine things that don't yet exist and take actionable steps to bring those things to fruition. One such tool is a 'Lifeview'- a short articulation of the critical defining values and perspectives that provide the basis for your understanding of life. At Ibu Sari's request (Sariadi, 2021- personal communication), I provided a selection of project-specific prompts to encourage participants to describe their own 'Lifeviews' in relation to their perspectives of the research project (see Appendix E).

Workshop 2 (Remote): Inhabiting Space

Key Methods and Characteristics:

- Invites participants to explore their own spatial practices and experiences of the PKP buildings they use on a day-to-day basis, including the shelter housing for marginalised women, production sites of the PKP social enterprises, social and teaching spaces, and agricultural spaces. This aims to engage participants in reflexive dialogue towards the production of stories that explore architectural space.

- Participants are encouraged to document their expectations, assumptions, and interpretations of architecture (see 2.2.5) by considering alternative ways to notate architectural space. Notations are methods of systematically recording the dynamic process of visualising spatial environments (Sanoff, 2016). This becomes a form of social cartography whereby participants produce visual representations of physical infrastructures, their social relations, and conflicts that may be present within them (Bastidas & Gonzales, 2009; Habegger & Mancila, 2006).

- Integrates the '3 E's'- Everybody is a teacher, every place is a school, every moment is a lesson- and 'Life Map' PKP rules (see Table 2.1). This encouraged participants to ask: What have you learned about your experiences of the building? What have you learned about other people's experiences of the building? What things about the building give you or other people pleasant experiences? What things about the building give you or other people unpleasant experiences? The answers to these questions help the participants to take actions using a 'life map' which, paraphrasing Ibu Sari, explains how: "When you experience pleasant things, you can see that you are lucky in some ways. When you experience unpleasant things, you can also see that you struggle in some ways. The balance between the pleasant and unpleasant helps to show your location in your life map, because it tells you what things you need to change and what direction you need to be going in" (Sariadi, 2020- personal communication).

Practical Tools:

- **Tour Guide (Photo-Voice) Activity:** Photo-voice approaches usually have an "emancipatory agenda" (Gray, 2019, p.519; Vince & Warren, 2012) where participants use visual media to critically analyse their everyday experiences and environments with the goal of promoting critical dialogue about important issues (Gray, 2019). Participants were encouraged to film their everyday routines and talk about the significances and meanings of the buildings they worked within. Ibu Sari suggested framing this activity as a 'guided tour' (Sariadi, 2021- personal communication), due to the PKP Community Centre's familiarity and reliance on tourism for economic security. Participants created short video 'tours' of their architectural environments at the PKP Community Centre (see Fig 6.5).

- '**Energy/ Engagement' Activity:** Adapting Burnett and Evans (2016 pp.29-62) 'compass' and 'wayfinding' techniques, participants' video tours were accompanied by written discourses that described their energy and engagement levels when conducting certain everyday tasks or events. This activity emphasises 'action' over 'thinking' by trying to get participants to catch themselves in the acts of gaining or giving energy and engagement to certain events- paying extra attention to their experiences, expectations, assumptions, and interpretations of architectural space in ways that they may not have before (see Fig 6.6 and Appendix E).

- **'Compass' and 'Life Map' Activities:** Continuing this enquiry (Burnett & Evans, 2016), these activities asked participants to; a) list their most pleasurable and unpleasurable experiences in the PKP buildings; b) consider what they could do to maintain the pleasurable experiences and change the unpleasurable experiences, and; c) consider what obstacles, achievements and actions would be required to either maintain pleasant experiences or change unpleasant experiences. At Ibu Sari's request (Sariadi, 2021- personal communication), I provided a selection of project-specific prompts to encourage participants to answer: "How could we find different paths? What if we could address X or Y barrier? What would need to happen to achieve X or Y goal?" (Escobar-Tello, 2021)- see Fig 6.7 and Appendix E.

Table continues on next page.

Workshop 3 (On-site): Roles

Key Methods and Characteristics:

- Acts as a reflective exercise for the participants, as they must repeat or revisit their memories of architecture in order to anticipate new modes of architectural practice in the future (see 3.1.2).
- Requires participants to reflect on the character 'archetypes' from Workshop 1, reconsidering them in relation to one another and to 'others'- whether that is people from outside of the PKP community, such as tourists, clients, political figures, historical or ancestral figures, or future generations. Participants were asked to visualise the different roles that they have at the PKP community centre, including relationships between themselves, their spatial environments, and 'others'.
- Expands on the '3 E's' and 'Life Map' PKP rules to ask participants to answer questions about the buildings they have described, such as: "What different roles are present in this building? For example, the building may require a leader to guide everyone, and an organiser to make sure everything is prepared for work. Or, what different roles do you represent in this building when you use it? You do not have to list only one role. Perhaps you have many roles in this building. For example, maybe you are a leader and teacher".

Practical Tools:

- **'User-Created Persona' Group Activity:** Similar to the User-Created Persona activity in Workshop 1, this activity asked participants to create personas of their individual and collective roles within the PKP community. Ibu Sari and myself noted that participants had previously selected character templates based on their own gender-identity in previous workshops, contrary to the fluid ambiguity of identity and roles associated with Indigenous mythological characters (Sariadi, 2022- personal communication). Therefore, we agreed to provide participants with a singular, non-binary, character template for this workshop, from which they could create a character of any gender and role using coloured pens and pencils. Each template also included space to list the different qualities associated with the roles represented (see Fig 6.8 and Appendix E)
- Once completed, the participants were asked to represent their characters using ethnographically-found objects (Cabrero et al., 2016)- an object that was not provided to them by the researcher but is taken from their everyday lives. Participants shared their character roles and objects with each other, engaging in a critical dialogue that questioned their experiences of these roles at the PKP Community Centre. As a group, the participants curated their ethnographically-found objects into a group representation of the PKP roles, describing qualities with significance to the entire community and detailing their relations to one another (see Fig 6.9).

Workshop 4 (On-site): Critical Inhabitation

Key Methods and Characteristics:

- Reflects on participants' experiences, expectations, assumptions, and interpretations of architecture shared in Workshop 2. I asked each participant to reconsider these experiences in a process that Karami (2018; 2019) calls "critical inhabitation". Karami (2018, p.57) defines critical inhabitation as "a way to expand the architectural site from a finished project to a political, continuous practice of making spaces", based on an inhabitants' knowledge over space, its limits, boundaries, borders, and possibilities that are only achievable over time. Throughout my fieldwork, I have witnessed the intimate knowledge that members of the PKP Community Centre have over their spatial surroundings.

- Participants returned to architectural plans that they originally drew as part of Workshop Two, but did not use because it became too difficult to implement the original activity remotely. Ibu Sari and myself agreed to return to this activity on-site at the PKP Community Centre. These plans depicted the buildings the participants inhabit in their daily lives at the PKP Community Centre, as well as for a future building at the PKP Community Centre based on their inherent knowledge over its space, its limits, boundaries, borders, and possibilities.

- Participants adapted their plans into physical architectural models using everyday objects to represent materials, objects, or spatial experiences. These were created in informal contexts where participants, or other attendees such as children, could directly or indirectly influence the construction and presentation of the final model; making it a truly collaborative experience across the PKP community.

- Integrates the 'LAF' (Look, Ask, Feel- look more, observe more, ask more, and feel deeper) and CPI (Copy, Paste, Improvise) PKP rules (see Table 2.1). This firstly asks participants to not only observe the buildings around them, but to observe how they experience these buildings, and consider how other people might experience the buildings. It includes questions about a buildings' shape, materials, and interiors, and asks participants to think critically about how and why these properties might make their experience (or other peoples' experiences) of those buildings easier or more difficult- i.e. small spaces, limited accessibility, discrimination of people etc. It then asks participants to consider how buildings make them feel in terms of oppositions- happy/sad, stressed/ relaxed etc.

- CPI expands on this research by the participants. To paraphrase Ibu Sari- "if we talk about a building or an architect, we are also talking about all of the knowledge and experiences of our ancestors being shared to us through a building. But not all of their knowledge and experiences are pleasant to us, because our ancestors had different beliefs and attitudes than we do. The buildings that we use reflect those beliefs- so people with different histories may have unpleasant experiences of a building. If you want to make change, you have to be willing to improvise around the ideas that come from a strict culture or tradition." (Sariadi, 2020- personal communication). It asks participants to reflect on previous workshops and answer questions such as: "Could you change the building's shape or size? Could you change the building's location? Could you change the materials it is made from? Could you change the objects it has inside? Could you change the activities that people use it for?"

Practical Tools:

- **'Drawing Space' Activity:** To help participants create their architectural plans, I provided them with a simple grid template of A4 size, where each square represented a one metre squared area, containing a drawing of a person for scale. The participants labelled different objects in their drawings and gave them accurate dimensions (either in conventional measurements such as centimetres or metres, or in Indigenous measurements such as arms, hands, or strides). However, the drawings themselves were not meant to be accurate depictions of the buildings. Objects and spaces were often distorted in the participant's drawings, changing scales and perspectives. I digitised the participant's drawings so that the next activity could take place on-site. Original drawings were provided to me remotely as photographs, so I: a) corrected the angles and perspective of photographs so that they matched the original grid layout and printed these as A3 photographs, b) faithfully traced the participants' drawings using tracing paper before re-scanning them back into digital format, and c) laying out the drawings side by side (see Fig 6.10).

- **Think with Things' Activity**: Adapted from Brussels-based designer and educator Julie-Anne Gilleland's 'Think with Things' packs, which she describes as "a fun engaging way to explore design thinking using found objects combined with hands on learning tasks" (Gilleland, 2022). Participants used a collection of playful triggers (purchased from Gilleland to avoid any bias in object selection)- objects

provided to stimulate the participants' imagination (Akama & Ivanka, 2010)- to turn their hand-drawn plans into three dimensional architectural models. Rather than approaching these models through accurate depictions of spatial dimensions, I asked participants to represent architectural space by selecting objects that could represent space through different roles, experiences, or feelings- described through the size, shape, colour, or function of the objects. The participants explained their reasons for picking each object during the model-making process which often divulged into tangential conversations around their daily lived experiences. Occasionally, where applicable, I would suggest adding objects to the participant's model to represent certain roles, experiences, or feelings that emerged within these tangential discussions. Throughout this process, I questioned; a) the participants movements through the room in which we were conducting the activity, often becoming inspired by other participants; b) their reasons for selecting, discarding, and often re-selecting objects for their models; c) how these objects represented architecture, whether real or imagined, and; d) if and how their models changed as we discussed stories from their previous workshops (Yaneva, 2009)- see Fig 6.11.

- Participants then shared their models with each other, explaining how and why they would like to change the architecture of the PKP Community Centre. This allowed participants to visualise how, despite their differences and unique experiences, they were all connected through common purposes. Unprompted, the participants created their own site plan for the future PKP Bale Tong Tong Community Centre using the 'Think with Think's objects as well as ethnographically found objects from the garden (see Fig 6.12).

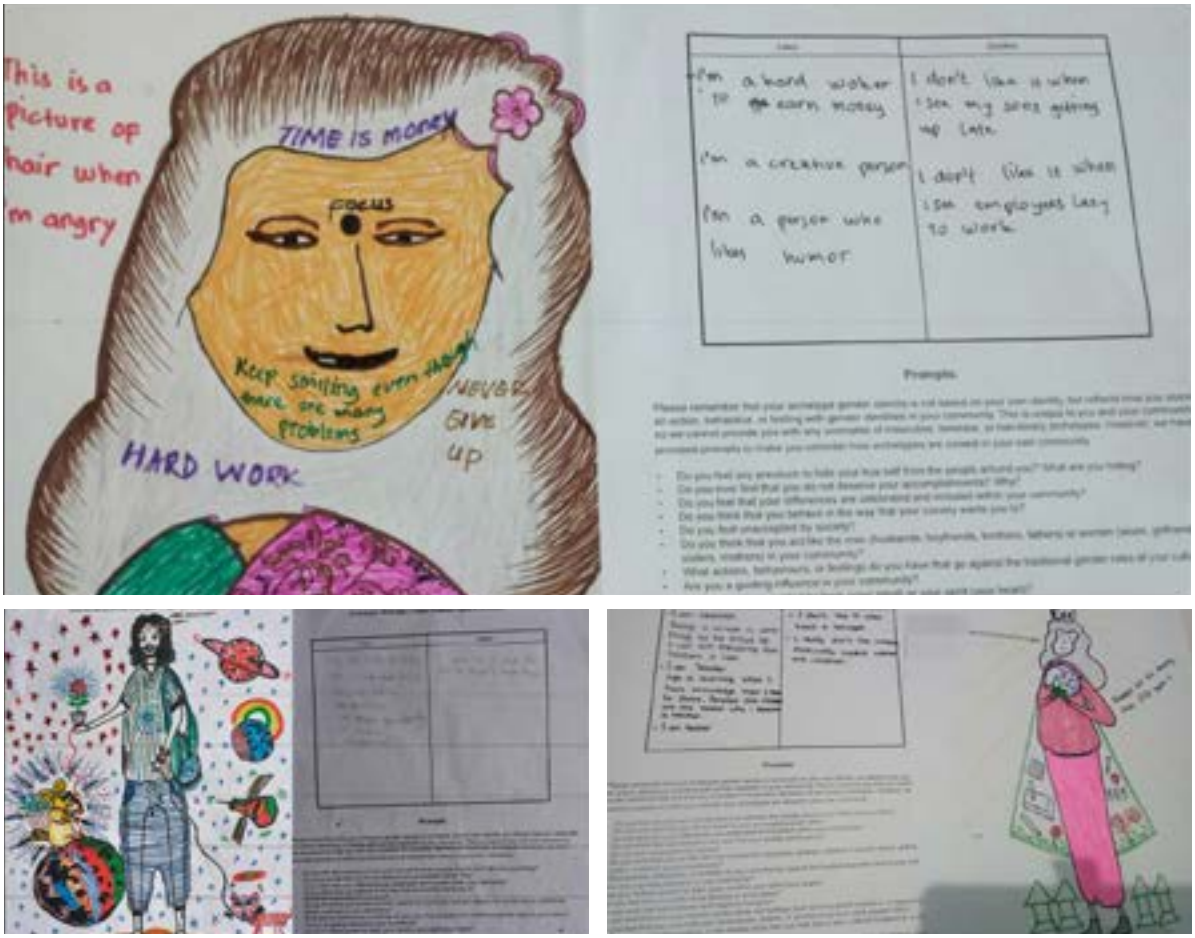


Fig 6.4 Excerpts from Three 'User-created Persona' Archetype Activities (for Illustrative Purposes Only)



Fig.6.5 Excerpts from Three 'Tour Guide' Activities (for Illustrative Purposes Only)

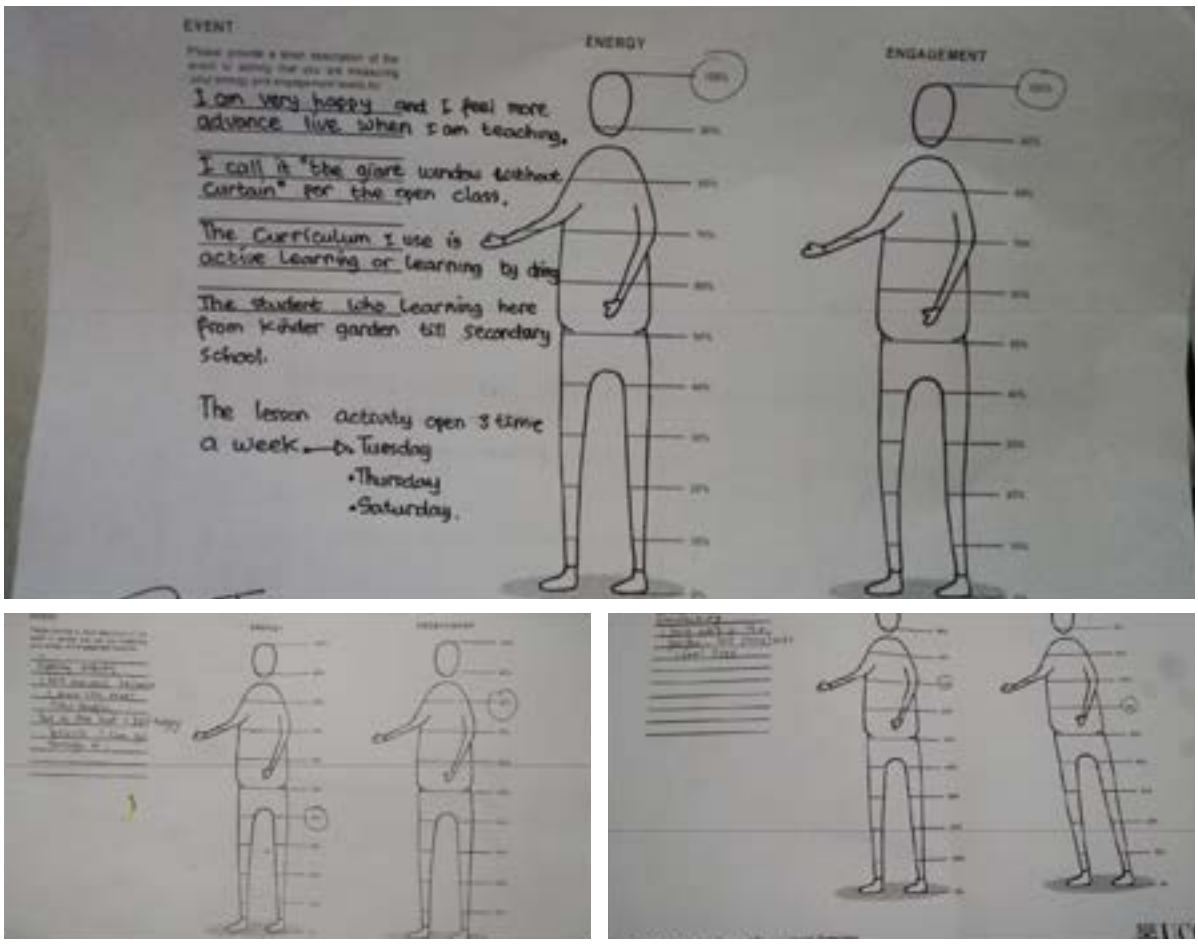


Fig 6.6 Excerpts from Three 'Energy/ Engagement' Activities (for Illustrative Purposes Only)

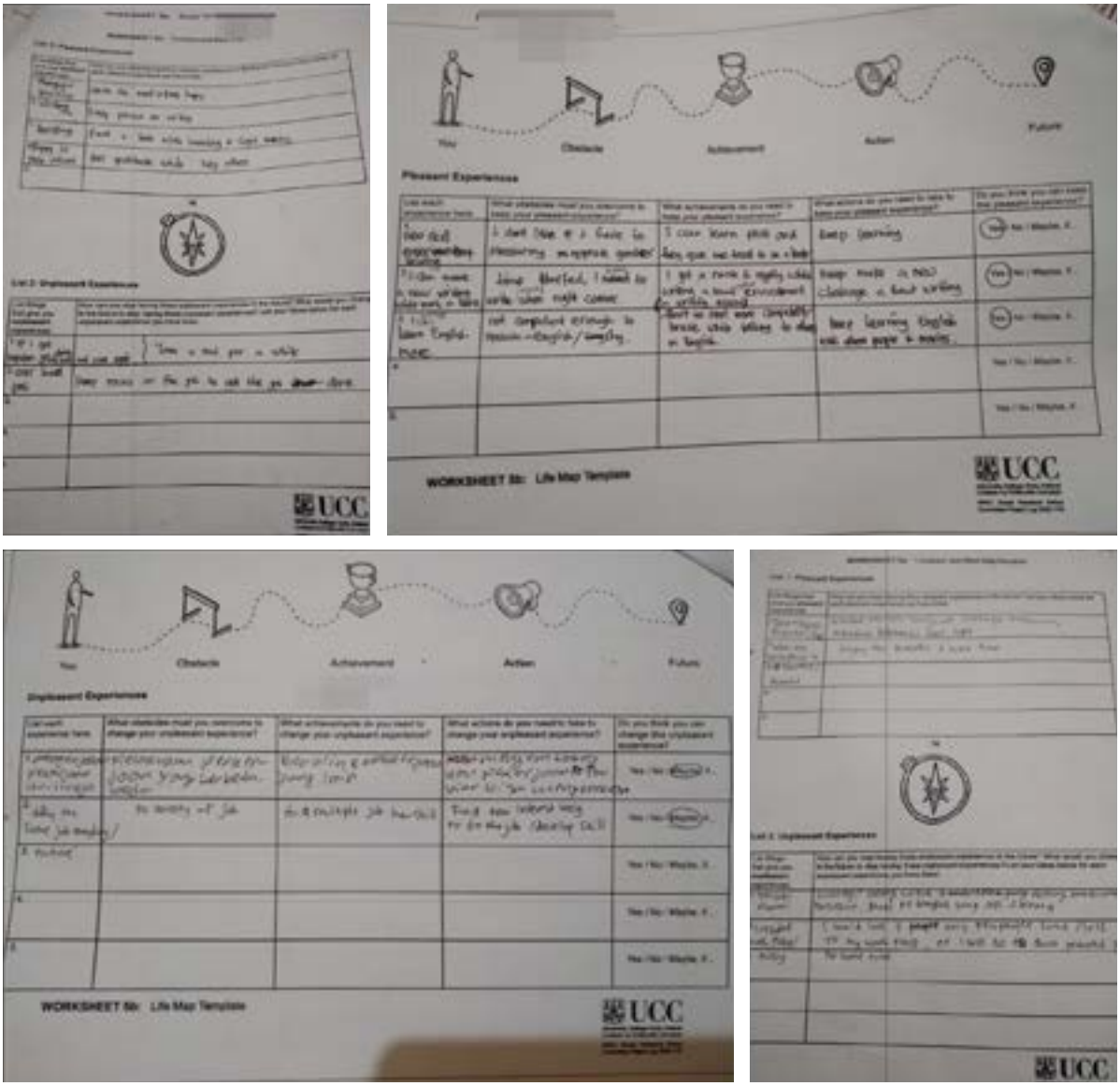


Fig 6.7 Excerpts from Two 'Compass' and 'Life Map' Activities (for Illustrative purposes Only)



Fig 6.8 Field Photograph of Participants' 'User-created Persona' Group Roles Activity (for Illustrative Purposes Only)









Guitar	Playing a note represents honesty whilst hearing a note represents a moment of empathy and harmony.
Scythe	Represents teamwork (feels like having five hands) protection (like trees protect the garden), and beauty (to maintain the garden).
Glass of Water	The central object representing the 'core' of the PKP community and the calmness, peacefulness, and fluidity of people's ideas coming into the community.
Plant Root	Coming from the water as a seed, representing strong, grounded people who can experiment and grow from their own learning- branching out into many new things.
Knife	Represents the strength of love of the community and precision of the work they undertake.
Tlompakan (Rice) Maker	Represents contributions to the community and strength in unifying differences.
Spoon	Represents the giving of life, energy, and care to the community through food- like a living battery.
Lighter	Represents sharing wisdom and the source of joy- a beacon of learning, sharing, and experimenting.
Brush	Each single length of dried grass is weak on its own, but once tied together they are strong and long lasting.
Massage Oil	Represents the individual expertise and contributions of each team member to the community, as well as the flexibility to adapt.
Book	Represents the story- knowledge and education- of the PKP Community Centre.

Fig 6.9 Field Photographs and Description of Participants' 'User-created Persona' Activity (for Illustrative Purposes Only)

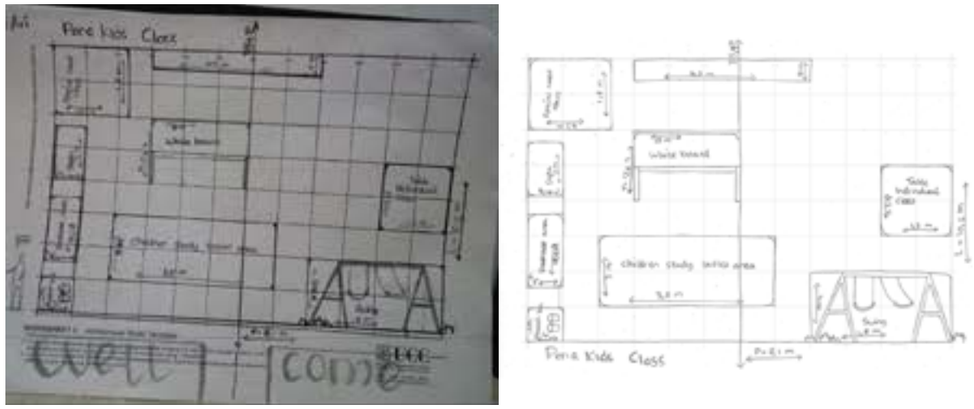


Fig 6.10 Example of Digitising Participants' Hand-drawn Architectural Plans



Fig 6.11 Field Photographs of Six 'Think with Things' Architectural Models



Fig 6.12 Field Photographs of 'Think with Things' Site Plan

(all images for Illustrative Purposes Only)

6.2 Data Analysis

6.2.1 Deconstructive Discourse Analysis and Discursive IPA

The data collected through the above methods was analysed using a Deconstructive Discourse Analysis and Discursive Interpretative Phenomenological Analysis (IPA) in order to abstract stories from the discourse. Both discourse analysis and IPA are concerned with understanding how discursive constructions- such as the collective act of creating and articulating connective stories through architectural boundary objects- are implicated in the experiences of the individual (Willig, 2003).

Discourse analysis is a 'vague' 'craft skill', in which methods emerge through the act of doing the analysis rather than being prescribed beforehand (Potter, 1996; Phillips & Hardy, 2002; Rose, 2016). This is because discourse analysis does not ascribe to specific terminologies or methods, often falling within 'the general style of' thematic coding (Robson & McCartan, 2016). The 'traditional' Foucauldian framework of discourse analysis is interested in how particular words, images, or other discourses are given specific meanings through a process of abstraction. This is where a researcher returns multiple time to the materials in order to recognise patterns between different elements of a discourse, or between different discourses entirely, through multiple, reflexive, and flexible rounds of coding (Anderson, 2003; Rose, 2016; Gray, 2018). This process aims to understand the strategies of persuasion used by a discursive power or authority within the construction of discourse.

Therefore, a discourse analysis is concerned with the discursive production of an authoritative account (such as the commodification and commercialisation of Balinese identity into the 'Indigenous Other'- see 2.1) and, perhaps too, about how that account can be contested (through situated discursive strategies implemented with/ from/ by the PKP community- see 2.2 and 3.0)- (Rose, 2016). Therefore, discourse analysis usually calls for specialist expertise and an appreciation of the underlying theoretical background of the particular type of discourse analysis selected (Robson & McCartan, 2016). This data analysis builds upon my situated understanding of Balinese architectural discourse in an attempt to a) recognise patterns related to authoritative and dominant systems, and b) consider how these are being contested by the PKP community's own construction of architectural discourse.

This type of 'critical' discourse analysis is situated and historically-sensitive, recognising the subtle indicators of power that authoritative accounts have in representing our worlds to us and orientating ourselves in relation to others over time (Chouliaraki, 2008; Fairclough, 2010). Following Derrida's ethical concerns with alterity (see 3.0), critical discourse analysis would define the power of certain authorities to classify the world into categories of us/ them and to orientate (or not) onlookers towards those others who are not like 'us' (Chouliaraki, 2008). Merely recognising this division does not move towards Derridean deconstruction, in which Derrida attempts to extinguish power struggles in discourse by tracing the meaning of a discourse back to an origin and proving, through critical arguments, that it should not be privileged over other discourses.

In response, Macloed (2002) suggests a 'Deconstructive Discourse Analysis' formulated around Parker's (1989) reading of Derridean deconstruction, in which discourses undergo a thematic analysis (informed by the researcher's specialist expertise and appreciation of the underlying theoretical background of the discourse), before engaging in a deconstructive analysis. This core use of thematic analysis is integral to my analysis of data that was summary translated, as it allows me to utilise Discursive IPA as part of Deconstructive Discourse Analysis.

Whilst discourse analysis is integral to conducting translations (House, 2014; Hatim & Mason, 1990; Munday & Zhang, 2017), it cannot be correctly conducted on non-verbatim translations as the main findings would focus on how the translator, rather than the participant, framed the argument in English (Schneider, 2013). A pluralistic approach to IPA has solidified itself in the field over recent years (Frost et al, 2010; Johnson & Stefurak, 2014; Shaw & Frost, 2015), allowing IPA to be approached discursively by considering how discourses are lived in the life of a person (Eatough & Smith, 2017).

IPA aims to uncover what a lived experience means to an individual, producing an account of lived experience in its own terms (rather than one prescribed by pre-existing theoretical preconceptions) by acknowledging how humans learn by meaning making (Smith et al., 2021; Smith & Osborn, 2015). "Learning as meaning making" emphasises that, in any process of learning, people are actively engaged in making sense of the situation by drawing on their history of similar situations and on available cultural resources that involve identities and emotions (Zittoun & Brinkmann, 2012).

Both Deconstructive Discourse Analyses and Discursive IPA use thematic analysis to understand the content and complexity of meanings within discourses. Multiple rounds of coding occur to abstract the discourses into its most significant elements, make links between elements, add commentary based on situational knowledge, and identify key themes or patterns that emerge (Smith et al., 2021). Abstraction is unconcerned with the literal depiction of things but, instead, refers to a discursive object that has been distilled from the real world. The process of abstraction reduces a complex and detailed 'thing', such as a discourse, into a list of its most significant generalised elements in order to extract underlying patterns.

Once a detailed thematic analysis has been conducted, a deconstructive analysis can occur in which themes are expanded into a narrative account- explained, illustrated, and nuanced as discursive outputs- see 6.4 (Macloed, 2002).

6.2.2 Coding Systems

Four rounds of coding and the relevant techniques to implement them have emerged from within my Deconstructive Discourse Analysis; 1) coding narrative elements, 2) coding identity markers, 3) coding Strategies of self-representation, 4) coding architectural notations. These are informed by my own observations and interpretations of discursive design practices, as well as my appreciation of the underlying socio-cultural origins of the discourses constructed in this study. See Fig 6.13 for an overview of my coding process, adapted from Bazeley and Jackson (2013) and Gray (2018). Table 6.4 describes this coding system in detail.

Finally, a deconstructive analysis is conducted in which these codes are expanded once again into multiple narratives for each participant, producing an effective "narrative framework … for contextualising and integrating the various elements … which characterised the social process" (Dey, 2007, p.183). This creates a polyphony of discursive outputs as an abstraction of the original discourse, derived from but not imitating the original content (see 6.4). Key findings are then deferred from these narratives and taken forward into the final phase of Fieldwork Outputs. Despite the narrative's disconnect from the original discourse, the process of abstraction uses deductive inference to provide a level of validity to the research findings. Anything inferred by the narratives has been deduced logically from relationships between the key elements of the original discourse (see Fig 6.13 on next page).

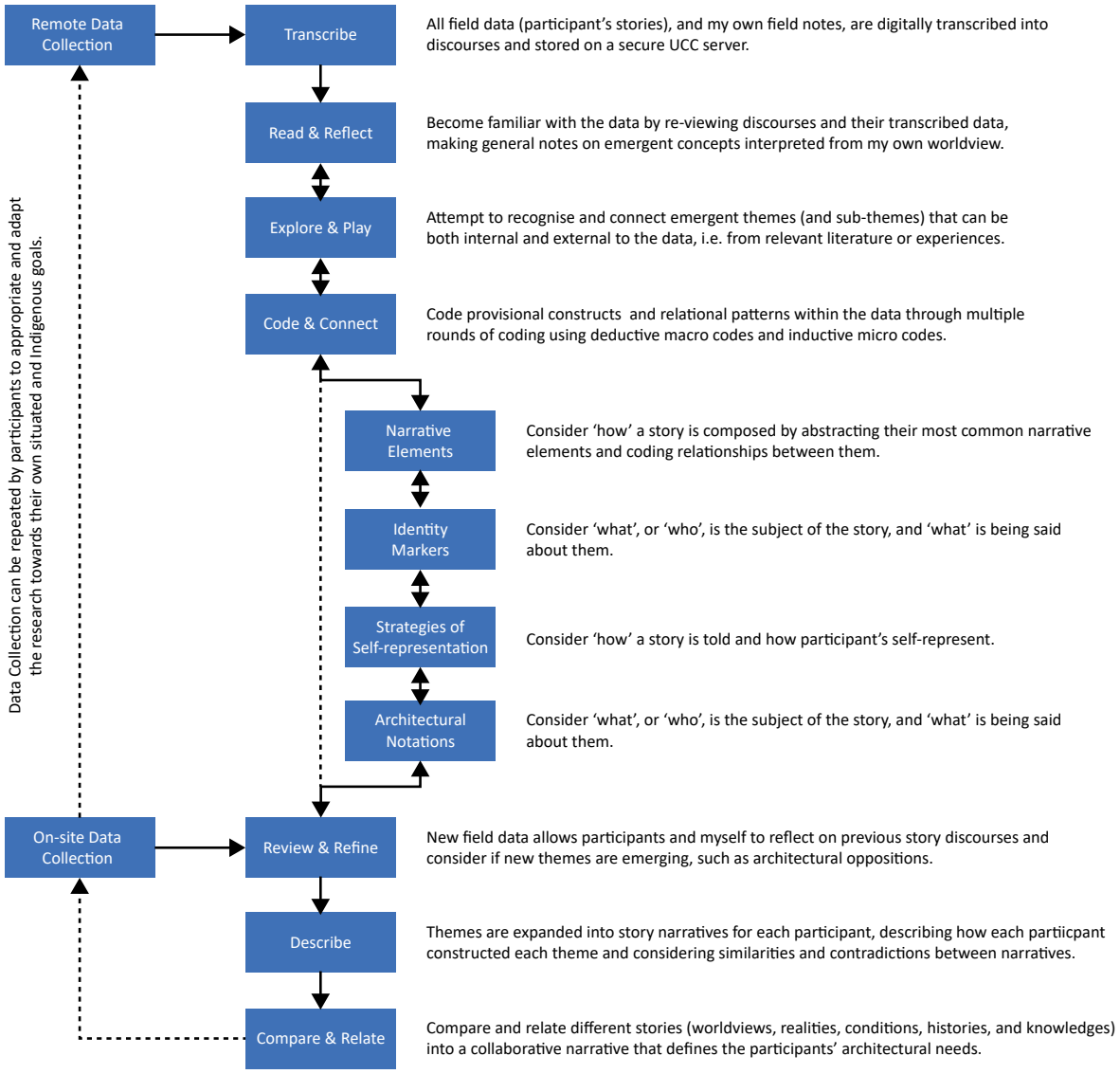


Fig 6.13 Coding Process

The data was then manually coded by myself to avoid using pre-defined analytic structures like NVivo™ that come from Western academic origins. These structures allow certain censorships and biases to be subconsciously integrated and articulated in the researcher's analysis. Whilst some authors argue that analytical software is neutral and that its uses are ultimately dictated by the researcher, there is significant evidence that the software itself can impose on, or influence, the analytical process (Crowley, Harre, & Tagg, 2002; Rodik & Primorac, 2015). This is exacerbated more in contexts outside of western academic contexts; Dollah et al. (2017) found that NVivo™ limited Indonesian researchers due to language barriers, whilst Sanusi (2019) found that Indonesian researchers did not always find NVivo™ relevant for analysing data from research with a culturally contextualised methodology.

James Gee (2011) advises researchers to divide transcribed audio and videos discourses into elements using non-final and final intonation markers. Non-final intonations mark unfinished thoughts, introductory phrases, or series of words, whilst final intonations mark the end of a phrase and can form meanings. Following Gee's (2011) approach, I transcribed audio using the key seen in Table 6.2.

Table 6.2 Key to Transcribing Audio and Video Discourses

Single Numbered ordered lists " 1. "	Marks 'lines' of text separated by a final intonation contour
Outline numbered lists " 1.1. "	Marks separation by a non-final intonation contour
Two Obliques "//"	Marks a final intonation contour (a moment that designates the end of a spoken sentence)
Oblique "/"	Marks a non-final intonation contour (a moment where speech is naturally divided into segments)
Question Mark "?"	Marks a final intonation contour that is treated as a question
Ellipsis "..."	Represents a pause in speech
Dash "-"	Represents a place where the speaker breaks off and says something else
Brackets "[ ]"	Indicate excerpts of text added by the researcher to aid in understanding. In cases where there was ambiguity in the transcripts, I asked participants to clarify their responses and placed these additions alongside the original transcripts.
Parenthesis "( )"	Indicate other movements, gestures, or audible cues that may suggest emotions made by the speaker to enable a complete analysis.
Underscores "_"	Represent redactions, such as names associated with the anonymity of participants

For example:

1.	I say "hellooooo" [word lengthening in excitement] (waving at you) / and then introduce myself //
	1.1. [1.2] (1.3.) / 1.4. //

Written text uses a similar system that is divided by components of sentence structure. These are often indicated by 'soft returns' or 'hard returns'. A soft return marks the end of a sentence component (usually containing a subject and a predicate) but the continuation of the sentence as a whole. A hard return marks the end of a complete sentence (see Table 6.3 on next page).

Table 6.3 Key to Transcribing Written Discourses

Single Numbered ordered lists " 1. "	Marks a paragraph or segment of text
Outline numbered lists " 1.1. "	Marks lines of text within a textual paragraph or segment
Punctuation " , . : ; ! ? - "	Marks the separation between textual elements and denotes meaning
Soft return "↲ "	Marks the separation between components of a sentence structure
Hard return " ¶ "	Marks the end of or separation between sentences
Brackets "[ ]"	Indicate excerpts of text added by the researcher to aid in understanding
Underscores "_"	Represent redactions, such as names associated with the anonymity of participants

For example:

1.	I say "hello" ↲ Because I am excited to meet you ↲ And would like to introduce myself ¶
	1.1. ↲ *1.2* ↲ *1.3.* ¶

However, visual and mixed medium materials are more difficult to break down into elements as there are no clear boundaries, such as intonation or punctuation (Bal & Bryson, 1991). This also makes it harder to 'break into' the relationality between different discourse elements, as meaning arises from the movement from one to the other (ibid). Rose (2016, pp. 24-47, 374-376) provides helpful cues to rationalise images into formal components, or elements, based on 'visual grammar' (Kress & van Leeuwen, 2006); the mediums used to make or display the image, the images intended purpose, under whose gaze was the image produced, how it is visually composed (subject positioning, scale, proportion, perspective), is it an individual work or part of a series, or are there any borders created between elements of the image (using lines, colour values etc.). Within this study, I asked participants to include written, audio, or video commentary alongside images so that I can draw comparisons (or contradictions) between the implicit 'visual' grammar of the image and their explicit 'spoken' grammar.

6.2.3 The Practical Methods of Data Analysis

This section details the practical methods within my Data Analysis (see Fig 6.12). Only twelve participants of the twenty who took part in both remote (between August 2021 and January 2022) and on-site (in July 2022) data collection completed all four workshops. I conducted the following four rounds of analysis on the data from Workshops 1 and 2, which was shared to me by these twelve participants. Data from Workshops 1 and 2 were suitable for a Discourse Analysis. Workshops 3 and 4 were analysed with a Discursive IPA to support the PKP community in producing Fieldwork Outputs (see Table 6.6). A summary of each method is provided below, accompanied by a detailed breakdown (see Table 6.4) for consideration by other researchers applying Architectural Storywork or similar methodologies.

Round 1: Coding Narrative Elements	Reduces a participant's discursive story into a set of narrative codes and their relationships so that I could begin analysing how those codes are arranged and composed together. This includes 'characters', 'settings', and 'events', as well as 'character- character', 'setting - setting', 'event - character', 'event - setting' and 'event - event' relationships.
Round 2: Coding Identity Markers	Identity markers are based on grammatical markers identified by Gee's (2011) discursive toolkits and Rose's (2016) work, to define what or who the 'subject' of a discourse is, what 'predicates' are being said about the subject, and any 'deictic' or 'anaphoric' expressions used that allow me to make grounded assumptions about what people already know or can figure out about the subjects.
Round 3: Coding Strategies of Self-representation	Analyses 'how' a story is said by utilising Rose's (2016) strategies of 'manipulation' or self-representation. Strategies of self-representation are used to empirically identify how participants might emphasise subjects, predicates, or deictics in their stories. These include excessively drawing attention to certain representations, constructing a single representation through a composition of other representations, copying existing representations, creating points of view or physical perspectives impossible in coherent space, or representations that are present through their absence.

Round 4: Coding Architectural Notations	Architectural notations consider if, and how, representations of architecture are used in the participants' stories in relation to how they represent themselves and their relationships to other people, other spaces, and other events. These include notations linked to the realisation of a finished object, representations in which the conventional/ singular point of view is developed through movement, or imagining a 'meaningless' or 'impossible' architecture that centres around experiences and the representation of other possibilities.

Table 6.4. Practical Methods of Data Analysis

Data Analysis- Practical Methods
Round 1: Coding Narrative Elements
Key Coding Systems and Characteristics:
• Reduces a participant's discursive story into a set of narrative codes and their relationships so that I could begin analysing how those codes are arranged and composed together.
Practical Techniques:

• Liu et al. (2019) provide a comprehensive list (or "8-tuple", p. 308) of narrative elements- based on Chapman's (1978) character, setting, events, and their relationships- which act as a basis for deductive macro codes:
  • Characters: A character can be real, fictitious, an individual or a named group/ organisation, i.e. a discursive subject.
  • Settings: This refers to physical environments and objects, natural rules, or social rules in the space of a story, i.e. a discursive object.
  • Events: An event is either an action or a happening.
  • Character- Character Relationships: When two subjects interact in some way, including a memory of past interaction or anticipation of future interaction.
  • Setting- Setting Relationships: When two or more spaces interact in some way, such as through permeable boundaries (doors, windows) or through comparative memory/ anticipation.
  • Event- Character Relationships: When an action or happening engages with a character (i.e. impacts the character physically or emotionally etc.) or when a character engages with an action or happening (i.e. performs an action, changes a happening etc.)
  • Event- Setting Relationships: When an action or happening engages with space (i.e transforms, constructs, destroys space) or when space engages with an action or happening (i.e. changes the parameters of an action etc.)

- Event- Event Relationships: When one or more events precedes and leads to another- these relationships are temporal.

- Inductive micro-codes emerged from within the material that identify and extract underlying patterns within the discourse.

- This first round of coding aims to articulate complex relationships as simple, relational elements. Therefore, codes are grouped together in sets to visually denote complexity in a simple format. Individual codes are composed of a macro code and micro code separated by a colon ":" and contained within a brackets "[]" i.e. [Macro1:Micro1]. Relational codes, depicting relationships between different codes, are composed of two individual codes separated by a comma "," and contained within their own brackets "[]" i.e. [Macro2:Micro2, Macro3:Micro3]. Individual and relational codes are separated from each other in the set using a comma "," i.e. [Macro1:Micro1], [Macro2:Micro2, Macro3:Micro3]. The relational codes are expanded upon in an adjoining dialogue box, allowing me to further explore relational connections across multiple discourses (see Fig 6.14).

Round 2: Coding Identity Markers

Key Coding Systems and Characteristics:

- Codes identity markers within the material to consider 'what', or 'who', is the subject of the story, and 'what' is being said about them.

Practical Techniques:

- Gee's (2011) discursive toolkits, taken alongside Rose's (2016) work, offer concise grammatical markers that help to determine what or who the subject of a story is and what is being said about them. These produce macro codes of:

  - Subject: the focal point of a discourse. In written or spoken form, the subject is usually denoted by a noun that is followed by a verb, describing an action, state, or occurrence attributed to the subject. In images, a subject is usually denoted by its position above or below/ in front or behind other elements, its foregrounding or size/ scale in relation to other elements, or being connected to or isolated from other elements.

  - Predicate: what is being said about the subject by other elements in the discourse. In written form, subjects and predicates are often linked by a verb, including emotion. Visually, these predicates often denote a subject (see above), including when elements outside of the visual frame are referenced or have a direct impact on the subject.

  - Deictic expressions allow us to make grounded assumptions about what people already know or can figure out. These include categories of person (I/me, you, he/him, she/ her, we/us, they/them), time (then, now, when, soon, yesterday, next year), place (here, this, that, those over there, come, go) and, less frequently, quantity (enough, more, all).

  - Anaphora are deictic expressions that refer back to a prior element in a discourse, expressing the storyteller's familiarity with certain categories of person, time, place, or quantity.

- Inductive micro-codes emerged from within the material that identify and extract underlying patterns within the discourse.

- A composition of a macro code and micro code are separated by a colon ":" and two or more codes are separated by a comma ",", i.e. Macro1:Micro1, Macro2:Micro2 (see Fig 6.14).

Round 3: Coding Strategies of Self-representation

Key Coding Systems and Characteristics:

- Analyses 'how' a story is said by utilising Rose's (2016) strategies of 'manipulation' or self-representation. Strategies of self-representation are used to empirically identify how participants might emphasise subjects, predicates, or deictics in their stories.

Practical Techniques:

- This is a discourse specific method for identifying passages of text that are emphasised or exaggerated in some way by the participant, with the goal of presenting a certain identity (Doane, 1982; Modleski, 1988; Rose, 2016). These form macro codes of:
    - Excess: Excessively drawing attention to certain representations.
    - Construction: Constructing a single representation through a composition of other representations.
    - Repetition: Copying existing representation, often repeatedly.
    - Distorted Space: Points of view/ physical perspectives impossible in coherent space.
    - (In)visible Absence: Representations that are present through their absence.
- Inductive micro-codes emerged from within the material that identify and extract underlying patterns within the discourse.
- A composition of a macro code and micro code are separated by a colon ":" and two or more codes are separated by a comma ",", i.e. Macro1:Micro1, Macro2:Micro2 (see Fig 6.14).

Round 4: Coding Architectural Notations

Key Coding Systems and Characteristics:

- Architectural notations consider if, and how, representations of architecture are used in the participants' stories in relation to how they represent themselves and their relationships to other people, other spaces, and other events.
- Derrida felt that these architectural notations of representation and relation become "non-architectural models of architecture" (Vitale, 2018, p.130); treating architecture as trajectories of experience moving through space in ways that can be disjunctive, dissociated, and separated from the Western notion of complete, composed, and 'universal' architecture. The idea of incomplete, uncomposed, pluriversal or polyphonic architectural notations are not bound to the realisation of a pre-established architectural project but can be joined in different combinations that offer different outputs (ibid).
- This coding round is the culmination of previous rounds and moves towards the creation of 'different' architectural outputs, such as an architectural charge from the PKP community (see 6.4).

Practical Techniques:

- I utilised Vitale's (2018) understanding of Derrida's (1967) and Tschumi's (1994) architectural notations to deduce macro codes of:
    - Architectural notations are linked to the realisation of a finished object, artefact, or product.

Table concludes on next page.

- Cinematographic notations (or 'notation with motion') are representations in which the conventional/ singular point of view is developed through movement, inscribing a kinesthetic dimension within stable architectural space.
- Choreographic notations give space to alterity by separating architectural experiences from the law of the house or dwelling. Architectural representation is no longer dictated by the metaphysical, but by the inscription of the 'event' that is traced within it. This could entail imagining a 'meaningless' or 'impossible' architecture that centres around experiences and the representation of other possibilities.

- Inductive micro-codes emerged from within the material that identify and extract underlying patterns within the discourse.
- A composition of a macro code and micro code are separated by a colon ":" and two or more codes are separated by a comma ",", i.e. Macro1:Micro1, Macro2:Micro2 (see Fig 6.14).

See Fig 16.4 on next page.

Participant 2: Activity 1 Coding Matrix

Discourse 1: Video Transcript

1.	**Hello (waves at the camera) / my name is _____ (places right hand to chest) //** *(1.1.) / 1.2 (1.3.) //*				
	1.1.	**Hello (waves at the camera)**	**P.1**	*[Char:Sek], [Set:Prop1], [Event:Move], [Event:Move, Char:Sek], [Event:Move, Set:Prop1]*	Character: Real/ Sekula Participant, Setting: Camera as a physical prop Event: Waving as movement Event:Character & Event:Setting relationships as the participant waves at the camera
			P.2	Subj:Arrange	Subject: participant identified as the subject using Arrangement through the gaze vector of the camera
			P.3	-	
			P.4	-	
	1.2.	**my name is _____**	**P.1**	*[Char:Sek], [Set:Int], [Event:ID], [Event:ID, Char:Sek], [Event:ID, Set:Int]*	Character:Participant, Setting: name as an intangible setting (i.e. an object, a location, situated as a Self), Event: naming as identity Building, Event:Character & Event:Setting relationships as the participant identifies with their name
			P.2	Dexct:ID, Subj:ID	'My' as deictic identity and Subject
			P.3	-	
			P.4	-	

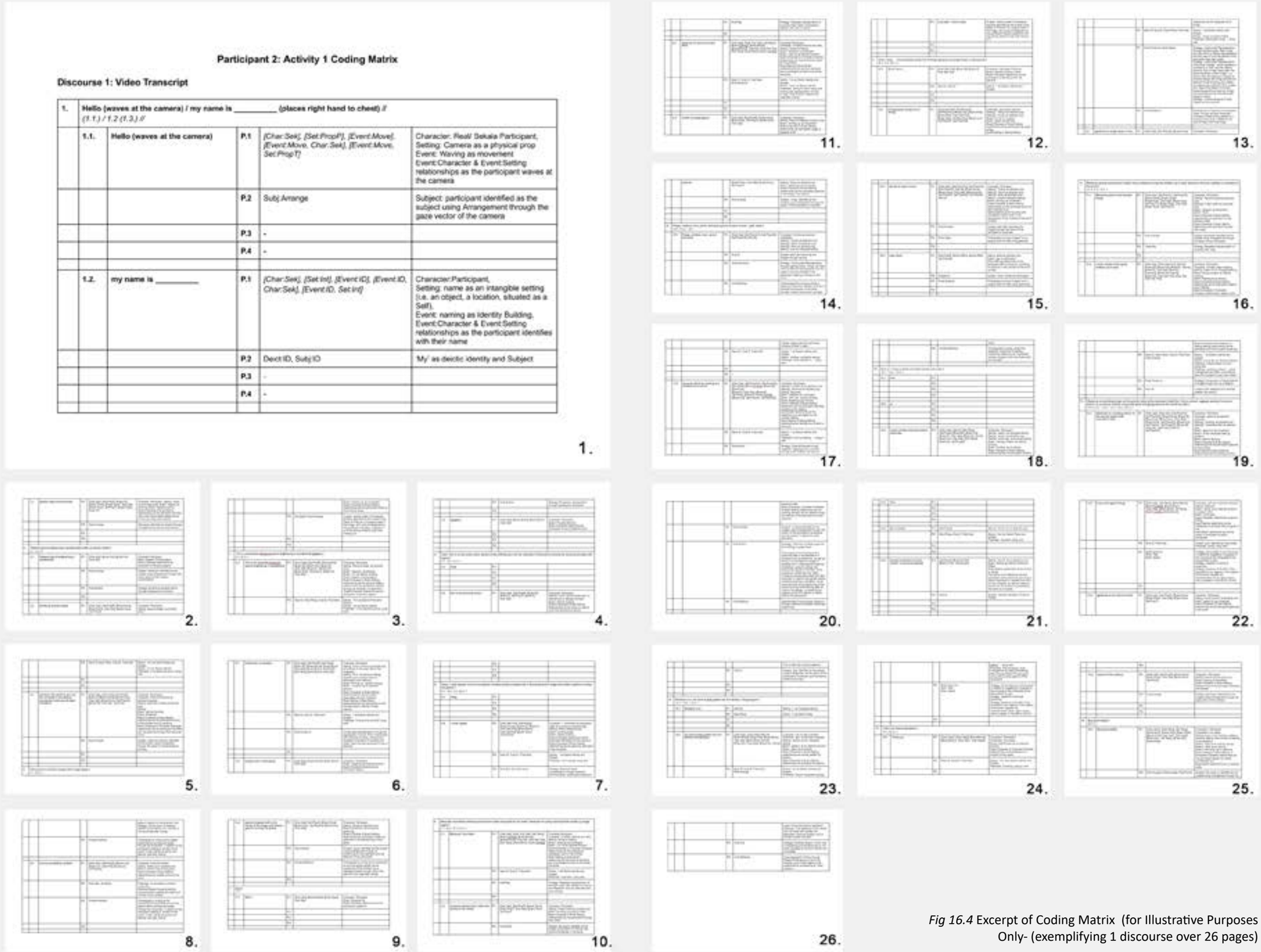


Fig 16.4 Excerpt of Coding Matrix (for Illustrative Purposes Only- (exemplifying 1 discourse over 26 pages)

6.2.4 The Practical Ethics of Data Collection and Data Analysis

This section details the practical application of Architectural Storywork ethics within my Data Collection and Data Analysis phases. A summary of each method is provided below, accompanied by a detailed breakdown (see Table 6.5) for consideration by other researchers applying Architectural Storywork or similar methodologies.

3. Reverence Between Teller and Listener	Workshops (both remote and on-site) took place in a group setting. This allowed participants to ask each other questions, share ideas, and weave together multiple worldviews through shared narratives that instilled feelings of community within the participants and provided collective support for others. I also provided questions and examples within these exchanges to guide participants in considering the extent to which their spatial experiences have relevance in their day-to-day life, as well as to reflexively and fluidly connect with participants in ways not foreseen before the workshops began.
4. Responsible Narratives	The collective data collection and data analysis process focused on the world building activities of the participants as they construct discourses and, in turn, their discourses shape their worlds back. This purposefully aims to trace the everyday actions of the PKP community as they make sense of their own world building activities. By engaging in group workshops, I hoped that participants could share their own world building processes with each other, giving voice to ideas that they may not have previously shared such as how diverse worldviews impact their daily experiences and vice versa. I also put several measures in place to reduce errors in my collection and processing of data in these scenarios.

5. Relational Reciprocity	I attempted to be aware of my influences on the community and attempted to utilise stories as counter-narratives to my own academic and Western understanding of design. To this end, I do not attempt to combine multiple and potentially contradictory narratives into a singular story but attempt to faithfully depict multiple, interwoven, and potentially contradictory narratives voiced by each participant.

Table 6.5 Storywork Ethics of Data Collection and Data Analysis

Data Collection and Data Analysis- Ethical Methods and Implementation
Principle 3- Reverence Between Teller and Listener (see 4.1.3)
• Whilst some workshop activities were individual, i.e. I asked participants to complete activities on their own, most of the workshops (both remote and on-site) took place in a group setting. This allowed participants to ask each other questions, share ideas, and weave together multiple worldviews through shared narratives. I recognised that open discussion between participants during the workshops could influence their data. However, this collaborative workspace also instilled feelings of community within the participants and provided collective support for others who may be too nervous to ask facilitators for help or clarification on the activities (Sariadi, 2023- personal communication). Ibu Sari and I deemed this to be more important as it positively contributed to: a) how well the participant's understand the data collection workshops and data analysis feedback, and b) the communal understanding of individual participant's values and goals and the development of communal values and goals related to their architectural needs.
• Each activity aims to focus on the participant's day-to-day experiences and to understand their normal movements through space. Whilst my own research interests lie in these day-to-day lived experiences, I cannot separate them from Balinese socio-cultural ideologies or practices that permeate into many aspects of the participant's daily lives. Instead, I provided prompts (questions and examples) within each activity to guide participants in considering the extent to which their spatial experiences have relevance in their day-to-day life. Occasionally, where applicable, I would also ask extra questions or provide supplementary examples to participants based on tangential discussions I had with them (or others). This allowed me to reflexively and fluidly connect with participants within situated, people and place-specific contexts that I was not fully aware of when creating the original activity prompts (see Appendix E).
• Whilst my data analysis also began to connect the participant's spatial experiences to larger cultural concepts (both colonial and Indigenous), I made efforts to ground all of my interpretations within the data itself. To achieve this, I numbered each discursive element of every workshop transcript to produce a discourse 'tag' (i.e. W1:D1:E:1.1 for Workshop 1, Discourse 1, Discourse Element 1.1). Discourses were preferred as markers over activities because any one activity could contain multiple discourses in differing mediums- using activities as markers would reduce this complexity and could affect analysis outcomes. Any assertions that I make from my data analysis are labelled with discourse tags, signposting exactly where each interpretation originated from within the data (Table 6.6, Output 1 and Fig 6.15). In this way, I hoped to avoid making any claims around the importance of the participant's daily lives or cultural experiences that they had not already voiced in some way within their data.

Principle 4- Responsible Narratives (see 4.1.3)

- Each of my four data collection workshops aims to provide participants with discursive mediums to explore and represent themselves in relation to their architectural environments and their day to-day events. The four rounds of coding that follow aim to identify exactly 'what', 'why', and 'how' participants represent relationships between themselves, other people, other spaces, and other events within these discourses. The collective data collection and data analysis process focuses on the world building activities of the participants as they construct discourses and, in turn, their discourses shape their worlds back. This purposefully aims to trace the everyday actions of the PKP community as they make sense of their own world building activities.

- The PKP community is a diverse group of people with different genders, faiths, cultures, economic backgrounds, and lived experiences. By engaging in group workshops, I hoped that participants could share their own world building processes with each other, giving voice to ideas that they may not have previously shared such as how diverse worldviews impact their daily experiences and visa versa. These types of interactions are difficult to plan, record, or evaluate. As facilitators, Ibu Sari and I could only attempt to create spaces in which these conversations could organically occur and encourage discussions at opportune moments. Some feedback suggests that this successfully allowed participants to understand themselves and others better (see 7.2).

- In order to reduce errors in my collection and processing of data (listening, interpreting, and re-telling participant's stories), I put several measures in place. Firstly, data collection workshops 3 and 4 reflect on stories told in data collection workshops 1 and 2 respectively, allowing participants to corroborate, expand upon, change, or retract information they had previously shared. Contradictions or visible absences in data were accepted. However, whenever participants contradicted or omitted information that they had previously discussed, I would draw attention to it and ensure that they were happy with both accounts of their story. Whilst expanding analytical themes into narrative accounts that explain, illustrate, and nuance the participant's stories, I made efforts to ground all of my interpretations within the data itself through the use of tags (see Principle 3 in this table or Table 6.6, Output 1 and Fig 6.15). This allows me to be transparent about my data analysis and be held accountable for the information I share about participants. I also shared my interpretations of data with the participants so that they could make changes to information that was inaccurate.

Principle 5- Relational Reciprocity (see 4.1.3)

- The researcher can learn many lessons from the content and performance of the participant's stories. These lessons are often framed as "research findings" using academic or architectural notations. When the researcher shares these findings back to a community, they are depicting a story of the participants. The content and performance of this story will teach lessons to the community about their sense-making and world-building activities. I attempted to be aware of this double movement of knowledge so that, whilst I took steps to include rigour and validity within my academic role, I was also aware of my influences on the community and attempted to utilise stories as counter-narratives to my own academic and Western understanding of design.

- Therefore, whilst I used a variety of data points and conducted multiple rounds of data analysis, cross-examining and cross-referencing multiple stories to find common themes and narratives, I do not attempt to combine multiple and potentially contradictory narratives into a singular story, nor do I attempt to exclude certain themes or narratives. Instead, I attempt to faithfully depict multiple, interwoven narratives voiced by each participant that can be traced back to specific passages within their data (see Table 6.6, Output 1).

6.3 Fieldwork Outputs

6.3.1 Deconstruction as Construction

My Data Collection and Data Analysis phases of fieldwork engaged in the critical, imaginative, and ethical interaction between the knowledges of the PKP community and discursive design languages. This gave the PKP community an opportunity to articulate their experiences of architecture and what their design intent might be for future architectural spaces. To task this future architecture with a responsibility to the PKP community, my data analysis needs to be expanded into a narrative account that explains, illustrates, and nuances the PKP community's design intent as a discursive output. This process allows the PKP community and myself, as co-researchers, to engage in a deconstructive analysis, adapted from Macloed (2002), that:

- Expands the abstract themes of my data analysis into multiple narratives for each participant, based on Liu et als.'s (2019) Conceptual Story Modelling, that identify socio-cultural oppositions within the participant's discourses.
- Determine if there are any architectural oppositions present within the participant's discourses that correlate or contrast with the socio-cultural oppositions already identified and, adapting Tschumi's (1994; 1996) discursive devices, frame these oppositions within each narrative.
- Consider how the participant's discourses succeed in imposing one dominant opposition over another and, adapting Tshcumi's (1994; 1996) discursive devices, sequence the framed oppositions into a new narrative that attempts to subvert and sabotage them-creating new architectural discourses that define new design intentions.

This deconstructive process allows the PKP community to construct an architectural charge from the 'new architectural discourses' and a draft design brief from the 'new design intentions'. Table 6.6 describe these processes in greater detail, outlining the key methods and practical techniques behind them. Situated within the context of colonial tourism and its impacts on vernacular Indonesian architecture, the PKP community's charge of architecture mirrors my own theoretical principle of a 'neutral origin' (see 4.1.2), which focuses on a

return to an ecologically beneficial origin; prioritising the relational connections and impacts of architecture within larger social and ecological systems through a recovery of pre-colonial knowledge and critically reflected colonial experience (Fry, 2009; 2017).

Derrida believes that deconstruction affirms construction through the act of 'bringing together' the self and the alterity of the other, questioning the dichotomic self/other opposition of Western architecture to produce something absolutely new- see 3.3 (Vitale, 2018, p.44). This final phase of fieldwork aims to bring together the diverse worldviews of the PKP community into a consensus on the design intent of the future PKP Bale Tong Tong Community Centre. A consensus is preferred to voting, because this encourages all viewpoints to be expressed and provides the opportunity for people to truly listen and learn from each other (Sanoff, 2016).

A consensus is achieved through open discussions until all participants can agree on a collectively defined a course of action. Whilst still open to bias and influence, a consensus encourages different and diverse perspectives to be shared and integrated into the final decision. In contrast, voting usually requires a list of pre-defined actions with minimal space for debate and/ or the integration of new ideas (Sanoff, 2016). During this fieldwork, the participants would engage in hour-long group discussions, facilitated by myself and Ibu Sari, that sought to include as many voices from the PKP community as possible and come to a consensus on the design intent of the future PKP Bale Tong Tong. Whilst a consensus was not always reached, these discussions brought forth interesting conversations that allowed participants to understand one another better (see 7.2.2).

6.3.2 The Practical Methods of Fieldwork Outputs

This section details the practical methods within Fieldwork Outputs. In total, the participating members of the PKP community described eight individual buildings within their data. Outputs 1 and 2 in the below table are based on the data of the twelve participants who completed all of the data collection workshops and data analysis rounds. Outputs 3 and 4 in the below table are based on the nine participants (eight of the previous twelve and one new participant) who participated in the Fieldwork Outputs workshops in February 2023. A summary of each method is provided below, accompanied by a detailed breakdown (see Table 6.6) for consideration by other researchers applying Architectural Storywork or similar methodologies.

Output 1: Conceptual Story Narrative	Adapted Liu et al.'s (2019) Conceptual Story Models to create a visual representation of the story narrative as a whole through written tables. These narratives remain genre independent until being developed into an architecturally specific discourse in the next output. Each Conceptual Story Narrative narrates the relationships between the participants and their spatial environments at the metaphorical level of their stories. The 'object' of these oppositions are treated as fictional protagonists within the participant's stories that can merge with each other, change gender and move from one place to another without restriction in a polyphony of identities.
Output 2: Deconstructive Narrative Frames	Attempted to isolate any architectural oppositions described in Output 1 and visually 'frames' them using Tschumi's (1994; 1996) and Perec's (1974) discursive devices of framing. Based on the culmination of prior data analysis and output findings, I extrapolate a single overarching tension within each architectural space of the PKP Community Centre and identify five settings, events, and characters that contribute in some way to each overarching tension.
Output 3: Architectural Charge	I engaged in a collaborative co-authorship with participants to visualise and sequence the frames identified in Output 2, creating stories of architectural transformation and responsibility. Participants drew images to represent each character, setting, and event identified in Output 2 before sequencing them into new visual stories. These stories take the form of a traditional Balinese *lontar* manuscript (made from dried and processed palm leaves) and, together, construct an architectural charge for the future PKP Bale Tong Tong Community Centre. This describes its architectural responsibilities to the community based on the actions and intentions of each participant, related to their goals for self-determinism, autonomy, and transmission of new knowledge.

Output 4: Draft Design Brief	Produced tangible outputs that the PKP community can use to show their current investors, potential funders, and local architects, that they have a plan in place for the PKP Bale Tong Tong project. Firstly, as a group, the participants created a draft design brief complete with building specifications based on a set of prompt questions I provided. Secondly, the participants took part in model-making workshops facilitated by Indonesian architects, in which they created initial architectural models of the PKP Bale Tong Tong project that the PKP community can aspire towards and utilise to try secure funding.

Table 6.6. Practical Methods of Fieldwork Outputs

Fieldwork Outputs- Practical Methods
Output 1: Conceptual Story Narratives
Key Methods and Characteristics:
• Adapted from Liu et al.'s (2019) Conceptual Story Modelling. A Conceptual Story Model is a visual representation of the "story", or 'what' of a narrative, composed of the most basic narrative elements such as characters, settings, and events. Conceptual Story Models should contain minimal discourse or rhetorical meanings and are genre independent. My study is interested in the "story" and its discourse, or 'how' it is communicated, and therefore creates a visual representation of the story narrative as a whole through written tables- a Conceptual Story Narrative. These narratives remain genre independent until being developed into an architecturally specific discourse in the next output.
Practical Techniques:
• Socio-cultural oppositions are identified within participants' data by grouping together discourse elements (see Table 6.5, Principle 3) that portray similar topics or have similar codes. These are denoted by different discourse structures (i.e. through deictic, anaphoric, predicate, or subject representation- see Table 6.4, Round 2), different discourse strategies (i.e. excessive, constructed, repetitive, distorted, or absent representation- see Table 6.4, Round 3), or different discursive notations (i.e. architectural, cinematographic, or choreographic representations- see Table 6.4, Round 3)- see Fig 6.15.
• Each Conceptual Story Narrative narrates the relationships between the participants and their spatial environments at the metaphorical level of their stories. The 'object' of these oppositions is treated as a fictional protagonist within the participant's stories. This protagonist is always an ambiguous, fluid, and incomplete character in the vein of Karami's (2018; 2019) dissident characters. These characters are purposefully meant to contrast the "supposed psychological complexity of… Western bourgeois characterisation" (Karami, 2019, p.10), giving them freedom to merge with each other, change gender and move from one place to another without restriction in a polyphony of identities (Karami, 2018, p.267)- see Fig 6.16.

Output 2: Deconstructive Narrative Frames

Key Methods and Characteristics:

- Attempts to isolate any architectural oppositions described in Output 1. Coyne describes two types of opposition: 'totalising' oppositions that include or entertain the priority of their opposition (i.e. Jun'ichirō Tanizaki's consideration of architecture as a 'praise of shadows' entertains both light/ dark and dark/ light), and 'antagonistic' oppositions that do not include or entertain their opposition (i.e. Le Corbusier's consideration of architecture as seeing 'forms in light' does not entertain dark/ light).
- Architectural oppositions are then visually 'framed' using Tschumi's (1994; 1996) and Perec's (1974) discursive devices of framing (see Table 3.3). Rather than attempt to produce discursive architecture through writing, a medium that the PKP community felt less comfortable using, visual frames allow for a 'kinaesthetic' means of articulation more desired by the PKP community (see 7.3.1). An empty square frame is used to explore what is both around about or inside it (Perec, 1974), inviting the participants to inhabit it, losing oneself down distant corridors of history and memory (Bachelard, 1957).

Practical Techniques:

- To isolate any architectural oppositions described in Output 1, I returned to the transcribed data of Workshop 3 and 4 (in which participants specifically focus on representing architectural space and their roles within them) to conduct a simple thematic analysis. The twelve participants described eight separate architectural spaces of the PKP Community Centre between them: the kitchen, the shelter, the garden, the school, the paper recycling centre, the batik and screen printing studio, the soap and fabric production space, and the *warung* (small kitchen).
- One round of analysis was used to identity specific architectural oppositions (i.e. light/dark) and the type of opposition based on Tschumi's (1996) definitions:
    - Spatial: filling space with forms of experiences, i.e. experiencing the space between the street and your living room, experiencing the spatial properties of your body, or experiencing the poeticism of your unconscious
    - Geometric: the manipulation of ordered architectural concepts- axes, hierarchies, grids, lines, models, walls, grammar and syntax.
    - Masking: Masks include façades, arcades, squares, or even architectural concepts and ideologies that disguise or hide other system of knowledge, other way to read architecture, or social, cultural and political agendas.
    - Bondage: manipulating the pervasive constraints on architectural design, such as networks of laws, rules, histories, theories, and other precedents that bind architecture.
    - Excess: exceeding the constraints placed on architecture by merging space and geometry in a way that can transgress all rules and creates architecture that can question assumptions, typologies, morphologies, and logical construction.
    - Eroticism: the intensity of a relationship between people and their surroundings- whether that is the intrusion of human bodily experience into the controlled order of architecture, or the spatial aggression of architecture on the human bodily experience. Even though a doorway or corridor implies a movement through it, our presence would both violate the space by blocking it and violate ourselves by enclosing us within it.

- A second round of analysis was used to identify which narratives from Output 1, if any, these oppositions related to.
- Based on the culmination of prior data analysis (see Table 6.4) and output findings, I was able to extrapolate a single overarching tension within each architectural space of the PKP Community Centre, expressed by the participant through their data. Output 2 contains a short description of each tension. Then, following Tschumi's examples, I identified five settings, events, and characters that contribute in some way to each overarching tension. Output 2 contains 120 blank square frames- five settings, five events, and five character frames for each of the eight architectural spaces described by the PKP community. Each frame is accompanied by a short description based on data findings- see Fig 6.17. By considering these tensions and their contributing elements together, I hoped that participants would be able to recognise and articulate their architectural needs- producing a charge, or responsibility, for future architecture to change in Output 3.

Output 3: Architectural Charge

Key Methods and Characteristics:

- Tschumi's work questions the conditions of architectural experience by mapping the transformative movement of people through space, literally deforming, deconstructing, or dissociating the represented architectural space (Tschumi, 1994; 1996). Rather than trying to interpret how the participants' might move through and transform discursive architectural space, I engaged in a collaborative co-authorship with participant's so that they had the agency and authority to map their own transformative movements through discursive space towards the realisation of a concrete architectural charge for the future PKP Bale Tong Tong Community Centre.
- This architectural charge describes the future PKP Bale Tong Tong's architectural responsibilities to the PKP community based on the actions and intentions of each participant, related to their goals for self-determinism, autonomy, and transmission of new knowledge.

Practical Techniques:

- For this output, participants visualised and sequenced the frames of characters, settings, and events I previously isolated in Output 2. I provided participants with two copies of Output 2 in English (UK) and in Bahasa Indonesian. Participants were asked to review this document and were given the freedom to disagree, adapt, or completely alter any section based on their individual truths and lived experiences. No details were changed by the participants, with all PKP members feeling that the descriptions accurately described the explicit and implicit tensions they experience. I deduced that this agreement is due to my rigorous referencing of the source data materials during my data analysis. Any assertions that I make from my data analysis are labelled with discourse tags, signposting exactly where each interpretation originated from within the data in an attempt to faithfully and authentically re-tell the participant's stories in new formats (see Table 6.5, Principle 3).
- After the participant's evaluation of my interpretations, participants were then asked to visualise the characters, settings, and events described in Output 2. Copies of Output 2 provided to the participants contain empty square frames for each character, setting, and event, within which they could draw their visualisations. Participants completed this process in groups settings, sharing ideas and giving each other advice when requested (see Fig 6.17).

Table continues on next page.

- Once visualised, participants were asked to sequence these frames into five short stories using a traditional Balinese *lontar* format (long treated palm leaf pages used for manuscripts like the Asta Kosola Kosali architectural guidebook). Each participant was provided with a template of five *lontar*, each denoting one short story containing five frames within which to draw. The purpose of each story is to describe, in some way, the tensions experienced within the current architectural spaces of the PKP Community Centre and, over the course of five visual frames, describe actions that can be taken towards a resolution of these tensions. Whilst some participants told very practical and methodical stories, contained a mix of 'transformative' sequences (based on intuition or habits) and 'spatial' sequences (based on architectural precedents), other participants crafted stories with deep layers of metaphor through random 'programmatic' sequences (where events are superimposed over space to create 'impossible fictions'). Again, participants completed this process in groups settings, sharing ideas and giving each other advice when requested. I digitised the participant's visual stories by faithfully tracing over them using a graphics tablet. Each digital story is accompanied by a short, written story as described by the participants (see Fig 6.18 and Appendix F).

- These stories were then ordered to create a visual anthology describing the PKP community's requirements of future architecture (see Fig 6.19). The order of these stories within this architectural charge was initially derived from the order of architectural models within the site plan spontaneously created and explained by the participants in data collection workshop four. I made a small alteration to the presentation of this *lontar* anthology to create a cyclical story that can be read in many ways- from the centre outwards, from the edge inwards, moving clockwise, anticlockwise, a pattern of all the above, or in a random and unorthodox manner. This creates a composite succession of frames that confronts spaces, movements, and events, each with its own combinatory structure and inherent set of rules (Tschumi, 1994, p.10). Architectural space is developed, deformed, frame by frame, therefore the frames establish a 'memory' of the proceedings frames; "Thus space can follow space, not necessarily in the order expected, but in a series of dramatic revelations that can announce a new spatial structure" (Tschumi, 1994, p.12). This allows for a polyphony of stories to co-exist together, heterogeneous examples of diverse lifeworlds- worldviews, realities, histories, conditions, and knowledges- that simultaneously compose a harmonious whole, and can be read in multiple ways with multiple teachings.

Output 4: Draft Design Brief

Key Methods and Characteristics:

- The immediate architectural needs of the PKP Community Centre are to, a) find a suitable site for the future centre to move to and, b) fundraise capital to purchase this land- ensuring that they have autonomy over the design, construction, and occupancy of their future centre. To fundraise for this project, the PKP community require tangible outputs that show their current investors, potential funders, and local architects, that they have a plan in place for the PKP Bale Tong Tong design (Sariadi, 2023- personal communication). Therefore, the final output of this study builds upon Output 3 to create a draft design brief- complete with building specifications and initial architectural models- that the PKP community can aspire towards and utilise to try secure funding.

Practical Techniques:

- The draft design brief explores the negotiations between the participants' experiential knowledge and architects' professional knowledge, where different practices of architecture are woven together to create something new.

- Ibu Sari and I invited both Balinese and international architects to the PKP Community Centre to engage in knowledge sharing and model-making activities with the participants. This process gave participant's

confidence in their own experiential knowledge of architecture, which they had developed over the course of this research project, and provided them with new ways to think about and articulate them. Participants shared their experiences of architecture with professional architects and, in return, gaining new knowledge about architecture in Bali. Participants then combined these experiences to create a draft design brief for the future PKP Bale Tong Tong buildings and create initial architectural models of their designs using local materials and techniques (see Appendix G).

- Firstly, as a group, the participants created a draft design brief. I provided a set of prompt questions (in English UK and Bahasa Indonesian) asking them to describe why the PKP Bale Tong Tong is needed, why they want to be involved in its design process, how this will differ from the current PKP Community Centre, what will be required of any future site for the PKP Bale Tong Tong, what traditional principles they want to integrate into the PKP Bale Tong Tong design, and a brief summary of the different buildings they wish to have on site- inclusive of materials, general size, specific requirements, layout and orientation of buildings, and other culturally relevant considerations. Answers were given in Bahasa Indonesian with summary translations provided by Ibu Sari. I transcribed these translations 'live' and provided a draft document in both Bahasa Indonesian and English (UK), which the participants reviewed and updated over the course of a few days.

- Each participant also created their own 1:100 scale bamboo model of the buildings described in the draft design brief based on the knowledge shared with them by both Balinese and international architects (see Fig 6.20). These model-making activities were done as a group, allowing participants to share ideas, advice, and discuss their own models as part of a greater whole. This was facilitated by a Javanese architect staying at the PKP Community Centring during this workshop. Ibu Sari was eager for this architect to be involved in the project so that he could share his experiences of bamboo architecture and Indonesian vernacular buildings with the participants (Sariadi, 2023- personal communications). This provided an opportunity for the participants to create intricate and professional models and consider their architectural designs in greater detail- with the support of a professional architect who understands a) the needs of the PKP community, and b) the purpose of this research project.

- Once the models were complete, each participant described their design decisions based on the architectural charge created in Output 3. Ethnographically-found objects, such as flowers, were used to denote different events or objects from the participants' stories within the architectural models- allowing the models to be 'inhabited' by the stories (see Fig 6.21). This activity encouraged the participants to consider how their designs were influenced by their current experiences of architecture and the lessons they had learnt through their storytelling workshops. The Javanese architect acted as facilitator and translator during this activity.

- Finally, the group created an overall site plan for the PKP Bale Tong Tong centre using their bamboo models (see Fig 6.22, which I carefully copied into a digital vector format (see Appendix G). All files related to the draft design brief, including vector design files of the site plan, were given to the PKP community. The models created by the participants are, at the time of writing, presented at the current PKP Community Centre as a tangible example of their future visions to potential investors.

Table concludes on next page.

Focus Group Evaluation

Key Methods and Characteristics:

- When considering the success of the research study, including its rigour and validity, I wanted to include the voices of the PKP community as co-researchers. This allows the study to be assessed based on my own research values and goals alongside the PKP community's research values and goals, staying true to the participatory nature and Indigenous methodological focus of the study.

Practical Techniques

- In order to assess if, and how, the Architectural Storywork process could support new critical perspectives within the PKP community, I asked participants a set of 18 evaluation questions about their experiences of the entire process in a focus group setting. The first two questions, which reflected on what participants have learnt from the process and what they would do differently, were answered individually by eight of the nine active participants. The remaining questions reflected more critically on the participants' experience and were answered collectively by six of the nine active participants (see Appendix H for the full set of questions and 7.0 Findings for a review of this evaluation).

Participant 2: CSN Inferred Narrative Oppositions

Conceptual Story 1: The Messenger		
Unseen *vs* ***Observable*** *dualism of Islamic faith, where the participant attributes her own observable gifts to the destiny bestowed by God from the unseen- a fundamental aspect of Muslim belief. In this way, the participant sees herself as a vessel through which this destiny is being fulfilled- a* ***messenger*** *of the unseen within the observable, material world. This is the fundamental opposition in this participant's discourse, which all other oppositions can be found within.*		
	Discourse Strategies:	
	Construction of 'Angel' Concept	**Discourse Elements: W1/D1/E9 + W1/D1/E10.1 + W1/D1/E12.3. + W1/D3/E1. + W1/D3/E2. + W1/D3/E3.** The participant begins by constructing the fractal identity of an angel by introducing wings to her persona.These wings contain the tools associated with the participant's professions (author, teacher, and leader), which are related with her desire to build a school- the manifestation of these professions. Islamic faith still believes in angels as physical beings with wings as well as abstract forces advising good deeds- sharing knowledge, wisdom, and faith.. Angels in Islamic faith also 'record the deeds' of humans, hence the representation of pencil, book, and other associations with the participant being an author.
	Construction of 'God's Destiny' concept	**Discourse Elements: W1/D1/E13.5. + W1/D1/E14.2. + W1/D2/E3** The participant treats her own skills and roles as the will of God, or a destiny bestowed by God. This is represented in the visual discourse as a light emanating from the ornate word 'God', radiating over the participant's persona.
	Construction and Repetition of 'Love' as the essence of God's destiny	**Discourse Elements: W1/D1/E1.3 + W1/D1/E5 + W1/D1/E8 + W1/D1/E10 + W1/D1/E11.1. + W2/D1/E6** The participant references 'love' multiple times in various contexts. She associates 'pink', a favourite colour that is signified in the persona's clothing, as romantic. On multiple instances the participant touches her chest when referring to herself, or instances of identity building, as well as when referring to her love and care for the children that she teaches (one vocation she feels is the destiny of God, represented visually by children surrounding a globe held in the hands of her Angel persona). The concept of love is visualised with ornate writing of the word *Cinta* (meaning 'love'), embellished with a love heart above the 'i'.

1.

	Distortion of the Observable	**Discourse Elements: W1/D1/E6 + W1/D1/E11.3. + W1/D1/E13 + W2/D1/E2** The participant visualises the globe in her persona's hands, surrounded by children. This is in reference to how she, through authorship and teaching, provides the children with a 'window to the world'. She specifically compares active learning as a teaching tool to a 'giant window without a curtain'. The participant also visualises her 'universal school' by the feet of her persona. Distorting observable space in this way begins to describe more details about the role the participant/ persona takes on as an Angel.
	Distortion of the Unseen	**Discourse Element: W1/D2/E2** The participant distorts 'light', emanating from God, as a representation of the destiny bestowed by God onto her persona/ herself.
	Invisible Absence of the Self	**Discourse Elements:W1/D1/E13.5 + W1/D1/E14 + W1/D2/E2 + W1/D2/E3** The participant removes any agency in her own achievements and actions when referring to her roles and love as the will and destiny of God.
	Discourse Structure:	
	Subject: Identification as Angel persona	**Discourse Elements: W1/D1/E6 + W1/D1/E9 + W1/D1/E14 + W1/D2/E1 + W2/D1/E6** The participant identifies with the Angel persona directly by using the Deictic Identity 'I' as the Subject of various discourse elements discussing the Angel. It is possible that a later 'we' associates herself with the Angel concept when discussing the need to be grateful for the destiny that God gave. In the visual discourse, the participant writes her own name within a thought bubble coming from the persona's head- suggesting that she, the real world observable entity, is a thought or projection of the Angel persona, an unobservable entity. This emphasises her construct of herself as a messenger, or physical manifestation, *of God's will/ destiny* that has been conjured by/ as an Angel.
	Predicate: Associating identity markers with the persona	**Discourse Elements: W1/D1/E4 + W1/D1/E8 + W1/D1/E10 + W1/D1/E11 + W1/D1/E12 + W1/D1/E13 + W1/D3/E1 + W1/D3/E2 + W1/D3/E3 + W2/D1/E2** The participant identifies with the Angel persona indirectly through Predicates (descriptions that tell us something about the Subject), where they discuss their own likes or roles in relation to the persona. Examples include liking the

2.

		colour pink in reference to the persona's pink clothes, her love for the children in her class in reference to the children surrounding the persona's globe, the items held in the persona's wings in reference to her own roles as teacher/ author/ leader (and how reading is a window to the world, referencing the children and globe held by the persona), or the school she dreams of building in reference to the school protected by the persona.
	Architectural Notations:	
	Cinematographic notation through relational movement (scale, proportion, perspective etc.)	**Discourse Element: W1/D1/E10 + W1/D1/E13** The participant uses relational movement to begin developing the singular point of view by considering the 'other'. In this case, the 'other' is the unknown and unidentified world beyond the window, which begins to interact with herself, her persona, and the abstract/ real children in her class. By scaling and positioning the school and teaching tools within her persona drawing, the participant is creating the possibility for interaction with the other.
	Cinematographic notation through spiritual movement (the unseen)	**Discourse Element: W1/D1/E9 + W1/D2/E2** The participant uses spiritual movement, i.e. the unfurling of the angel wings within which the persona holds the tools of teaching, and the bestowing of this destiny through the light of God, to create the possibility for interaction with the other described above.
	Choreographic notation through relational movement	**Discourse Element: W1/D1/E6 + W1/D1/E11.3. + W1/D3/E1.3.** Through the scaling and positioning of the globe and surrounding children, the participant is able to distort stable space by tracing an event within it (the event of a creating a window to the world through reading/ teaching), allowing us to imagine an impossible architecture that centres around experiences and the representation of other possibilities.

3.



4.



5.



6.



7.



8.

Fig 6.15 Excerpt of Conceptual Story Narratives (for Illustrative Purposes Only- exemplifying 5 narratives over 8 pages)

Participant 2: Opposition Coding Matrix

Discourse 1: Audio Transcript- Summary Translation of Present Architectural Model Descriptions

SPKR = Speaker DE = Discourse Element AB = Alastair Brook FT = Facilitator PT= Participant

Arch Opposition	SPKR	DE		Transcript:	CSN Narrative
	AB	1.	1.1.	[As an example] How do you want to represent the whiteboard?	
	FT	2.	2.1.	(Referencing a new object on the model) / this is whiteboard //	
	AB	3.	3.1.	And / then / to explain why you chose [it] //	
	FT	4.	4.1.	She think / like this / why she used this one for whiteboard / because it is.... / er.... / rectangular //	
Independence/ Dependence Opp of Space & Opp of Geometry			4.2.	Because / she is a teacher / have many students / every student has a different thing / different choice //	The Gatekeeper
			4.3.	Student one / (Pointing to each hole in the object) / has choice	
	AB	24.	24.1.	You have a bo... ...e middle?	
	FT	25.	25.1.	Yes / something like / er / a thing / for the eruption //	
	AB	26.	26.1.	(Describing the video) / it is a cup / with soil around to make a mountain / and the leaves for the jungle //	
				And you mix things in the cup / until it is going to overflow / gets very fizzy / wow / and erupting //	
Practical (Praxis) / Theory Opp of Bondage	FT	27.	27.1.	So / student can explain why the mountain is eruption //	The False Liberator
				...s like it //	
				...rean //	
	PT	38.	38.1.	Dirty / (exclaimed) //	
	AB	39.	39.1.	It is okay / we have this [cover] //	
Natural / Industrial (in reference to bamboo being a replacement material in later discourse) Opp of Space	FT	40.	40.1.	(Referencing an object) / Bamboo //	The Messenger
	Short break as participant answers a telephone call				
	AB	41.	41.1.	(References the objects picked) / Did you understand what we did with this example?	
		42.	42.1.	If you like / we can add to this or move to some other events //	
		43.	43.1.	(Uses a phone to translate the question using Google Translate)	
	PT	44.	44.1.	Finished with whiteboard //	
	AB	45.	45.1.	Okay / shall we do the swing next?	
	PT	46.	46.1.	Okay //	
	FT	47.	47.1.	(Referencing a different object on the model) / this is the swing //	

1.

2.

3.

List of Oppositions:

inside/ outside

centre/ margin

concave/ convex

structure/ ornament

light/ dark

noise/ silence

sensory saturation/ sensory absence

service areas/ areas to be served

east/ west (north/ south)

front/ back

life/ death

heaven/ earth (spiritual *niskala*/ real *sekala*)

solid/ void

enclosure/ exposure

(detached) observation/ (direct) immersion

transilition (connection)/ stagnation (exclusion)

directional/ restful

linear/ circular (curves)

order/ chaos

affordance/ performance

denial/ reward

completeness/ incompleteness

construction/ destruction

high tech/ Lo-TEK

self/ other

private/ public

natural/ industrial

permeable/ impermeable

size/ scale

constriction/ freedom

protection/ vulnerability

domestic/ non-domestic

patriarchal/ matristic

interior corner/ exterior corner

unity/ division

care/ neglect

holistic (composed)/ atomistic (fragmented)

flowing/ compartmentalised

above/ below

peace/ violence

clarity/ opacity

vernacular/ contemporary

expansion/ retraction

ownership/ leasing

individual agency/ proxy agency

agricultural/ urban

additive/ extractive

(phenomenal) transparency/ opacity

time (orientated towards a destination)/ space (orientated towards an origin)

past/ future

movement/ rest

rough surface/ smooth surface

horizontal mass/ vertical mass

repetitive/ continuous

truth/ narrative

loggia/ facade

harmony/ disharmony (with the natural world)

organic/ non-organic (architecture)

entry/ exit

insider/ outsider

imagined space/ material space

flexible/ inflexible

focus/ indistinct

universality/ pluriversality

human/ more-than-human

isolation/ connection

silence (emptiness)/ noise (excess)

simplicity/ complexity

safety/ risk

architecture of the mind/ architecture of materiality

hearth/ elements

visual/ three ears

independence/ dependence

home/ wilderness

play/ function

purity/ impurity

practical (praxis)/ theory

dominance/ submission

cultivate/ waste

perfection/ imperfection

Fig 6.16 Excerpt of Discursive IPA and List of Architectural Oppositions (for Illustrative Purposes Only- exemplifying clips of 3 pages)

1. THE KITCHEN

A site of Frontiers and Boundaries

In Frontier spaces, cultural leaders help tourists understand the importance of events; allowing both the cultural leader and t tourist to give meaning to the event. In Boundary spaces, tourists are denied access to parts of events and their meanings. Different events can include both Frontier and Boundary spaces, depending on the unique relationships between the cultural leader and the tourists. The meaning of each event is created through these unique relationships, which are controlled by the cultural leader. What the cultural leader chooses to show, change, or hide from tourists create purposeful re-contextualisations of local culture and need to be understood.

In The Kitchen, tourists are invited to participate in making *Tlompokan* and are taught the importance of ceremonial offerings. Tourists are also taught how to prepare and cook other regional dishes, which they can then eat as part of their visit. Tourists bring their own meaning to these events, understanding their part in sustaining the Centre through active participation. But tourists are also denied access to the darker meanings of these events, such as the domestication and capitalist oppression of the community, that only come forth in discussions around the 'think with things' models. *Tlompakan* making and catering services are essential for the survival of the Centre, forcing the community to work 24 hour shifts to continue production and sustain the community. Unhealthy capitalist production is required to sustain the healthy spiritual care provided by the Centre. The community becomes sick with domestication, in an attempt to become spiritually liberated.

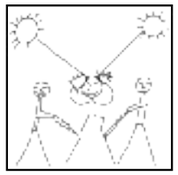
1.1.

Setting:
The Ovens



The Ovens are a symbol of sustainment for the community. They help to provide an income that can be shared to the community in a variety of resources, including donations of food, tools, or clothing, and funding local initiatives. The Ovens also provide to the community spiritually, by producing *Tlompakan*. But The Ovens are also dangerous. They require 24 hour care to stop them burning. The community has become a slave to The Ovens, and must 'worship' them in order to sustain themselves.

Event:
Domestication



The need to constantly attend to The Ovens is a form of Domestication. The Kitchen, within architecture, is a site of Domestication; where women or other marginalised groups are forced to work for the sustainment of patriarchal and capitalist systems, Their work keeps them alive by providing just enough income to support themselves, but does not provide any opportunities to be empowered. They become trapped in a cycle. The community risks being trapped by the Domestication of The Ovens.

Character:
The Masquerader &
The Self-Saboteur



The Masquerader wears many masks. The most commonly worn are the masks of Capitalism and Spirituality. *The Mask of Capitalism* is represented by 'hard work' and 'time is money' ideals; triggered by growing issues of debt and land ownership, and emphasised by a need to sustain the community. *The Mask of Spirituality* represented as an 'offering' to the community, both literally in the *Tlompokan* production, financially through the sharing of money and resources, and metaphorically through their blood, sweat, and tears. These difficult offerings are hidden behind another mask, *Mask of Comedy*, which is used to energise the community in the face of struggles. By encouraging capitalist ideals and hiding the negative spiritual consequences, they harm themselves and the community- becoming The Self-Saboteur.

1.2.

Setting:
The Wood Fire (*Kayu Bakar*)



The Wood Fire is a symbol of rebellion. Even though it is rarely used, and then only for the most basic of tasks such as cooking the pigs food or providing water to bathe, it is an essential requirement in The Kitchen. A key concept in architecture is that the wood fire (or hearth) is the heart of the home. It defines a territory, or a boundary, through light and heat. Using The Wood Fire can create a sense of territory for the community, defining a space that is free from Domestication. Unfortunately, The Wood Fire is still only used for domestic tasks and is disliked by the community because of the ash it produces.

Event:
Circularity (Life & Death)



The burning of wood represents the natural circularity of life & death, and is a reminder that the community must maintain a harmonious relationship with the natural and spiritual worlds, with their Land and their ancestors.

Character:
The Reductionist



The Reductionist battles to create new meanings and definitions for female community members and other marginalised groups. This includes women taking on roles traditionally occupied by men, empowering them and giving them opportunities to be more. The traditional roles of men and women are reduced into a singular character that represents them both- allowing women and other marginalised members to move away from Domesticated roles and towards a renewed relationship with each other, with Land, and with their ancestors.

1.3.

Setting:
Wood Ash



Ash caused by The Wood Fire is seen as something impure, dirtying the cooking pots and causing a mess. This seems to be one of the main reasons for The Wood Fire not being used often.

Event:
The Pure in The Impure



Whilst Wood Ash is often referred to as the 'dead embers' of a fire and is thrown away, Ash contains a lot of nutrients and minerals that are beneficial for plants and trees once mixed into the soil. This is one reason why the water from Mount. *Agung* is seen as 'pure', because it contains large amounts of Ash rich nutrients from volcanic soil. These nutrient rich soils are found in sacred forests, river beds, and *Subak* irrigation systems. Even the yearly process of burning rice stalks returns left over nutrients back into the soil. There is purity within wood Ash that can return to nature.

Character:
The Choreographer



The Choreographer guides the flow of positive energy (like nutrients and mineral) through the community and into the Land. The Choreographer believes in giving everything to others, even if they do not have much to give themselves. By giving the Ash back to the Land, they also give all the nutrients they have. The Choreographer is seen as a dancer in the *agem* stance; a stationary position full of energy, from which they are ready to unfurl and explode into dance. Their dance contains "liminality"; the possibility of disrupting long established patterns and creating positive change towards something new.

1.4.

Setting:
The Sink Basin



The Sink Basin is located next to The Wood Fire, so that the dirtiness from the Wood Ash (and other food related mess) can be cleaned directly from the cooking utensils. Once cleaned, these utensils are dried and stored closeby. The cooking utensils are either represented as closed- to avoid getting dirty again from the fire- or open- to receive ingredients and help sustain the workload of The Kitchen. The Sink Basin is a place where the kitchen utensils can be both closed and open; a place of rest in between their duties to the community.

Event:
Filled to Excess



The Sink Basin is sometimes empty, with nothing to wash clean. Other times, it can be full to excess- overflowing with cooking utensils and organic waste such as Wood Ash and food scraps. The Sink Basin is burdened with this organic waste, often seen as 'dirty', so that the rest of The Kitchen can remain clean and pure, ready to keep working and sustain the community.

Character:
The Bearer



The Bearer carries the excess emotions and feelings of the community, so that other community members can feel free from the weight of worry and sadness. Much like The Sink Basin, they bear the weight of other people's 'impurities' so that they can continue to keep working hard and sustain the community.

1.5.

Setting:
The Medicinal Garden



The Medicinal Garden is defined by its collection of healing plants; including turmeric and ginger. These plant roots specifically aid in digestive troubles. The Medicinal garden also contains other herbs used for cooking, as well as general flowers to attract pollinators. Butterflies in the garden are a sign that the plants are healthy and fresh. Butterflies also represent a freedom that comes from being self-sustaining- where all of the resources needed for the community come from within the community. This connects to The Garden's more general responsibilities at the Centre.

Event:
Indigestion



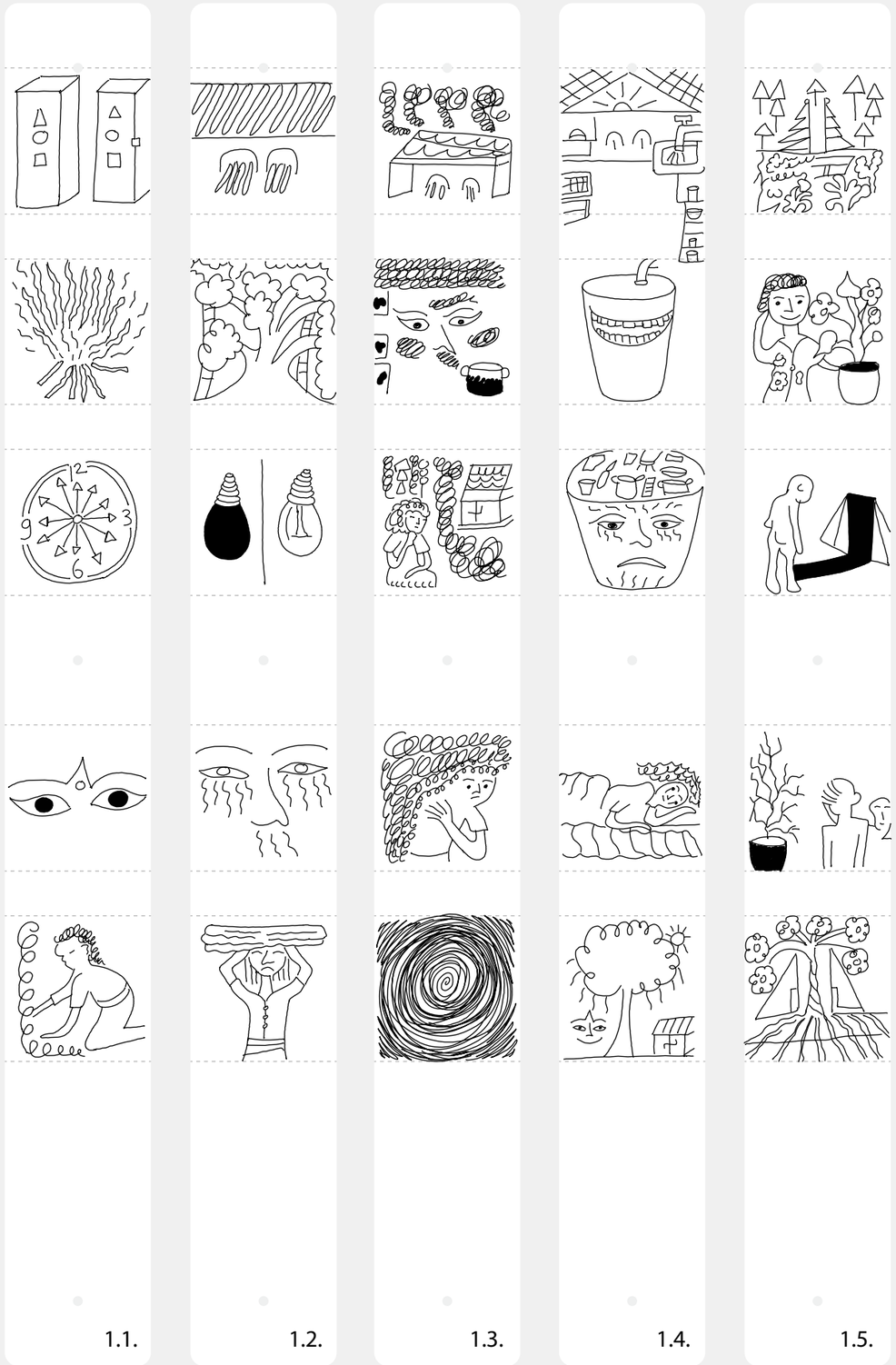
The community has Indigestion. Indigestion is caused by a problem digesting food. Here, the Indigestion is metaphorical; the community struggle to digest Capitalism and Domestication as part of their daily lives, making them sick. The Medicinal Garden provides a possible cure to their Indigestion.

Character:
The Revenant (The Returner)



The Revenant/ Returner wants to return to nature- to ancestors, to Land, to spirituality and the *Niskala*. They wrap themselves in nature, both metaphorically in their floral clothes and literally as they tend to The Medicinal Garden. The Revenant is worried that the community's reliance on The Kitchen will not sustain them far into the future, and believes that a renewed focus on harmonious relationships with nature will provide longer lasting sustainment.

Fig 6.17 Excerpt of Deconstructive Narrative Frames (for Illustrative Purposes Only- exemplifying 15 frames over 6 pages)



1.1.

1.2.

1.3.

1.4.

1.5.

1.1 The Oven is very important. We use it every time to make *tlompokan*.

Fire is very important for the oven because the oven needs to have the fire always on but the fire can burn everything.

Watch the clock. The timer has a function to remember every 1 hour to open the oven to check/and rotate the rice shape.

The need to focus. Eyes have a function, always standing by and focusing on checking the rice shapes. Until the eyes get tired or hurt from the fire smoke. If eyes close it is dangerous because the fire is on.

My low energy is not good for the oven. We need to have a strong energy with the oven, because it needs a long time. It makes us tired. The solution has to be smart and manage the time during the work.

1.2 Firewood is stored above the open wood fire (*kayu bakar*). The store must always be full because we have traditionally used wood for a long time and sometimes cook using it.

We always plant trees because we need firewood everyday to fill the wood store.

The wood fire is different than the stove, it has to be watched all the time because it can be on and off. Once it is on we need to keep an eye and make sure it does not turn off, because when it is off and the flames have gone it takes longer to get the fire again.

Firewood makes me cry from the smoke.

So collecting the wood fire takes a lot of energy, it is hard work. It is also not good for the posture, my body still small and short from carrying all the weight of the wood- like the energy, it is small.

1.3 The fire causes too much ash and smoke and is annoying.

When there is too much smoke and ash, we have to deal with the 'natural makeup". Normally we use white powder but now it is using black powder on my eye and nose, my cheeks. All the kitchen equipment turning to black.

I sit and I see the ash and I think, everything turn black and how to find a solution.

When I think about a solution...

One thought is to separate the wood fire from others to not make everything turn black.

1.4 Because everything is close to the wood fire and everything turn back, we need extra time and extra energy to clean everything as quick as possible.

The sink is happy because everything is clean and they are empty.

The sink is upset because they are full of dirty things.

She thinks when she goes to sleep and when she wakes up there is a good solution to take.

The solution is to make sure everyone is aware and taking action to clean the sink with a smile.

1.5 The temple is always surrounded by trees and plants. So many leaves fall around and needs cleaning.

Everyone has to be taking care and be aware of everything, especially the environment.

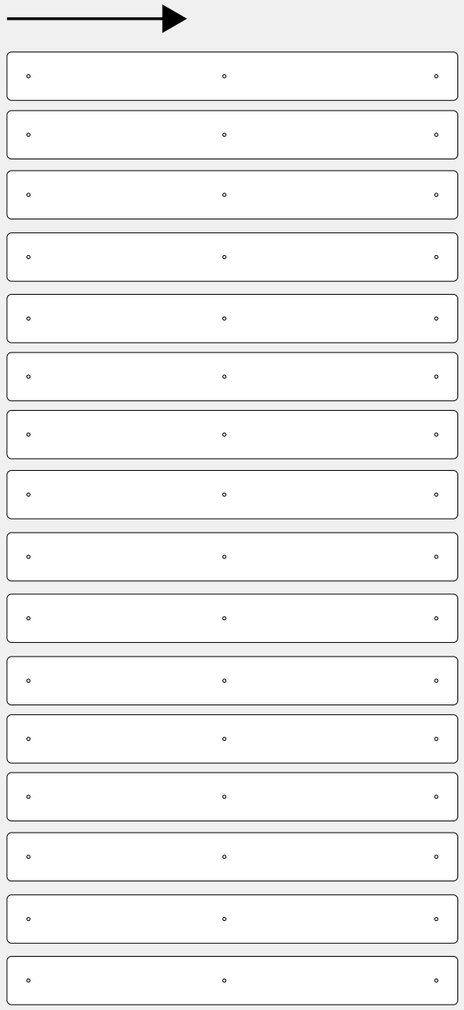
We cannot stop and must keep perseverance.

We cannot pretend that we are blind...

Because everything will return to the nature and be connected.

Fig 6.18 Example of Stories Contributing to the Architectural Charge
(for Illustrative Purposes Only- exemplifying 5 stories)

Traditional Lontar Reads - Across (Left to Right), then down (Top to Bottom)



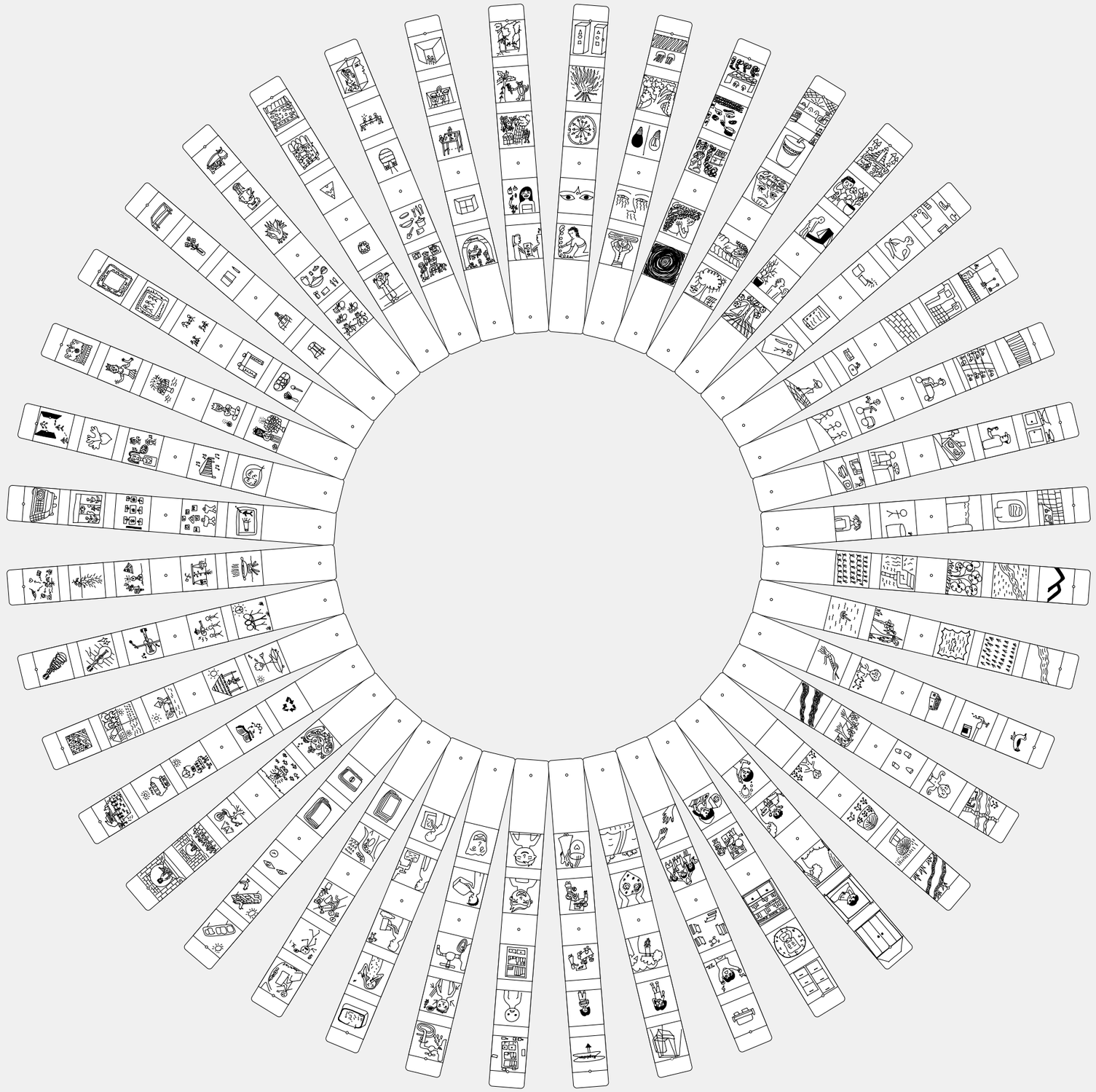


Fig 6.19 Traditional (left) and Circular (right) Storytelling Format

(for Illustrative Purposes Only- exemplifying 40 stories)

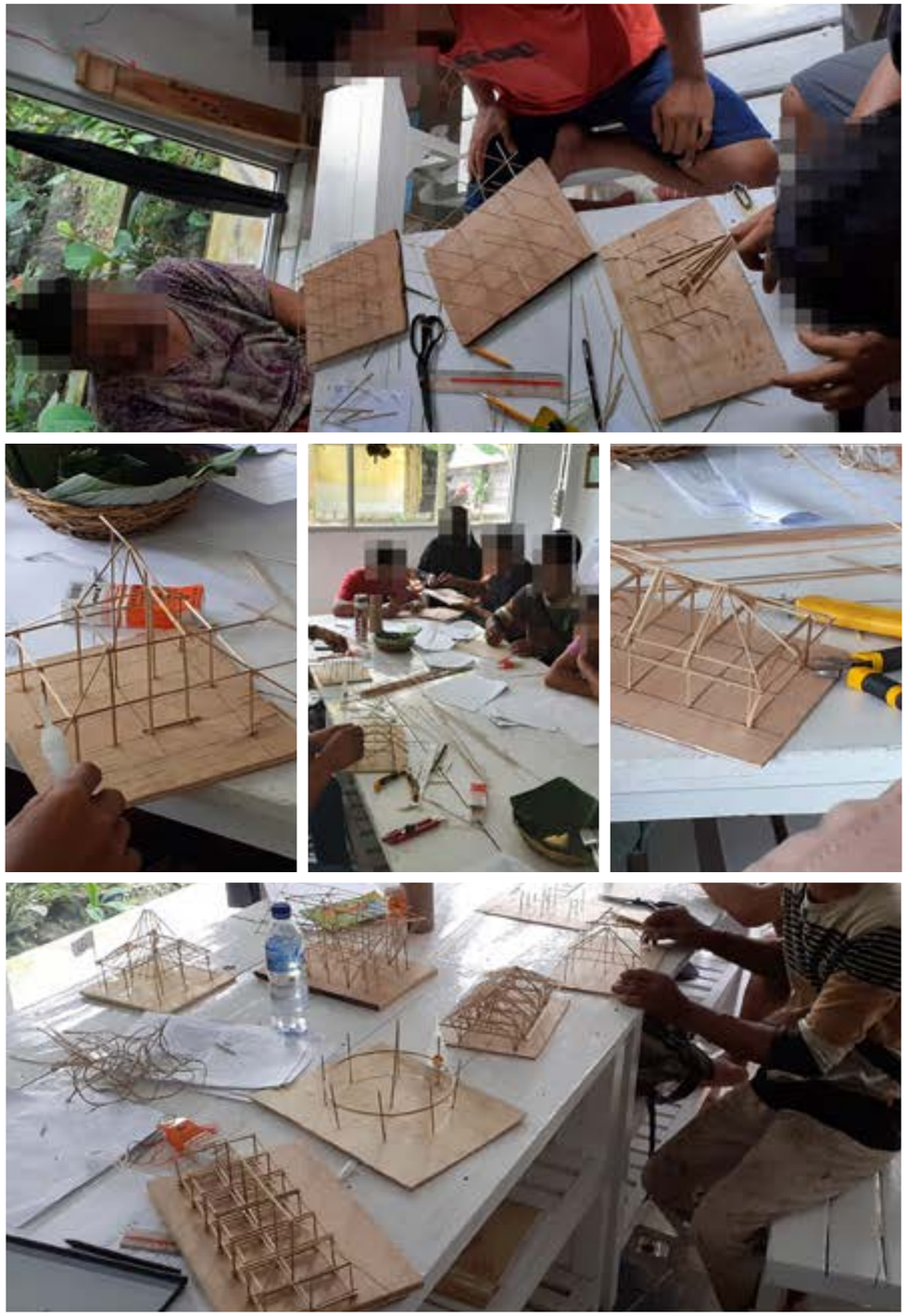


Fig 6.20 Field Photographs of Model-Making Workshop



Fig 6.21 Field Photographs and Video Stills of 'Stories Inhabiting Models' Activity



Fig 6.22 Field Photographs of 'final' PKP Bale Tong Tong Site Plan using Initial Bamboo Models

6.3.3 The Practical Ethics of Fieldwork Outputs

This section details the practical application of Architectural Storywork ethics within my Fieldwork Outputs phase. A summary of each method is provided below, accompanied by a detailed breakdown (see Table 6.7) for consideration by other researchers applying Architectural Storywork or similar methodologies.

6. Holistic Transformations of Trauma	I help to introduce participants to both traditional and non-traditional mediums of architectural discourse so that they can recognise ways to articulate their lived experiences of architectures between the lines of normative architectural discourses; creating a dialogue on systemic social change that can emerge from reflexive, critical, and discursive learning practices.
7. Sharing Interrelated Stories	All Fieldwork Output workshops were group-oriented, giving community members opportunities to examine their stories as a shared topic with other people from other cultures, and all of the physical research data (including blank workshop activity sheets and the outputs of my own data analysis) was left with the PKP community. These two actions encourage the PKP community to re-engage with each other as a collective and to potentially share these processes with new people in new spaces.
8. Synergetic Actions	I invited the participants to co-author the final study outputs based on my own data analysis so that they could retain agency and authority in retelling their own stories by evaluating the accuracy of my analysis and having the opportunity to amend or adapt it to better represent their experiences. Participants were also given the opportunity to evaluate and co-assess the rigour, validity, and success of the entire study, in relation to their own goals and values, within a focus group.

Table 6.7 on next page.

Table 6.7 Storywork Ethics of Fieldwork Outputs

Fieldwork Outputs- Ethical Methods and Implementation
Principle 6: Holistic Transformations of Trauma
• Participants are introduced to new ways of seeing, knowing, and articulating architectural experience through two distinctly different mediums: the traditional mediums of architectural discourses (design brief and physical model-making) and non-traditional mediums of architectural discourse (stories told through of visual 'framing' and 'sequencing'). This gave participants' the opportunity to understand the importance of both mediums, but also recognise the differences between the articulation of their ethno-architectural knowledges and the articulation of professional architectural knowledge- and to consider how they could possibly co-author architecture with practitioners by communicating their experiences between the lines of normative architectural discourses (Karami, 2019). In understanding their own experiential architectural knowledge and professional architectural knowledge, I hope that the final outputs of this research represent a new design culture emerging at the PKP Community Centre around architectural discourse.
• The 'framing' and 'sequencing' activities conducted with the participants aim to instigate conversations around tensions within the architectural spaces of the PKP Community Centre. These tensions often reflect wider systemic tensions within the socio-cultural systems of Bali. Rather than asking participants to potentially re-live traumas caused by these tensions, these activities specifically focus on telling new stories of transformation. In this way, these activities aim to harness the performative potential of architectural discourse as a dialogue on systemic social change that can emerge from reflexive, critical, and discursive learning practices.
Principle 7: Sharing Interrelated Stories
• The processes/ workshops undertaken to create the architectural charge and draft design brief were all group-oriented, giving community members opportunities to examine their stories as a shared topic with other people from other cultures (Balinese, Javanese, and Anglo-European), recognise core values and beliefs within shared stories that can be embedded within the future PKP Bale Tong Tong Community Centre (wherever and whenever that may be), and consider how other people, other Balinese communities, or other Indigenous people may face similar experiences of tension and transformation.
• To enable future reflection on these ideas and to encourage the repeatability (and adaption) of these workshops, all of the physical research data (including blank workshop activity sheets and the outputs of my own data analysis) was left with the PKP community, collated into a single folder at the PKP Community Centre. Digital copies of this data were also shared with Ibu Sari in the event of physical copies being lost or damaged. This give the PKP community an opportunity to clearly explain why they charge the future PKP Bale Tong Tong Community Centre with certain responsibilities to their self-determined Indigeneity, architectural autonomy, and the freedom to create and share new knowledge. Chapters 5.0 and 6.0 of this thesis aim to also make similar data available to other researchers and the general public for repeatability/ reproducibility.
Table concludes on next page.

Principle 8: Synergetic Actions

- I purposely decided to co-author the final fieldwork outputs with the participating members of the PKP community. I initially began to frame and sequence the participant's stories myself, based on my own interpretations of the research data. However, in an attempt to reduce my own biases and retain the participants' agency and authority in retelling their own stories, I actively engaged in a collaborative co-authorship with participants. This required me to translate my data analysis into a format that the participants could firstly evaluate and then utilise to create their own transformational stories. This co-authorship brough the PKP community's goals and values into focus and helped to keep me vigilant in bringing these into being.
- The final outputs were created through the participant's experiences of participatory workshops and discursive practices. The focus group evaluation session aimed to provide the PKP community with an opportunity to co-assess the rigour, validity, and success of these workshop practices in relation to their own goals and values. This acted as a group reflection on the whole process, weaving together different opinions and interpretations into a diverse conversation around new possibilities and possible futures. The topics raised in this focus group are described in detail within Chapter 7.0 Findings.

6.4 An Architecture of Events

Chapter 5.0: Co-Authoring Architecture and Chapter 6.0: Storying Architecture both develop an architectural study centred around the 'charge'- architecture's responsibility to its inhabitants. Generally, this responsibility follows Derrida's call for architects to make responsible decisions by inviting in and accepting the alterity of otherness in its entirety, so that others may show up and dwell according to their own diverse realities, histories, conditions, and knowledges. Within the situated context of the PKP community, this responsibility calls for a new design culture and discursive architectural practice that supports the PKP community in achieving their own values and goals for self-determined Indigeneity, architectural autonomy, and the freedom to create and share (transmit) new knowledge.

The practical development of this architectural charge required the application of critical, imaginative, and ethical methods towards the deconstruction of dominant power structures and architectural tensions. Through an interaction between design knowledges and discursive languages, this fieldwork process wove together interrelated narrative elements capable of imaginative stimulation, collectively authoring stories through oral, aural, and visual works that imagined both possible and impossible architectures. These visual works were created through everyday practices and storytelling processes that exchange ideas in the space between intuitive vernacular architecture and the conscious design of space with specific political intent.

During this fieldwork, the creation of the architectural charge has become an architectural work in itself, defining discursive architectural spaces that have been inhabited and transformed by the participants. Similarly, the process of conducting research with the PKP community has built its own framework of responsibility through participatory and Indigenous methods. Derrida calls this 'an architecture of events', in which architecture must respond to its 'irreducible' responsibilities (Vitale, 2018). Chapter 7.0: Findings considers if this research has succeeded in responding to its responsibilities to the PKP community by considering: a) if I have answered my research questions with academic rigour and validity, and b) if the study has met the PKP community's research values and goals, staying true to its participatory nature and Indigenous methodological focus. Chapter 8.0: Discussion then expands on these findings to consider the overall contributions of this study to architectural research and practice- both with Indigenous communities and further afield.

Part 4: Findings

7.0 Findings

Chapters 7, 8 and 9 present the findings of my study in relation to my research questions (see 2.3), discuss Architectural Storywork's potential as a discursive design methodology, and conclude with a review of the study's contributions to knowledge, limitations, and future research. These chapters return to Research Question 6 to consider how, if at all, the interventions and outputs developed throughout this thesis have contributed to new approaches to architectural fieldwork in general or to new design cultures at the PKP Community Centre.

This thesis has documented a research study conducted over two and a half years with members of the PKP Community Centre (Pusat Kegiatan Perempuan: *pusat*= centre, *kegiatan*= activity*, perempuan*= women) and its founder, Ni Komang Sariadi (Ibu Sari), located in Banjar Selasih, Puhu Province, Payangan District, Gianyar Regency, Bali, Indonesia. In early 2020, I was invited by Ibu Sari to collaborate on the design of a new building at the PKP Community Centre. The scope of this project quickly expanded as the PKP community became at risk of being displaced from Banjar Selasih by development during the SARS-CoV-2 pandemic. The new parameters of the project were widened to include the design of an entire new community centre, named the PKP Bale Tong Tong Community Centre, whilst the goals were made more acute to include: self-determinism, architectural autonomy, and the ability to transmit new knowledges to new people in new places.

This study constructed three research strategies related to these goals (see Chapter 2). These strategies were developed through Chapters 3 and 4 to construct a situated Architectural Storywork methodology. A Storywork methodology abstracts layers of metaphors from within Indigenous stories and attaches key theoretical or ethical principles to them as a guiding framework for research with Indigenous communities. My Storywork methodology purposefully abstracts metaphors related to architecture and geography to create a 'discursive epistemological landscape', and attaches theoretical and ethical principles informed by Balinese architectural principles and Storywork precedents.

This methodology was then implemented with the PKP community within both remote and

on-site fieldwork (see Chapters 5 and 6) to create an architectural charge and draft design brief for the PKP Bale Tong Tong Community Centre. An architectural charge is an imaginative, critical, and ethical component within the earliest stages of the design process, and aims to articulate architecture's responsibility to a community- allowing them to show up and dwell based on their own unique and diverse worldviews, knowledge, conditions, histories, and realities.

The following sections of this chapter interpret and present the findings of my research study as 'an architecture of events' (Derrida, Brunette, & Wills, 1994; Wigley, 1993; Vitale, 2018; Lawlor, 2022). These interpretations are intrinsically people, place, and time specific. They consider the anticipation of an architecture to-come in the PKP Bale Tong Tong, a speculative architectural project that may never be fully materialised, in response to a specific order of events that have occurred between myself and the PKP community, and between the PKP community and alterity, over the course of this study. This includes the construction of my Architectural Storywork methodology (see Chapter 4) based on the development of three situated research strategies (see Chapters 2 and 3), and its implementation over four phases of fieldwork- Fieldwork Initiation (see Chapter 5), Data Collection, Data Analysis, and Fieldwork Outputs (see Chapter 6).

The findings reflect my understanding of these events at this specific moment of writing, somewhere in between my accounts of the events and the anticipation of architecture to-come. In order to interpret the research findings, I consider the outcomes of this study in relation to my initial research questions. I classify the outcomes of this study as the architectural charge (see Table 6.6, Output 3 and Appendix F) and a draft design brief (see Table 6.6, Output 4 and Appendix G), alongside the PKP community's answers to a set of evaluation questions (see Appendix H) on their experiences of Architectural Storywork.

7.1 Participant Pseudonyms

This chapter considers extracts from, or references to, individual participants. During the course of the study, each participant was anonymised by being assigned a numerical value, i.e. Participant 1. To humanise each participant whilst maintaining this anonymity, I have used pseudonyms to identity them within this chapter- see Table 7.1. Each pseudonym was

chosen by the PKP community to represent their 'role' at the PKP Community Centre in Data Collection Workshop 3. Only participants who provided full data sets or completed all activities, bar Participant 21, are included in these final analyses. Participant 21 joined the study in the Fieldwork Outputs phase at the request of Ibu Sari, to continue the work of participants who had studied the shelter building- arguably one of the most important spaces to consider at the PKP Community Centre- and could no longer complete the study.

Ibu Sari wished to include Participant 21 to improve their personal development, social skills, and general engagement with the community. Participant 21 completed all previous workshop activities outside of the remits of this study, to gain a similar understanding of the study as other participants. This data could not be included within the study as the timeframe was too restrictive to conduct the intensive data analysis required and was deemed essential to the study based on the criteria outlined by the PKP community's goals and values (see Chapter 2). However, their data for Fieldwork Outputs is included. I refer to myself as 'Researcher' and Ibu Sari remains non-anonymised as a facilitator, in accordance with my University College Cork Social Research Ethics Committee approval. Ibu Sari is a vocal activist for women's rights and has appeared in research studies such as Yu's (2015) thesis *On Moral Imagination and Indigenous Wisdom*, documentaries such as Mikova and Arthus-Bertrand's (2020) acclaimed *Woman*, and books such as Gardiner's (2023) bestselling *55 Faces: Global Edition*.

Table 7.1- Participant Pseudonyms

Participant 2:	Angel
Participant 3:	Super Mom
Participant 6:	Dewi Kunti (the name of a character in the Mahabharata epic and one of the 'five maidens' whose names are believed to dispel sin when recited)
Participant 8:	Indra (lord Indra, the god of rain)
Participant 10:	Tulip
Participant 11:	Candra (lord Candra, the moon god)
Participant 18:	Alchemist
Participant 19:	Kakang (brother- 'immigrant from heaven')
Participant 21:	Goku (inspired by contemporary adaptions of the Monkey King character)

7.2 New Critical Perspectives of Balinese Culture and Self-determined Indigeneity

To consider any critical perceptions of self-determined Indigeneity formed by the PKP community, I return to my initial primary research questions, beginning with;

> *Has Architectural Storywork supported new critical perspectives of Balinese culture within the PKP community?*

Forming critical perspectives of Balinese culture is a process that, firstly, reveals colonially derived values, institutions, laws, and symbology within architectural spaces, which have been shaped over time in contrast to the 'Indigenous Other' and, secondly, humanises this difference by shifting perceptions of Indigenous people away from the 'Indigenous Other' to fellow human through; the honouring of pre-colonial lifeways, the re-discovery of themselves beyond the 'Indigenous Other', the recognition of their self-determined identity, and the respectful participation in contemporary society through ethical relationships with alterity (Bunten & Graburn, 2018).

In order to assess if, and how, Architectural Storywork could support new critical perspectives of Balinese culture within the PKP community, I conducted a focus group with the active participants. I initially intended for this focus group to be facilitated by a neutral third party, so that neither myself nor Ibu Sari could inadvertently influence participants into providing false answers. However, after multiple discussions with Ibu Sari and members of the PKP community, it became apparent that the participants wanted me present so that they could also ask me questions and engage in open dialogue about their experiences.

In order to reduce my own biases and possible influence within this scenario; a) participants received a set of 18 evaluation questions prior to the focus group which they could consider individually or discuss collectively (see Appendix H); b) Ibu Sari would act as facilitator, asking the questions on my behalf and translating the participant's answers, and; c) I would act as a observer unless the topic of discussion warranted further questioning, whether from myself or from the participants. Warrants for further discussion were indicated by topics related to the PKP community's research goals of self-determinism, architectural autonomy, and the transmission of new knowledge to new people in new place, and my own research goals to achieve this through Architectural Storywork as a discursive design practice.

The first two questions were answered individually by eight of the nine active participants, whilst the remaining questions were answered collectively by six of the nine active participants during the focus group. After transcribing the participant' answers, I conducted a simple thematic analysis to identify any common themes, ideas, or patterns related to the critical perception of self-determined Indigeneity.

7.2.1 Individual Critical Perspectives of Balinese Culture

My analysis suggests that Architectural Storywork helped to guide the participants' understanding and communication of unmarked colonial influences within their architectural environments. This was expressed through the participant's architectural charge (see Appendix F), which described primary and secondary tensions within each architectural building based on a thorough deconstructive discourse analysis of their data;

Discussing the tensions of patriarchal domestication and capitalistic commodification of culture within the kitchen, in response to Q1 and 2:

Super Mom *"I don't know about building, I don't know about [negative] feeling… No one asking about that. I know in my heart, and I feel that, but no one ever ask."*

Discussing the importance of understanding and communicating tensions, Q1 and 2:

Angel *"It is important to recognise the tensions, the negative feelings in the building, to be able to move forward with a new building."*

Discussing the benefits and/ or limitations of Architectural Storywork, Q3:

Angel *"There is no[t] any architect asking about feeling or anything, and this is something unique that [Architectural Storywork] brought to the PKP Centre. And this is also guiding everyone to be smarter, creative, [have more] initiative."*

Discussing the impact of Architectural Storywork on understanding what they need within architectural spaces, Q1 and Q2:

Candra *"Both the first phase activities [remote workshops] and second phase activities [on-site workshops] help a lot to be able to make this visible to see."*

Discussing their understanding of buildings, Q1 and Q2:

Alchemist *"I'm getting more understand, getting closer to understand more about the building. It influence our body and mind … Need cycles, good cycles when working at the space. But, with the knowledge that [is brought] to this architectural story and design, it helps [me] to be able to create something new, create a good energy temporary at this space, even though it is inconvenience or not comfortable, but [I am] able to balance that energy cycles at the moment in this current space. And in the future it will be easier for me to share my ideas of architecture through the psychologist [psychological] side relating to the building."*

Discussing the benefits and/ or limitations of Architectural Storywork, Q3:

Kakang *"The overall benefits I get is, I can see clearly the correlation between me as a human being and the building. So, I can explore more about myself, about what space I would like to create."*

Discussing what has been brought from Balinese and Javanese culture into the Architectural Storywork activities, Q4:

Angel, Alchemist, and Kakang *"It has been guided to consider: consider what needs to be avoid[ed] or forbidden... The way of communication has been heritage by our ancestor, both Balinese community and Javanese community, where been forgotten for long time that communicating your feelings, communicating your passion [and] exploring your passions also very important, in doing anything in our daily lives… It was very dangerous, it has been very dangerous to forget what has been heritage. So, this is good activities to lead us [to be] more connected… [to guide] us to remember what has been forgotten through these activities."*

Discussing how the integration of Balinese and Javanese principles within Architectural Storywork has changed their experience of architecture, Q5:

Alchemist *"From now on, from these activities, [I] will be able also to see the character, the characteristic of each person who are in a certain building. When [I am] going out from Bali, or Payangan, [I] will be able to recognise "this building has this character, this energy"."*

Speaking for the group about the role of Balinese metaphysical concepts- such as spirits, deities, and principles- within the Architectural Storywork activities, Q6 and Q7:

Ibu Sari *"[Architectural Storywork has] been … connected amongst those cultural spirits etc. Including guiding us to think out, to recognise all the tension in our daily activities in a space... helping [us] to guide and letting [us] explore [our] own self."*

'Tensions', 'negative feelings', 'inconvenience', 'discomfort', things to be 'avoided' or 'forbidden', or the 'dangers of forgotten heritage', all refer to the hidden influences of colonial and touristic systems on the buildings of the PKP Community Centre. This occurred through the subjugation of pre-colonial Balinese culture and the projection of the "Indigenous Other" onto the Balinese people through tourism, the re-classification of Indonesian vernacular architecture, and the gradual erosion of Balinese architectural autonomy through contemporary architectural institutions (see 2.1).

Whilst the PKP community described their personal experiences of these tensions within the data collection workshops- drawing attention to their interpretations, expectations, and anticipations of the PKP Community Centre's architecture- they only explicitly articulated this after reading my analysis of their data. 'Super mom's' comments suggest that the PKP community were aware their feelings towards colonial and capitalist system, but had not connected this to their experiences of architecture because no one had ever suggested this to them before. This is supported by other references to 'recognising', 'understanding', and 'being guided' to 'make visible' tensions or negative feelings about architectural space.

I consider this a decolonial and/ or redirective act (Fry, 2017; Schultz, 2019) by the PKP community, as they firstly reference the appropriation of colonial experience by 'understanding more about the building' and considering what negative aspects should be 'avoided' or what can be 'explored more', and then reference the 'remembering' and being 'connected' to pre-colonial values through 'explorations' of their 'own self' for application in the future.

7.2.2 Collective Critical Perspectives of Balinese Culture

This re-recognition of their communal self-determined identity is further expressed by:

Discussing the inclusion of Balinese and PKP principles, in answer to Q4:

Alchemist *"As well as the principles of PKP as well: the motto "from us to us" also being embraced in the overall activities for the first case. By guiding [me] to learn more about [my]self, and then bring the individuals roles and experience together to create something as the banjar or community."*

Discussing the possible social change in the local community through Architectural Storywork, in answer to Q10:

Alchemist *"Once guided everyone to understand themselves, then the cycles will be* tat twam asi: *"I'm you, you're me, we are one". So, everyone can understand each other."*

Speaking for the group about my treatment of their stories, as a white male academic and outside visitor to Bali, in answer to Q11:

Ibu Sari *"There is nothing rude that you have done so far… Instead, we try to understand all those [tensions and feelings] among us by, kind of fighting each other. Not in a bad way, (laughing), like a community: asking and [then answering] "no and yes"."*

Discussing the possible social change in the local community through Architectural Storywork, in answer to Q10:

Kakang: *"[I] could see that, through these activities, Goku changed a lot. Of course, I changed a lot as well. To be able to be a good listener, and also seeing the differences amongst the members [of the PKP community]. They were unable to listen [before], listen to others… So, this method also guiding the circumstance amongst the community. That there is no difference among us, no matter what is the background… we are the same here. So, we get the same knowledge, we having the same capacity to not understand [the tensions] at the beginning. But then, we all work together to understand, individual and as a group, to create something."*

These descriptions of self-determination move fluidly from individual identity to communal identity, expressing a relationship between the exploration of the self and respectful relationships with others. This relationship is described as the basis for social change in the community; where individuals recognise the 'otherness' inherent within their own identities ("I am you, you are me, we are one") as movement towards respectful relationships with otherness ("from us to us"), where 'us' is simultaneously both you and me, known and unknown, that experience and create something new together. This not only suggests the respectful participation in contemporary society, but also suggests a desire to enact social change within contemporary society through respectful participation with the alterity of others.

7.2.3 Radical Hermeneutics of Self-determined Indigeneity

In questioning whether the active participants of the PKP community have engaged in radical hermeneutics, that considers respectful relationships between self and other, I return to part a) of my second primary research question:

> *Has Architectural Storywork supported the PKP community, as individual members and a collective group, to define self-determined identities of Indigeneity through architecture's general responsibility to alterity?*

To answer this question, I conducted a narrative analysis of the architectural charge (see Appendix F) and draft design brief (see Appendix G), treating each participant's contributions as a purposeful storied account of their experiences. This analysis interprets the content of each participant's story and interrogates what their story is about. It also considers the way that the stories are composed using different methods of communication, such as the written and oral descriptions, and collated through different methods of composition, such as ordering of images and physical architectural models (see Chapter 6).

My analysis provides some supportive evidence that individual members of the PKP community have already defined, or are moving towards the definition of, self-determined identities and respectful relationships with alterity through:

- Impossible depictions of space that invite relationships between the PKP community and unknown otherness, such as books being 'windows to the world' (see Appendix F, 4.2), a projector acting as a two-way glass door so that visitors and the PKP community can both see 'other communities, other creatures, other animals' recognising themselves within others (see Appendix F, 7.1), mirrors representing the imperfections that connect all humans (see Appendix F, 7.4) etc.

- Depictions of architecture that literally 'open' themselves to others, removing boundaries that exist within the current spaces of the PKP Community Centre (from doors, walls, confined corners, etc.) and replacing them with open space (see 7.3.4 and Appendix G).

- Arranging buildings within site plans so that a) education about the Balinese self in relation to non-Balinese 'others' is spiritually prioritised based on the hierarchy of Balinese orientation and b) the 'being-together' of the PKP community and unknown visitors is physically prioritised by placing gathering spaces at the site entrance (see 7.3.4 and Appendix G).

- Configuring buildings as discursive or narrative devices that mirror the self-exploration of the *mandala*, such as within the Yoga Shala-lala, Kakang House Batik Studio, and Narasa Screen Printing Studio, where inhabitants move through space towards a central node that depicts self-healing and self-enlightenment through creativity (see 7.3.3 and Appendix G).

Further evidence that participants may have recognised 'otherness' within their own identity is found within the construction of the architectural charge, which views their individual stories as a collective work with a shared narrative- defining what responsibilities the architecture of the PKP Community Centre has towards them. This document (see Appendix F) can be interpreted as a communal move towards a self-determined identity as each story progressively engages in respectful relationships with alterity by searching for connections with 'otherness' (other people, other ecologies, other spiritualities etc.) within themselves:

- Story 1 describes a connection with nature by 'returning' resources to it such as using nutrient rich ash as fertiliser or planting new trees and medicinal plants.
- Story 2 describes self-knowledge through a sense of communal responsibility, finding a form of inner enlighten through the maintenance of a community.
- Story 3 describes a communal 'protection' of nature through the collective management of resource extraction.
- Story 4 describes the acceptance of other knowledges and other conditions by putting aside differences and creating new cultures based on each other's needs.
- Story 5 describes the need for balance between human and other-than-human ecologies.
- Story 6 describes an exploration of human experience in relation to other-than-human ecologies.
- Story 7 describes otherness (particularly other people) as a projection or reflection of ourselves.
- Story 8 describes the giving of offerings to ancestral deities so that they may support a harmony between the PKP community and otherness.

The narrative of these stories moves from a desire to 'return' resources to nature, through an exploration of the self in relation to other people, other ecologies, and other knowledges, considering how to find a harmonious balance between humans and other-than-human ecologies, and concludes with a situated response that invokes the Tri Hita Karana- harmony between humans, nature, and the universe.

7.2.4 Findings

Despite this compelling evidence, I cannot conclusively state that PKP community have collectively defined, or are moving towards the collective definition of, a self-determined identity through respectful relationships with alterity. Whilst the composition of stories within the architectural charge derives from the composition of models created by the PKP community in Workshop Four (see 6.4.2), the active participants did not challenge or alter this composition in later storytelling workshops, continuing to arrange images and architectural models in the same order. It is possible that this occurred because the PKP community simply progressed from one workshop to another in a synchronous way, or that I did not directly ask them if they would like to change the order. If the order of stories had been changed by the participants, I might not have interpreted the shared narrative as a communal move towards the recognition of otherness within their collective identity.

Whilst not conclusive, my findings do suggest that;

- *Yes,* Architectural Storywork *has supported new critical perspectives of Balinese culture within the PKP community,* as the participants were able to reveal unmarked colonial influences within their experiences of architecture and redirected these experiences through a decolonial lens by re-affirming pre-colonial Indigenous concepts and explorations of self/ communal identities within their data.

- *Yes,* Architectural Storywork *has, to some extent, allowed the PKP community to recognise the 'otherness' inherent in their identity as a way to rediscover themselves,* as a narrative analysis of the architectural charge and draft design brief suggest both acts towards relationships with the alterity of others and acts towards self-knowledge. However, any correlation between the two is less explicit within the data of individual participants and have, instead, been interpreted from the composition of participants' stories within a joint narrative. A different composition of stories may have yielded different results and, therefore, further evidence is required to unequivocally support the claim that participants' have recognised 'otherness' within their own identities.

7.3 Critical Perceptions of Architectural Autonomy

To consider any critical perceptions of architectural autonomy formed by the PKP community, I return to part b) of my second primary research question:

> *Has Architectural Storywork supported the PKP community, as individual members and a collective group, to reconceptualise their architectural autonomy?*

This reconceptualising of architecture is an extension of Derrida's radical hermeneutics and his call for respectful relationships between the self and the alterity of the other. It demands a new approach to architecture that will allow people to show up, dwell, and live according to their own circumstances, rather than those dictated by known rules and established practices (Vitale, 2018; Coyne, 2011; Wigley, 1997).

The PKP community had already begun to reconceptualise socio-cultural space before my Architectural Storywork intervention, creating new rules and establishing new practices specifically designed to provide social and cultural autonomy to members of the PKP community and beyond. True to Ibu Sari's definition of Balinese Indigeneity, the new PKP Rules and practices are rooted in pre-colonial Indigenous Balinese Knowledge that is, itself, a non-static and pluriversal entity- teaching different lessons to different people based on the listeners' time, space, and circumstances.

However, these rules and practices are confined by architecture that has not yet been reconceptualised; architecture whose pre-colonial values of autonomy and pluriversality, as described in the Balinese Asta Kosala Kosali guiding principles of architecture, have long since been eroded and superseded by colonial domestication and commodification (see 4.2 and 4.3). This creates and perpetuates moral-ethical tensions between old and new meanings. Following Ibu Sari's approach to the PKP Rules, I deduce that any reconceptualisation of the PKP Community Centre's architecture would involve the creation of new architectural rules and practices that are rooted in the pre-colonial knowledge of the Asta Kosala Kosali (circa 13th and 16th century) centring values of autonomy and pluriversality.

I triangulated data from the PKP community's answers to my evaluation questions, extracts from the final architectural charge and draft design brief, and extracts from my field diary.

I then conducted a thematic analysis of this data using deductive coding related to the five core principles of the Asta Kosala Kosali*;* 1) Manik Ring Cucupu, 2) Tri Hita Karana, 3) Tri Angga, 4) Tri Mandala, and 5) Sanga Mandala (see Table 4.1 for summary context and 4.4.1 for detailed context).

Manik Ring Cucupu:	Harmonious interplay between building (macrocosm) and inhabitants (microcosm) at a 'centre', treating the macrocosm/ microcosm binary as both themselves and each other at the same time by reducing them into a singular term that contains them both.
Tri Hita Karana:	Spatial groupings that maintain relationships to the universe, other humans, or the environment.
Tri Angga:	Qualifies the spatial groupings of the *Tri Hita Karana* into a sacred upper zone (i.e. roof), neutral middle zone (i.e. walls or structure), and profane lower zone (i.e. foundations). Also refers to the spatial patterns of settlements, such as linear, crossroads, or a combination of the two.
Tri Mandala:	Classifies the spatial grouping of the *Tri Hita Karana* based on the Tri Angga; where scared spaces are known as the *Utama Mandala*, the dwellings are known as the *Madya Mandala*, and the profane spaces are known as the *Nista Mandala.*
Sanga Mandala:	Literally meaning the nine mandala, this divides the Tri Mandala into a 3x3 grid known as the 'nine-folded hierarchal space'- dictating the layout of Balinese architecture based on *Kaja-Kelod* (mountainward-seaward axis) and *Kangin-Kauh* (sunrise-sunset axis).

This analysis considers any evidence of emerging architectural rules or practices rooted in these core principles.

7.3.1 Reconceptualising the Manik Ring Cucupu

The below extracts consider how individual members of the PKP community have begun to reconceptualise the Manik Ring Cucupu by establishing new practices of architecture that consider the harmonious relationship between building (macrocosm) and inhabitants

(microcosm). Beginning with a short exchange between Dewi Kunti and myself within Q1 and 2, who understands the need to search within themselves (microcosm)- to explore their expectations and experiences of architecture- in order to build something new (macrocosm). This expresses the macrocosm within the microcosm:

In discussion on Q1 & 2:

Dewi Kunti: *"[I] prefer to practise more, like kinaesthetic… So, direct to drawing, for example, instead of writing."*

Researcher: *"So, the like/ dislike table and things [related to self-exploration]?"*

Dewi Kunti: *"Yes… [I] prefer direct to building [models]."*

Researcher: *"Do you think you could have gone straight to the building without doing everything else first?"*

Dewi Kunti: *"No."*

Researcher: *"So the first bit [self-exploration] was not that enjoyable, but without doing that you don't think you could have gotten to [model] the building?"*

Dewi Kunti: *"No (laughing)."*

In a further extract, Super Mom admits that she was not sure why the first data collection workshops had asked her to describe her identity and feelings in relation to the architectural spaces of the PKP Community Centre:

In discussion on Q1 & 2:

Super Mom: *"I couldn't understand at the beginning [why I had to explore my feelings], but then in the end I do understand overall the activities, which has [sic] supposed to be that journey."*

This confusion occurred despite myself and Ibu Sari describing the purpose of the study to all participants before it commenced, making transparent our motivations and goals for the workshops and describing, in detail, each activity and its relevance to other activities and the overall goals of the study (a diagram of which can be seen in Fig 6.2- Discursive Data Collection Guide).

It is possible that some miscommunication occurred due to language barriers between English and Bahasa Indonesian, that I did not provide enough descriptive material in Bahasa Indonesian (as I provided worksheets, activity booklets, and descriptive videos in English- see Appendices D and E), or that the PKP community has different expectations and perspectives on the role of architects and researchers.

As highlighted in Section 7.2.1, participants had not previously been asked by architects (or others) about their feelings in relation to their experiences of architectural space. This was highlighted in further, informal, discussions with interested members of the wider PKP community who were intrigued by the 'anthropological' and 'sociological' questioning in my study activities.

As mentioned in Section 7.2.1 and highlighted by Dewi Kunti (above), participants felt that the progression of workshops helped to guide them to a point of understanding that made visible the relationship between the PKP Community Centre buildings (macrocosm) and the PKP community as inhabitants (microcosm). Throughout the rest of the evaluation questions, other active participants showed similar awareness, also expressing the microcosm within the macrocosm:

In discussion on Q3:

Kakang: *"The overall benefits I get is, I can see clearly the correlation between me as a human being and the building."*

In discussion on Q5:

Kakang: *"From now on, from these activities, [I] will be able also to see the character, the characteristic of each person who are in a certain building. When [I am] going out from Bali, or Payangan, [I] will be able to recognise "this building has this character, this energy"… So, the differences between those people who build a building without going through all these journey of activities, it will be different feelings."*

These statements describe a reconceptualisation of contemporary Balinese architecture by 'Copy, Paste, Improvising' the Manik Ring Cucupu philosophy. By firstly understanding the relationship between building and inhabitant, the PKP community were able to view

their stories of lived experience as a 'third position' of harmony between the building and themselves; in which both contain the other. However, the PKP community are aware that "there is no[t] any architect asking about feeling or anything, and this is something unique that [Architectural Storywork] brought to the PKP Centre" (Angel, 2023- Interview).

The participants showed a willingness to share their experiences with Balinese architects, in the hope of changing the status quo within contemporary architectural practice and building reciprocal relationships of trust between architects and the community. This optimism occurred despite a grounded understanding that Balinese architects may not be as willing to engage in, or be sympathetic towards, more participatory, co-design, or storytelling approaches to architectural practice- highlighted in the evolution of the below discussion:

In discussion on Q9:

Researcher: *"[Once you have shared your stories with an architect], would you expect the architect to then share back in a reciprocal relationship?"*

Alchemist: *"Of course, because we need the architect to be responsible for what he share for the safety of building and things in the future. And also, good to know by having the architect honesty. We will be able to know whether he is capable or not to do something. It's like build[ing] trust."*

Researcher: *"You want to know that you can trust the architect for their professional skill, but also their ability to listen to your stories and take them into the design? To be respectful of your [life] experiences?"*

Ibu Sari: *"Yeah … it's back again to the building affect individuals. If it is not honest, or put things in place for them to want, that has been shared."*

Researcher: *"So, that is what the team want and expect from an architect. Do you think you will get this from most architects that you speak to?"*

Alchemist: *"Yes, as long as having clear communication about what and how the journey began, to the end result of building."*

Researcher: *"That is good? That you have the confidence to go to an architect now with this story?"*

Alchemist: *"Yes, of course, 100% confident. We are there to be having argument."*

This final comment speaks volumes about the difficulties the PKP community may face when challenging the status quo of contemporary architectural practice. This exemplifies my own interactions with Indonesian architects, in the roles of facilitators or guests during the study, who felt that the design agency of 'clients' reflected a lack of trust in their knowledge and judgment, showing disapproval at the 'design' of certain architectural models created by the participants, or showed limited interest in how the design agency of participants articulated their architectural experiences, expectations, or needs as a community.

Therefore, it can be suggested that the successful reconceptualisation of architectural principles requires the involvement of architects who are complicit in decolonial actions by the community's they work with, are open to adopting Indigenous Research Methodologies (such as Storywork) that centre the voices of Indigenous community's and their lived experiences, and make space for the alterity of the community's they work with so that the architectural process can be collaborative and participatory- weaving the goals, values, experiences, expectations, and anticipations of the 'client' into the design process.

7.3.2 Reconceptualising the Tri Hita Karana

In considering reconceptualisations of the Tri Hita Karana, I reviewed the PKP community's draft design brief, alongside extracts from the PKP community's answers to my evaluation questions. The most direct reference to the Tri Hita Karana within the answers to my evaluation questions came from Goku, who describes how different participant's drawings and architectural models (culminating in the architectural charge and draft design brief- see Appendices F and G) consider the relationship between the PKP community, their diverse worldviews, and their natural surroundings in relation to ancestral deity spirits:

> Discussing the inclusion of Balinese cultural principles within the outcomes of the Architectural Storywork activities, Q4:
>
> *Goku:* *"Yes, of course, because it is relating to the Tri Hita Karana concept by taking care. There is surrounding by nature, taking care of the nature, there are human being doing activities from many different background. Also put the different religion in one space."*

Similarly, the draft design brief focuses on the relationships between architectural buildings

and nature, and between human inhabitants and nature. The PKP community wish to use local and naturally sourced materials for any future construction work, in an effort to reduce the ecological damage caused by unsustainable material extraction. This includes the development of facilities to process and store material, such as a bamboo treatment plant or clay brick making workshop, so that the PKP community can maintain their future buildings all in-house.

Extract from Draft Design Brief:

> *"We want to use a mixture of bamboo, soil, terracotta/ clay bricks, wood, and local stone. We are open to using modern materials, like steel and concrete, if no natural alternative is possible to meet our needs."*

Extract from Draft Design Brief:

> *"We also want to have a bamboo treatment workshop to continue maintaining the buildings. But this must be supported by human resources and funding."*

The PKP community also want to foster a self-sustaining ecosystem at the Community Centre by developing their own waste management systems and converting natural resources into energy efficient tools or processes:

Extract from Draft Design Brief:

> *"We have a bad waste management system and livestock are too close to the other buildings, making it unhygienic. We need to create a more self-sustaining waste management system and show more awareness about organic and non-organic waste. Animals need to be separated from the other buildings."*

Extract from Draft Design Brief workshop:

> *"There are two water tanks [in the garden]. One is from the spring water that is for drinking or washing stuff during garden activities. The second one is water from the stream, but if there is no stream then it will be from the well [underground aquifers]. A hydropower system will be used to create and store electricity from the flow of the stream… Gutters and drainage systems will eventually be installed at the side of the*

path to supply the rice fields with water. This is combined with the water tank at the storage/ workshop space that collects rainwater during the wet season."

Extract from Draft Design Brief workshop:

"[The paper recycling building will] have glass walls and roof combined with terracotta bricks to help maintain the correct temperature and humidity for drying the paper. The glass roof helps dry using natural solar heat. Solar panels on the roof will generate electricity for the air con."

Extract from Draft Design Brief workshop:

"[The Batik Studio will] have a balcony looking out over the surrounding nature, plants used for natural dyes and with relaxing smells… [The Soap and Sewing building] is surrounded by plants and flowers than can be used for dying or making scents, and to make the space smell nice all the time."

One of the most prominent outcomes of the draft design brief workshop was the PKP community's desire to integrate rice fields into the future Community Centre and, subsequently, be connected to their local *subak* irrigation system; a UNESCO World Heritage Site since 2012 and upheld today as a model for the whole of Balinese society by embodying the Tri Hita Karana (Lansing in Watson, 2019).

Both Tulip and Indra described the addition of *subak* rice fields, whilst Kakang and Alchemist described the addition of *sawah tambak*, a rice-fish aquaculture predominantly used in Java, where fish and rice are grown together in a symbiotic ecosystem. Alchemist described the connection between the *sawah tambak* and the Tri Hita Karana in their section of the architectural charge:

Extract from Architectural Charge section 6.1.:

"The main energy coming from the sun and this takes a very important role in the [sawah tambak], helping to maintain the system including giving human life energy. It represents the challenge of the connection between the Tri Hita Karana… it is difficult to take care of it."

In both cases, the *subak* and *sawah tambak* co-inhabit architectural space with the PKP community, whether literally, sensory, or through symbiotic processes; the draft design brief of the Narasa Screen Printing building contains a central aquaponics tank that physically replicates the *sawah tambak* indoors; the draft design brief of the Yoga Shala-lala building orientates the second floor yoga space towards the rice fields to include visual and olfactory stimuli; the draft design brief of the Riang Garden connects its inhabitants to the *subak* system through pathways that feed the *subak* system with water- circulating towards, around, and through the fields.

The draft design brief workshop also expressed a clear relationship between architectural buildings and the universe, and between human inhabitants and the universe, through the Kahyangan Temple space. In Hindu mythology, the world rests on the back of a tortoise as a form of Vishnu the creator and preserver; representing the psyche's subterranean levels that support the rest of life and consciousness (Ronnberg & Martin, 2010).

Shaped like a turtle/ tortoise with five different worship rooms at each point of its pentagonal 'shell', the Temple space celebrates the world's major cosmological beliefs as the foundation of life and consciousness itself. The orientation of other buildings show an adherence to Balinese cosmological beliefs; most buildings in the draft design brief orientate one corner directly North Eastward (which would contain a simple shrine), and the Southward boundary of the Mesari Kitchen faces the cardinal direction of Brahma the god of fire.

7.3.3 Reconceptualising the Tri Angga

Any relationships expressed between the human inhabitants of a singular building are better understood by considering reconceptualisations of the Tri Angga. The Tri Angga further qualifies the Tri Hita Karana philosophy within a singular architectural space and considers the proposed sections of individual buildings from the draft design brief. Further relationships expressed between the human inhabitants of multiple buildings are better understood by considering reconceptualisations of the Tri Mandala and Sanga Mandala, both of which further qualify the Tri Hita Karana philosophy within the urban layout of multiple architectural spaces. This considers the proposed grouping of buildings from the draft design brief. To review any reconceptualisation of these three principles, I analysed the

PKP community's architectural charge and draft design brief, with supporting material from my narrative analysis of both. See Fig 7.1 (on next page) for a visual of the Tri Angga zoning of the Yoga Shala-lala, Narasda Screen Printing and Kakang Batik studios.

The Yoga Shala-lala building is zoned similarly to the Tri Angga philosophy with; a sacred upper zone on the third floor analogous to the 'head', where the unconscious psyche is explored; a neutral middle zone on the second floor analogous to the 'body', where both the unconscious and conscious psyche are maintained in harmony; and a profane lower zone on the ground or first floor analogous to the 'legs', a homogeneous, amorphous, and fluid space dedicated to the conscious psyche of the collective. There is constant circulation between these three levels, both physically and metaphorically, which reconceptualises the traditional dominance of the sacred zone into a symbiotic relationship between self/ other, unconsciousness/ consciousness that constantly flows between 'head', 'body' and 'feet'; more analogous to the human vascular or circulatory system.

Both the Narasa Screen Printing and Kakang Batik studios are zoned similarly to the Tri Angga philosophy, with; a sacred upper zone on the second floor containing exhibition and gallery spaces- the 'head' of the building within which is planted the seed of unconscious enlightenment through creativity (as described by Alchemist and Kakang in their 'Think with Things' Modelmaking Workshops); a neutral middle zone on the ground/ first floor containing spaces for creative workshops and production processes- the 'body' of the building where the unconscious and conscious psyche are maintained in harmony through 'art therapy' (as described by Kakang in their sections of the architectural charge), expressing the unconscious within the conscious and connecting to the Tri Hita Karana; and a profane lower zone containing the *sawah tambak* rice-fish aquaculture; as the representation of the Tri Hita Karana- a guiding consciousness for the entire building. This reconceptualises the traditional dominance of the sacred zone by establishing the profane zone as the guiding principle for the entire building- to bring the unconscious as far as we can into consciousness; initiating the psyche into self-knowledge (Ronnberg & Martin, 2010).

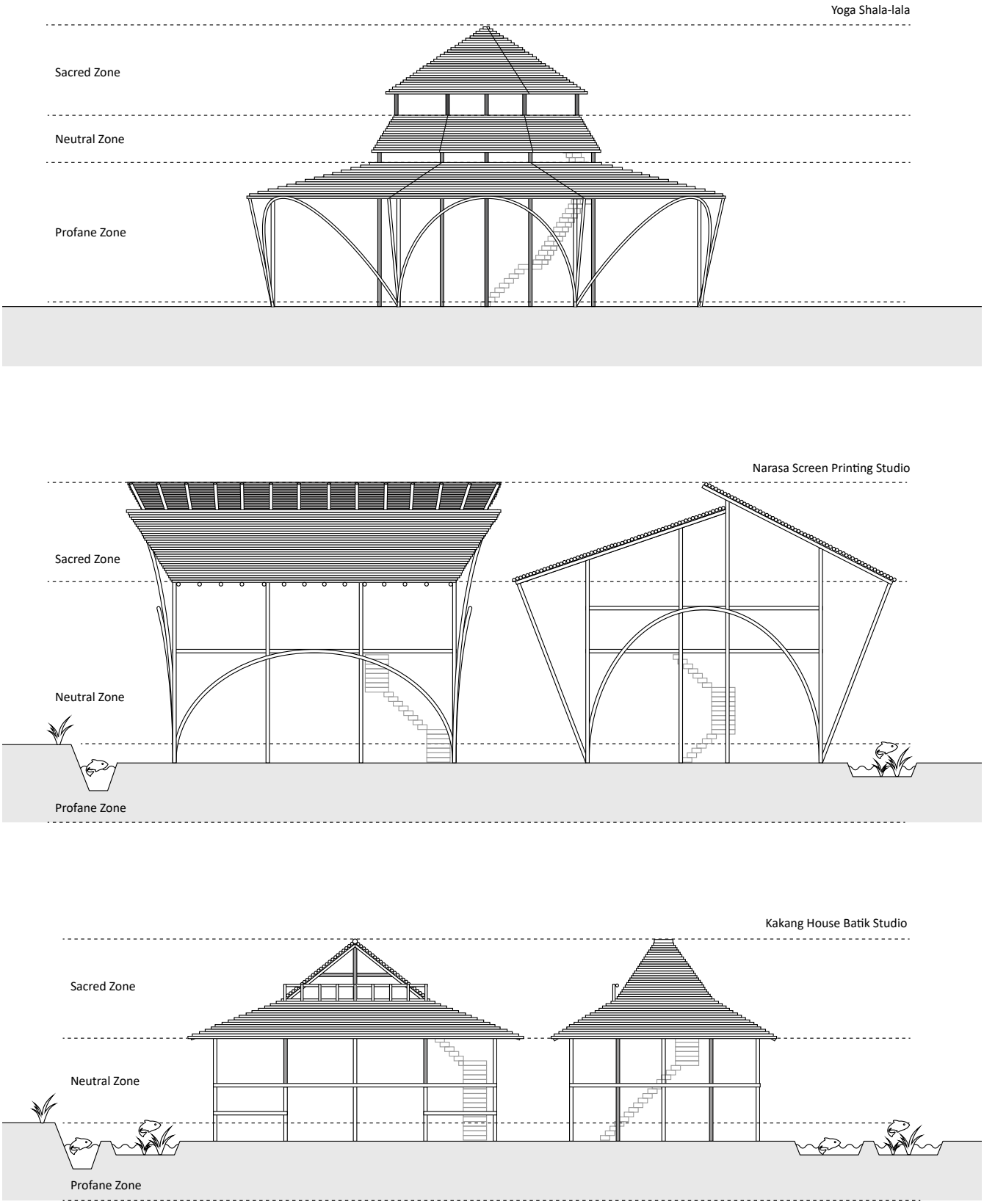


Fig 7.1. Initial Schematic Drawings of Yoga Shala-lala, Narasa Screen Printing, and Kakang Batik Studios (for Illustrative Purposes Only- exemplifying Tri Angga Zoning)

7.3.4 Reconceptualising the Tri Mandala and Sanga Mandala

The following section considers the further reconceptualisation of Balinese architectural orientation and positions by the participants, moving from discussions on individual building layouts to the wider configuration of multiple buildings- as designed and expressed by the PKP community. The Tri Mandala and its derivative, the Sanga Mandala, dictates the architectural patterns of compounds, villages, or regions based on; a) the hierarchy of sacred (*utama*), neutral (*madya*), or profane (*nista*) spaces that are orientated along the *kaja-kelod* (mountainward-seaward) axis, and b) the hierarchy of the Dewata Nawa Sanga, or the eight cardinal directions and a centre protected by nine deities, which is oriented around the *kaja-kelod* and *kangin-kauh* (sunrise-sunset) axes.

Buildings are usually positioned within the Tri Mandala and Sanga Mandala based on their functional importance; religious buildings or main dwellings are placed in the Utama Mandala with the main shrine or temple given pride of place in the North-East corner; other dwellings and pavilions are placed in the Madya Mandala; and service buildings such as the kitchen, granary, or animal stye, are placed in the Nista Mandala. The architectural pattern of the PKP Bale Tong Tong, created solely by the participants through group discussions at the culmination of the Architectural Storywork activities (see Fig 7.2), reconceptualises this tradition by; placing multiple 'service' buildings in the Utama Mandala and prioritising the Rimba School within the Northeast corner; democratising sacred, neutral, and profane buildings within the Madya Mandala; privileging the Riang Garden in the Kangin (sunrise) direction and placing the Republik Shelter in the Nista Mandala.

See Fig 7.2 on next page.

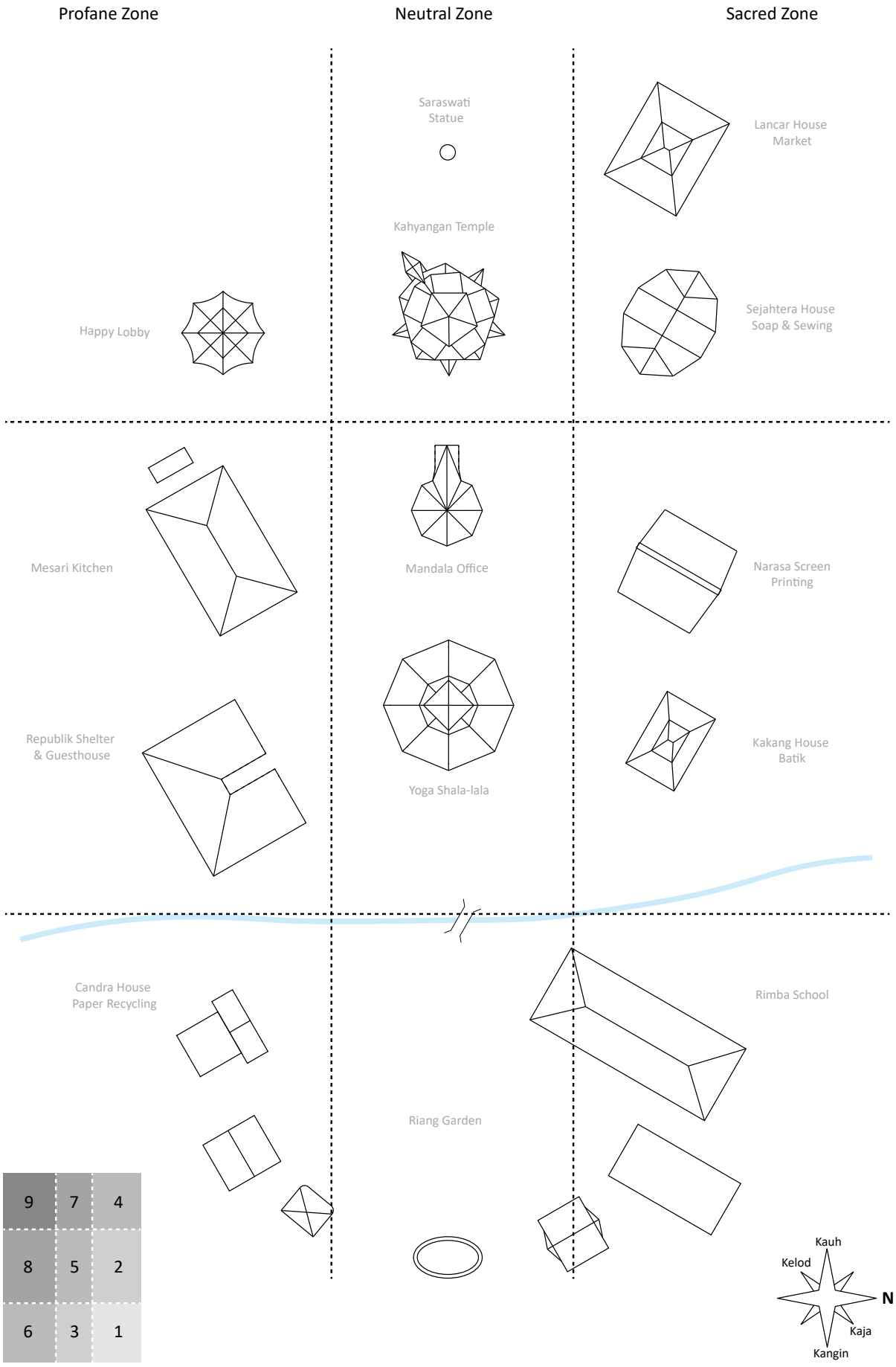


Fig 7.2. Initial Schematic Drawings of PKP Bale Tong Tong Tri Mandala and Sanga Mandala Zoning (for Illustrative Purposes Only- use key in bottom left to read the spatial zoning, lightest = most sacred)

The central placement of the Narasa Screen Printing and Kakang Batik studios in the sacred zone, pointing mountainward and representing purity and divinity, suggests a prioritisation of creative enlightenment that moves from an inward focus on the unconscious psyche to an outward focus on the conscious psyche. This closely follows the PKP community's critical perception of self-knowledge (as identified in Section 7.2 through narrative analyses of the architectural charge and draft design brief- see Appendices F and G) which suggests that the participants have, individually and collectively, taken steps towards a self-determined identity of Indigeneity by recognising the otherness within themselves and extending outwards beyond themselves to make connections with alterity. Previous commentary by participants suggest that this was only possible due to the initial data collection workshops (see Table 6.1, Workshops 1 and 2). This later allowed them to recognise the tensions between traditional Balinese values (harmony between self/ other) and colonial structures (division between self/other) within their architectural experiences (see Table 6.1, Workshops 3 and 4), and transform these tensions into new expectations of architecture that task it with a responsibility to maintain harmony between the PKP community and otherness (see Table 6.6).

The Lancar House Market, placed on the Western edge of the scared zone, has one enclosed corner whose exterior face points Northeast and whose interior face is open in the Southwesterly direction. This suggests that the 'extension outwards to accept the alterity of otherness' is a priority for the PKP community. The Lancar House Market also faces the statue of Saraswati, the Goddess of knowledge and education, reflecting the privileged position of the Rimba School in the Northeast corner of the sacred zone- a place usually dedicated to a shrine or family temple.

Rather than privileging future generations over ancestral deities, this could represent a harmonious union between the two; one that firstly subverts the Balinese opposition of ancestors/ descendants (where both the knowledge and karmic debt of ancestors must be carried and revered by descendants) and reduces it into a singular 'central' point that contains both. The traditional 'passive learning' space connects future generations with ancestral knowledge through reading and other forms of storytelling, whilst the 'active learning' laboratory connects them through spiritual connections to Land and ancestry- children are

not only using their natural environment to learn mandated school subjects through active engagement, but also learn how to take care of their ecologies through the spirits within them. This reflects the grounding of the Narasa Screen Printing and Kakang Batik Studios in the Tri Hita Karana philosophy- a harmonious balance between humans, the universe, and nature that Ibu Sari believes is the cornerstone of Balinese Indigeneity.

The sacred space of the Kahyangan Temple, the neutral spaces of the Mandala Office and Yoga Shala-lala, and the profane space of the *subak* rice fields are all located within the neutral zone. This suggests a democratisation of the three hierarchical Utama, Madya, and Nista Mandalas. The *subak* rice fields, along with the rest of the Riang Garden, are positioned in the *kangin* (sunrise) direction which denotes life (see Fig 7.2). The *subak*, established a model for the whole of Balinese society by embodying the Tri Hita Karana, can be seen as the life force of the PKP Bale Tong Tong concept.

During the draft design brief workshop, the Kahyangan Temple was considered to be one of the most important buildings on site because the Balinese should pray before and after any activity, leading the active participants to place the Kahyangan Temple model at the entrance to the site. From the perspective of a visitor entering the PKP Bale Tong Tong site, the central axis of buildings mirror the Tri Mandala zoning system with the Kahyanhan Temple in the first sacred zone, the Mandala Office and Yoga Shala-lala in the second neutral zone, and the *subak* rice fields in the third profane zone. However, similar zoning does not apply to the buildings along the site boundaries.

Whilst it is not uncommon to place dwellings in the profane zone, these are most often associated with service buildings. At first, the decision to place the Republik Shelter within the profane zone puzzled me, but it is supported by PKP community's reconceptualisation of the Tri Angga and Tri Mandala philosophies; defining profane space as a communal consciousness, neutral space as the harmony between consciousness and unconsciousness, and sacred space as exploring the unconscious psyche. In this reconceptualisation, the PKP community visualise fluid movement between all three zones with the ultimate goal of bringing unconsciousness as far into consciousness as we can.

This initiates the psyche into self-knowledge by, firstly, moving towards a definition of their 'true self' by recognising the inherent otherness within, before extending outwards to accept the alterity of otherness beyond the self. The long-term inhabitants of the Republik Shelter are mostly vulnerable individuals who have been marginalised by oppressive systems within the communal consciousness. The Shelter itself is divided into three zones- a private space, a semi-public space, and the wider public space of the PKP Bale Tong Tong- providing its inhabitants with autonomy over their use of space as well as supporting their developmental growth by a) imagining an improved quality of life through individual reflection and targeted engagements with others, and b) working towards that improved quality of life through community integration. By having the freedom to move autonomously between spatial zones, the inhabitants of the Republik Shelter can slowly begin to bring their unconscious psyche into their conscious psyche and work towards improving their quality of life through creative enlightenment.

7.3.4 Findings

The above evidence suggests that the PKP community have reconceptualised their architectural autonomy by adapting the five core principles of the Asta Kosala Kosali, to greater or lesser extents. I must take into consideration that the PKP community did not name the Manik Ring Cucupu, Tri Angga, Tri Mandala, or Sanga Mandala specifically within the creation of the architectural charge and draft design brief. The PKP community are aware of the Tri Hita Karana, which is a well-known and generalisable philosophy in Bali and a cornerstone of Ibu Sari's definition of Indignity.

However, the other terms are architecturally specific and are not widely known by the general population (see 4.4 on gatekeeping architectural knowledge). Instead, these terms were applied by me retrospectively as I identified relationships between the community and study outputs. It is possible that these principles are present within the PKP community's data because they are understood as tacit knowledge or Balinese architectural ethnoknowledge (Suryawan & Juniantari, 2021); knowledge that is expressed through language specific to a given socio-cultural group and, therefore, might deviate from a commonly held 'standard' language (Borba, 1990).

These principles use the standard language of Balinese architecture, whilst the PKP community may have expressed these principles in non-architectural language specific to their socio-cultural group. Evidence to support this is shown by the participant's awareness of a building orientation in reference to *kaja/kelod* or the eight cardinal directions, as well as their general understanding of the Tri Hita Karana and Tri Angga (as 'head', 'neck' and 'body' as described by Ibu Sari).

My findings provide strong evidence to suggest that;

- *Yes,* Architectural Storywork *has supported the PKP community to reconceptualise their architectural autonomy.* Further research, with the specific goal of practicing the five lexicons of Balinese architecture with the PKP community, could further support my assumption that gatekept architectural knowledge is still implicitly understood by Balinese communities and could be re-surfaced and re-applied as an autonomous and redirective architectural act.

7.4 Critical Perceptions of Indigenous Teachings

To consider any critical perceptions of indigenous teachings formed by the PKP community, I return to part c) of my second primary research question:

> *Has Architectural Storywork supported the PKP community, as individual members and a collective group, to reflect upon and retell their Indigenous/ ancestral teachings?*

There is supporting evidence that the PKP community have reflected upon and retold ancestral teachings through; a) new critical perspectives of Balinese culture that help to redefine their Indigeneity by recognising, amongst other forms of alterity, the 'otherness' of their ancestors inherent within their identity; and b) the reconceptualisation of the Asta Kosala Kosali principles that have been passed down through inter-generational teachings since sometime between the 13th and 16th century.

To better review this evidence, I return to- and reframe- my supporting research questions to critically ask:

- Did the PKP community recognise any Indigenous Knowledge gaps within contemporary Balinese architectural theory and practice?

- Do the PKP community feel it was necessary to centre the teachings of the Tong Tong drum, as Indigenous Knowledge, within the architectural research fieldwork? Did it fill any gaps within contemporary Balinese architectural theory and practice?
- Did any specific interventions develop directly from the teachings of the Tong Tong drum? Did these interventions inform the development and implementation of new architectural approaches by members of the PKP community?

7.4.1 Recognition of Indigenous Knowledge Gaps

There are no direct references to the PKP community recognising Indigenous Knowledge gaps within contemporary Balinese architecture and theory. However, extracts from the data do suggest that the Architectural Storywork process has;

a) introduced members of the PKP community to new knowledge that has helped them develop a framework for doing architecture:

Discussing what knowledge they have taken from the Architectural Storywork activities, Q1:

Tulip: *"Yes, it gives me a new knowledge so I can see the building at the moment… [I] have a general frame[work] of doing, of creating the architecture."*

Alchemist: *"[I] would imagine to build something, to have a brief architecture before these activities. But its unstructured and got so much distraction all the time. So, this knowledge is lead [me] to really have the overall result, from the beginning to the end… it is good guidance. Imagination align."*

b) guided them to connect with ancestral knowledge that has been applied within this framework:

In discussion on Q4:

Researcher: *"Have the activities in some way given you an opportunity to feel connected with that ancestral knowledge through your own exploration of architecture?"*

Alchemist: *"Yes, its guiding us to connected to what has been heritage."*

In discussion on Q10:

Researcher: *"And [democratising knowledge through the Architectural Storywork method] also connects you to the ancestral knowledge that is being brought through [your exploration of architecture] as well?"*

Ibu Sari: *"There is no ownership, no ego, involved there. This is the great things."*

Alchemist: *"Detachment [from oneself/ the self]."*

The claim that Architectural Storywork's connection to ancestral heritage fosters a "detachment from oneself" in which there is "no ownership, no ego", is indicative of Simpson's (2022) assertion that the stories Indigenous communities have today do not belong to them, but have passed from generation to generation and belong to their ancestors. Likewise, the stories created in their lifetime belong to their descendants.

7.4.2 Teachings of the Tong Tong

The architectural heritage that the PKP community likely feel connected to is that of the Asta Kosala Kosali, whilst their reconceptualisations of its core principles creates new knowledge that will be passed down to, and belong to, their descendants. There is some evidence to suggest that teachings associated with the Tong Tong drum are included within their connection to 'forgotten-but-now-remembered' ancestral heritage.

Within the draft design brief (and it's accompanying architectural models), the participants reference a ceremonial bamboo Tong Tong being placed in the Mandala Office- the physical and spiritual centre of the future PKP Bale Tong Tong. This Tong Tong drum is made ceremonial so that there is no confusion with local *banjar* or *subak* Tong Tong, which could a) disrupt local ceremonial and ritual duties, and b) possibly undermine the cultural significance of the Tong Tong. Instead, the participants wish to have 'walkie-talkies' and other contemporary means of communicating within the PKP community.

As a ceremonial artefact, the bamboo Tong Tong is a representation of cultural values and the principles that the PKP community task their future architectural spaces to protect- such as the Tri Hita Karana as a representation of self-determined Indigeneity and harmony with otherness, and the PKP rules (see Table 2.1) as a representation of the PKP Community

Centre's autonomy and ability to teach new knowledges in new spaces with new people. This describes a remembrance of ancestral knowledge, both architectural and otherwise, and its new applications in modern society to meet the needs of contemporary communities.

The PKP community believe that ancestral architectural knowledge has "been forgotten for [a] long time" (Alchemist, 2023- Q4 Evaluation Questions), possibly due, in-part, to the limited time they have to integrate architectural practices into everyday life. Whilst core socio-cultural beliefs heavily guide the daily lived experiences of the Balinese people, ritualistic daily offerings and commonplace ceremonial duties fill the majority of this time. On top of this, the PKP community must also put aside time to maintain multiple social-enterprises and support vulnerable at-risk individuals:

Discussing any disadvantages to the Architectural Storywork activities, Q1 and 2:

Angel: *"So, there is nothing that needs to be changed. Just that too many works, too much works happening at the same time."*

Discussing any disadvantages to the Architectural Storywork activities, Q3:

Kakang: *"The overall things of the activity, there is no negative impact, just feeling sleepy (laughing). Not because of the activities themselves. It is because too much things also going on outside."*

There was a sense amongst the PKP community that the limiting time and circumstances of their everyday life set them apart from professional architects. However, whilst the PKP community understand the benefits of working with qualified architects, they also feel a sense of autonomy over their architectural environments specifically because they are not bound by preconceived academic rules. Instead, they are eager to merge "the two sides" of profession and ethno-architectural knowledge:

The group discussing any disadvantages to the Architectural Storywork activities, Q3:

Ibu Sari: *"So, [they] mentioned the negative impact overall from these activities is not really relating to what has been done. But is not as good as those people who are studying academic, of course… [after more discussion] If we look at the two sides, from us and those [academic or professional] people, it is not really a negative impact actually."*

The group discussing any disadvantages to the Architectural Storywork activities, Q3:

Alchemist: *"One example: I don't know the strength as the bamboo yet, not as much as those people who are knowledgeable."*

Researcher: *"As well as inviting architects to discuss these kind of situations, it is maybe better for communities [if you do this again or if other communities do these activities] to have a much longer period to understand the materials, so they could do a bamboo architecture [workshop] for one or two weeks or something? Would that help? Of course, there is a gap in the knowledge but it is the circumstances and situation, and bridging that as much as possible [could be beneficial]."*

Alchemist *"Of course, to understand more."*

It was made clear at the start of the study, and before any workshops involving architectural discussion, that the participants were not expected to have specific architectural knowledge and that the focus of the study is on the transformation of their architectural experiences, expectations, and anticipations. By the end of the study, participants had a strong understanding of their architectural experiences and wanted to learn more about how to practically translate and articulate those into real-world designs.

I had not initially intended to construct a design brief with the community, as this study specifically focuses on the production of an architectural charge. At the request of Ibu Sari and the PKP community, catalysed by their need to relocate (see 2.1.2), both Indonesian and international architects were invited to share their knowledge with the participants. These discussions allowed participants to ask critical and practical questions about architecture than could be explained in non-academic settings using traditional knowledge to Indigenous architectural approaches.

The desire for a harmonious relationship between professional and ethno-architectural knowledge reflects the Indigenous Balinese philosophy of *rua bineda* ('two that are different'-Reuter, 2006), comparable to Lévy-Bruhl's (1926) "Law of Participation" or Lederach's (2005) "Paradoxical Curiosity", in which there is no ambition to deny difference or resolve tensions by permanently uniting or separating them and, instead, moves past "dualistic categories

of truth" (Yu, 2015) to accept that that things are both themselves and other things at the same time. The Tong Tong drum is both a simple slit-drum and the embodiment of countless instances of Indigenous Balinese Knowledge at the same time.

7.4.3 Interventions

As a discourse product, a device used to communicate or perform cultural rules (Fromin, 2019), the Tong Tong drum also forms discursive spaces through the knowledge expressed in its manufacture, placement, and use, which represents architectural space as spiritual, physical, and audible territories that enable new practices to emerge. It is important to Ibu Sari that the PKP community understand that architectural space can be many things at once- spiritual, physical, audible etc.- by containing many different knowledges all at once- traditional, professional, ethnographic etc.:

Discussing the length of the Architectural Storywork process , Q1 and 2:

Researcher: *"Do you think if, instead of having all the workshop activities spread out over so long, it was compressed and we did everything in a month, making a specific time for everything, if this would be better?"*

Ibu Sari: *"It doesn't affect the time, the limit time [time limit]… Everyone agree (everyone laughing). It doesn't matter the time as long as everyone understands."*

Discussing the possibilities of social change occurring from Architectural Storywork, Q10:

Ibu Sari: *"Of course, this knowledge help the social change in the community because, once they see the building, or once they are here through the activities as well, people will understand more and deeper about the essence of the activities, the building we are going to build, [our] story behind [it], and the overall history."*

This communal understanding of "the overall history" (ancestral knowledge) and "our story" (reconceptualised knowledge) mirrors and transforms the sense of unity, ethnicity, locality, and identity expressed by the Tong Tong drum, by allowing many different people to see, hear, and feel similar things that they might otherwise not have known; promote

interconnectedness between people who have had knowledge withheld or censored from them, provide opportunities to liberate this knowledge, and support the PKP community in retelling this knowledge.

The retelling of this knowledge is clearly visible in the process and outcome of the draft design brief workshop in which the PKP community were able to explore their existent ethno-architectural knowledge alongside traditional knowledge "remembered" throughout the Architectural Storywork process and professional architectural knowledge shared by practising architects.

7.4.4 Findings

Based on this evidence, I believe that my findings do suggest that;

> *Yes,* Architectural Storywork *has supported the PKP community to reflect upon and retell their Indigenous/ ancestral teachings,* as well as critically re-consider and reconceptualise them within the context of modern society and their contemporary needs.

7.5 Summary of Findings and the Content for Discussion

My findings suggest that the application of Architectural Storywork has:

- Supported new critical perspectives of Balinese culture within the PKP community. A review of the final evaluation questions conducted with the participants suggests that some members of the PKP community:
    - Recognised unmarked colonial influences inherent within the buildings of the PKP Community Centre, which originate from Bali's colonial past and manifest through subjugation of pre-colonial Balinese culture and projections of the "Indigenous Other".
    - Recognised the re-classification of Indonesian vernacular architecture, and the gradual erosion of Balinese architectural autonomy through contemporary architectural institutions.
    - 'Remembered' and 'connected' to pre-colonial values through 'explorations' of their 'own self', which suggests new critical perspectives of Balinese culture in light of the unmarked colonial experiences permeating through contemporary Balinese society.

- Supported, to some extent, the PKP community to recognise the 'otherness' inherent in their identity as a way to rediscover themselves. A review of the final evaluation questions conducted with the participants suggests that some members of the PKP community were engaged in individual moves towards a *recognition* of 'otherness' within their identity which was not present prior to this study. I emphasise *recognition* here, because it is clear that Architectural Storywork helped the PKP community to 'rediscover' and 'remember' their intrinsic link with alterity by re-centring the traditional Balinese philosophy of *tat twam asi* and the PKP principle of 'from us to us' within their experiences of architecture, where 'us' is simultaneously both you and me, known and unknown. A simple narrative analysis of both the architectural charge and draft design brief, which considers the archetypal symbology within visual stories and the inclusion of principles from my Storywork methodology, suggest that the participants share a communal narrative thread towards the recognition of 'otherness' within their collective identity.

- Supported, to some extent, the PKP community to reconceptualise their architectural autonomy by adapting the five core principles of the Asta Kosala Kosali. These adaptions appear to have occurred through the application of the participant's ethno-architectural-knowledge; where the traditional orientation, layout, and patterning of buildings on the PKP Bale Tong Tong site have been altered to better express the priorities of the PKP community including; creative enlightenment, active learning, and, to some extent, the acceptance of 'otherness' (see Figs 7.1 and 7.2).

- Supported the PKP community to reflect upon and retell their Indigenous/ ancestral teachings through a desire for harmonious relationships between professional and ethno-architectural knowledge; reflecting the Indigenous Balinese philosophy of *rua bineda* ('two that are different') that moves past dualistic categories of truth. This retelling is clearly visible in the draft design brief, supported by the PKP community's reconceptualisation of their architectural autonomy.

These findings only ask further questions about the implementation, implications, and future recommendations of the Architectural Storywork methodology, which are considered in Chapter 8: Discussion.

8.0 Discussion

This chapter reflects on the methodological process of Architectural Storywork, as developed within this study, in relation to its situated implementation with the PKP Community Centre. Divided into four key sections, this chapter considers the implementation of Architectural Storywork with the PKP community, the impacts of this methodology on the research outputs, the ethical accountability of this process, and its possible generalisability and reproducibility in practice.

8.1 Implementation

The *Tong Tong* Storywork methodology has been continually developed from relevant literature and experiential knowledge on specific topics related to the PKP community in Bali, Indonesia. Fig 8.1 isolates eight core steps in the development of the *Tong Tong* Storywork Methodology and identifies the main impacts of each step. The impact of each step was not immediately clear at the time and only became apparent through critical reflections on the study's findings.

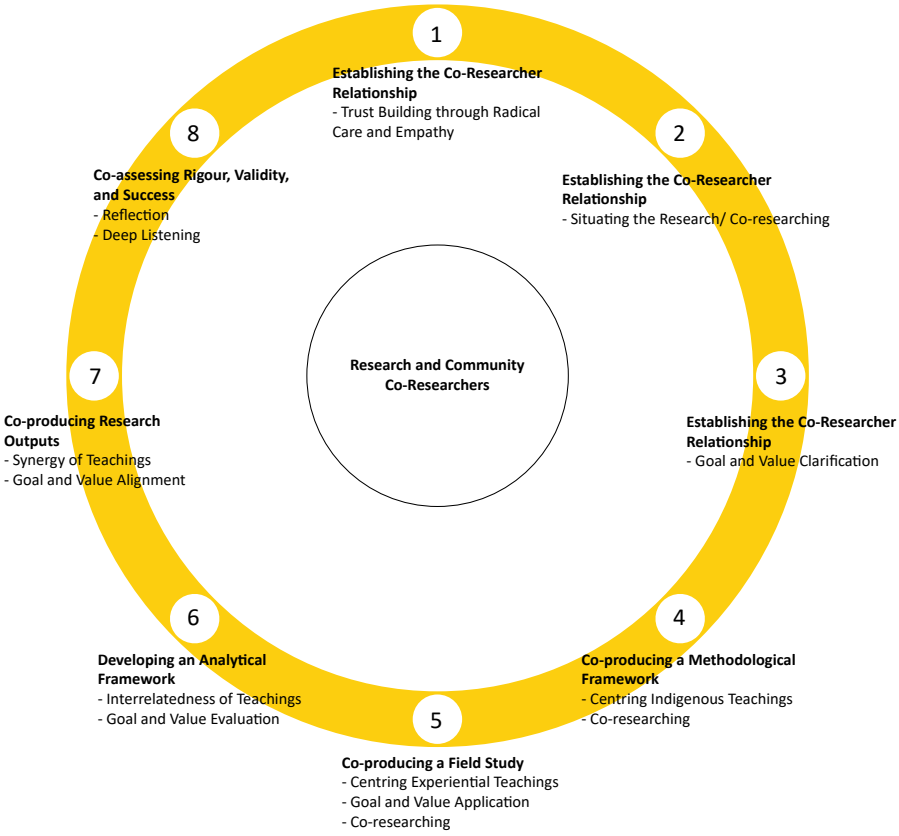


Fig 8.1 The Eight Steps of Architectural Storywork and their Impacts

8.1.1 The Eight Steps of Architectural Storywork

The following table links these steps and impacts to the tools that were used, offering some more information that details the broader impact of each step. This information helps to establish the generalisability of Architectural Storywork and consider its application and facilitation in other communities.

Table 8.1- The Eight Steps of Architectural Storywork

Steps 1, 2, and 3: Establishing the Co-researcher Relationship • Trust Building through Radical Care and Empathy • Situating the Research/ Co-researching • Goal and Value Clarification
Tools: Indigenous Research Methodologies (see 3.4, implemented in 2.0: Settings & Strategies)
'Radical care' helps to build trust with marginalised groups by engaging in a process of communal care that recognises what it means for individuals and groups to feel and provide care, survive, and even thrive in environments that challenge their very existence (Hobart & Kneese, 2020). 'Radical empathy' helps to build trust with marginalised groups by taking actions that will not only help others but will also improve society. It tasks us with, firstly, understanding ourselves so that we can open ourselves up to the experiences of others; allowing authentic connections to ourselves and others (Givens, 2021). This is similar to the Indigenous practice of listening with the three ears- two ears and the heart (Archibald, 2008). Engaging in these practices situates the researcher as an embedded part of the community within the research practice, whilst simultaneously situating the community as co-researchers within the research practice; promoting a joint understanding of people's goals and values through immersive experience. This helps to centre the needs of the community within the study's "research questions".
Step 4: Co-producing a Methodological Framework • Centring Indigenous Teachings • Co-researching
Tools: Storywork Principles (see 3.4.2 and Table 3.3), Discourse Products and Discursive Spaces (see 3.1.1 and Table 3.1)
Any engagement with the Indigenous Knowledge held in stories, including Indigenous, Digital and Transformative Storywork, should adhere to the seven Storywork principles (Archibald, 2008) to ensure respectful and authentic research practices. Indigenous stories are not 'universal', with no presumed listeners or omniscient narrators. Instead, Storywork makes transparent the listener and teller in the dialogic nature of storytelling- so that a change in teller or lister changes the perspective of how the story is told (Kinloch & San Pedro, 2014). The knowledge held within stories changes based on how it is told through performative discourses; context-specific uses of an abstract system of principles for communication by words, music, visual images, styles, facial or hand gestures, or skills, that are outwardly visible, audible, tactile etc. (Archibald, 2008; Archibald et al., 2019; Fromin, 2019). These performative stories provide the

architectural researcher with a discursive and engaged method of architectural inquiry with a focus on the surface tensions embedded in the status quo, so that new design cultures and tools can be developed that empower the most vulnerable (Toffa in Troiani & Ewing, 2020).

Step 5: Co-producing a Field Study

- Centring Experiential Teachings
- Goal and Value Application
- Co-researching

Tools: Archetypes and User-created Personas (see Table 6.1, Workshop 1 and 3), Life Design (see Table 6.1, Workshop 2), Think with Things (see Table 6.1, Workshop 4), and the PKP Rules (see Table 2.1 and Table 2.3)

Involving participants as active researchers can help create emancipatory knowledge by co-designing workshops that use bottom-up participatory methods and tools originating from, and sensitive to, the context the research works within (Wheeler, 2009; 2020; Escobar-Tello, 2021). Co-designing fieldwork tools with community leaders, gatekeepers, or participants allows the researcher to adapt appropriate methods towards the accurate and authentic retellings of the communities' lived experiences. Fieldwork must be constantly reflexive, responsive, and sensitive, in order to confront any implicit and explicit colonising, anthropocentric or academic ideologies, centring the goals and values of a community within the application of research methods (Akama, 2017).

Step 6: Developing an Analytical Framework

Interrelatedness of Teachings

Goal and Value Evaluation

Tools: Deconstructive Discourse Analysis and Discursive Interpretative Phenomenological Analysis (see 6.2 and Table 6.4)

Interrelatedness is one of the seven Storywork principles described by Archibald (2008; 2019), where the researcher and/or community discover new teachings (new ideas or meanings) by engaging with stories in a combination of emotional, intellectual, physical, or spiritual ways. These new teachings may come from individual stories, both Indigenous and experiential, or from a narrative thread woven across multiple stories due to their relational nature (ibid). In both cases, teachings are directly linked to the listeners' understanding of a story's narrative sequence- both the "story" and its discursive performance (Chapman, 1978; Liu et al., 2019). Understanding the narrative sequence of the story unlocks "another story contained within [it]" (Archibald, 2008, p.84). This requires multiple levels of rigorous discourse analyse that look beyond the surface tensions of the status quo to consider exactly 'what' is being told and 'how' it is being told (Liu et al., 2019).

Table concludes on next page.

Step 7: Co-producing Research Outputs

- Synergy of Teachings
- Goal and Value Alignment

Tools: Conceptual Story Narratives (see Table 6.5, Output 1), Architectural Charge (see 3.3.3 and Table 6.5, Output 3), Design Brief (see Table 3.2 and Table 6.5, Output 4)

Synergy describes the beneficial power of Storywork to make meaning in the space between the story, the context in which the story is used, the way that the story is told, and how one listens to the story (Archibald, 2008). This process helps the listener consider new ideas or deepen existing ideas by learning from the characters and events of a story as *performed discursively by others*- usually with the purpose of strengthening their emotional, intellectual, physical, or spiritual wellbeing (ibid, Archibald, 2019). A reciprocal relationship should be fostered between the researcher and a community within a double hermeneutic approach. The researcher can learn many lessons from the content and performance of the participant's stories. These lessons are often framed as "research findings" using academic or architectural notations.

When the researcher shares these findings back to a community, they are depicting a story of the participants. The content and performance of this story will teach lessons to the community about their sense-making and world-building activities. Researchers must be aware of this influence and attempt to utilise stories as counter-narratives to their own settler-colonial understanding of design through the creation of 'boundary objects' (Martinez, 2021). These are curated architectural works, co-produced by the researcher and the community, that carry and communicate connective stories across different contexts, giving meaning to stories that might have very different practices, competences, tools, or languages (Star & Griesemer, 1989).

Step 8: Co-assessing Rigour, Validity, and Success

- Reflection
- Deep Listening

Tools: Focus Group Evaluation (see 7.0: Findings)

Ideally, connective stories will help establish new critical perspectives of architectural knowledge relating to the development of new design cultures and tools that empower communities to achieve their goals and maintain their values. To evaluate the success of the study, the researcher can return to a stage of 'deep listening' (Scharmer, 2016) in which they listen to authentically connect with the experiences of the participants as co-researchers, going beyond the trappings of self and ego to genuinely focus on helping to bring the best possible future into being. Deep listening should ask critical questions of the research related to the goals and values of the community; did the research produce design tools capable of healing, building relationality, recover possibilities of listening to the communal through strategies that help articulate and comprehend, or make communities aware of their own architectural narratives of what was, what remains, and what could be (Vasquez, 2017; Schultz, 2019)?

8.1.2 Framework for Relational Accountability

This process aims to ensure rigour within the research process by implementing multiple layers of accountability through genuine engagement with Indigenous peoples. This is described as 'relational accountability' by Wilson (2008) and Davidson (in Archibald et al.,

2019), which aims to ensure that I maintain respectful relationships with members of the PKP community. At every stage of the research process, I attempt to maintain respectful relationships in the vein of Derrida (Vitale, 2018) by opening myself to the absolute alterity of the PKP community and integrate that alterity into the research process; accepting multiple readings of our world (Dei et al., 2000). Whilst each Part of this thesis builds upon many important topics, each also exemplifies a key research method that ensures these multiples layers of accountability are applied throughout the study:

Table 8.2- The Four-Part Framework for Relational Accountability

Part 1: Framework (Steps 1, 2, and 3)
Indigenous Research Methodologies
• Centres research inquiry that seeks to regenerate Indigenous ways of knowing that craft educational spaces 'for Indigenous people, by Indigenous people' (Smith, 2021; Windchief & San Pedro, 2019).
• The design and implementation of research must be guided by Indigenous cosmologies, axiologies, and epistemologies (Smith, 2021; Wilson, 2008; Kovach, 2009; Chilisa, 2011).
• Are always people and place specific, arising from Indigenous frameworks of knowledge (Smith, 2021; Tuck & McKenzie, 2015).
• Practitioners must apply relational validity to place, fulfilling an obligation to be accountable to the relations between Land, sovereignty, belongingness, time and space, reality, and futurity that shape Indigenous Research Methods (Tuck & McKenzie, 2015; Wilson, 2008; Geoman, 2013; Byrd, 2011; Salmón, 2012; Windchief, 2015).
• Critical Indigenous pedagogy support Indigenous knowledge systems to "promote, protect, and preserve Indigenous languages, cultures, Land, and people" (Garcia & Shirley, 2012, p.80).
• Focuses on recognising "self-in-relation"; a conscious interdependence between the individual and collective, framing knowledge as a co-production using dialogic and relational methods, and located in the development of ourselves in relation to others (Kovach, 2010; Tuck, 2009).
• Recognises that research is what people do every day and is not hallowed, special, or separate from workaday actions (Patel, 2015).
Part 2: Literature (Step 4 for Reviewing Literature and Step 7 for Writing Literature)
Co-research (adapting Participatory Action Research)
• Research that is situated at the intersection of creative techniques, post-colonial/ decolonial methodologies that centre participants as protagonists within emancipatory practices; using creative arts-based methods to give voice to the worldviews and lived experiences of communities, whilst deconstructing and critically questioning the presence and reproduction of colonial social structures and systems of power (Lykes & Scheib, 2015; Escobar-Tello et al., 2021).

- It inverts the relationship between the researcher and the researched by shifting perspectives away from the institutionalised knowledge systems and 'expertise' of the researcher, to focus on the Indigenous knowledge systems and experiential expertise of the participants (Chambers, 1995; Wheeler, 2011).
- Develops community-centred research tools that engage community members as co-scholars or co-researchers within research studies in a process of creating emancipatory knowledge (Gruenewald, 2003; Northway, 2010; Stanton, 2014).
- Applying research at an Indigenous and community-based level as a project to decolonise ourselves as researchers. Researchers must break down us/them dichotomies by not only inviting the community to be co-researchers but also becoming an active community member themselves; developing longitudinal relationships with the community, cultural leaders, Elders, or knowledge holders before the research begins; inviting the community to incorporate their needs into the research question, collection tools, and analysis; sharing all findings to the community so that they can use those research findings to teach their future generation; and constantly asking "how can I become a learner instead of a researcher, so that the community can share their Indigenous Knowledge through storytelling?". It is not about the struggles of the community, but about our collective struggles; it is research of 'us' and 'we' (Datta et al., 2015; Datta, 2022; Rix et al., 2019).

Part 3: Fieldwork (Step 5)

Architectural Ethnography

- Research practices that utilise ethnographically found or created objects as dialogic tools for communicating individual and collective experiences of architecture- focusing on the ordinary forces, arbitrary decision making, and conditions of experience over prevailing theories or practices, to explain the meaning of architectural design (Yaneva, 2009; Bandoni et al., 2010).
- Channels a community's intimate ethno-knowledges over space, its limits, boundaries, borders, and possibilities to expand architectural sites into political projects and continuous practices of making space for Indigeneity (Karami, 2018; 2019).
- Boundary objects, such as architectural models, are co-constructed in the space between the community and the researcher as a form of sensory autho-ethnography; allowing participants to communicate stories and examine their own experiences of architecture by inhabiting or 'living in' their models, creating a 'place-event' in which the community and researcher are mutually emplaced in relation to the architectural model as they literally and metaphorically move through its embodied narrative (Pink, 2009; Martinez, 2021; Marco et al., 2021; Bosmans et al., 2022).

Part 4: Findings (Step 6 for Analysis and Step 8 for Outputs)

Architectural Deconstruction

- Efforts are jointly made by the researcher and participants to recognise, subvert, and harmonise any architectural oppositions that cause or perpetuate moral-ethical tensions within the daily experiences of the community; so that new architectural theories and practices can be constructed to replace older, less relevant, or directly harmful ones such as colonial values that have eroded traditional ways of being or place-based belief systems that no longer serve contemporary local communities (Parker, 1989; Wigley, 1993; Macleod, 2002; Coyne, 2011; Vitale, 2018).

8.2 Methodological Influences on Architectural Design

The above steps, topics, and tools of Architectural Storywork contributed to the final outputs of an architectural charge and draft design brief (see Appendices F and G respectively), which propose an initial architectural design for the PKP Bale Tong Tong community centre- the name given to the future architectural space developed in this project (see 2.2.2). Section 7.3 examined how the Architectural Storywork methodology has influenced the proposed form, layout, configuration, circulation and spatiality of the PKP Bale Tong Tong design in relation to the Asta Kosala Kosali- the guiding manuscript of Balinese architecture. To further consider the influences of Architectural Storywork, this section considers the proposed buildings' form, layout, configuration, circulation, and spatiality in relation to the stories and discursive practices integrated into the design process (Grant et al., 2018).

8.2.1 Categorisation of Architectural Characteristics

It is not possible to conclusively state that certain stories or discursive practices used in the design process have directly influenced the forms, layouts, configurations, circulation, and spatiality of the PKP Bale Tong Tong design. Multiple factors could have influenced the participant's decision-making throughout the study that were unrelated to the stories or discursive practices used. Indigenous architecture is also embedded in ever-changing and place-based aesthetics than can influence design choices using Indigenous palettes, colours, designs, patterns, geometry, sculptural forms, and shapes used, Indigenous natural resources, materials, and construction methods, or newly introduced approaches that have been adopted, adapted, or nuanced to Indigenous cultural and social needs (Matunga in Grant et al., 2018). This could have affected the PKP Bale Tong Tong design in ways unbeknownst to me.

However, I attempt to draw comparisons and correlations between architectural characteristics of the PKP Bale Tong Tong design and the different stories or discursive practices introduced within its design process. I also consider if these same characteristics are present in two other designs for buildings at the PKP Community Centre, titled Precedent 1 and Precedent 2 respectively, both of which did not integrate stories or discursive practices into their design processes.

These depict prior designs that were exemplified and used to guide or consider the methodology of this study in the early stages of the PKP Bale Tong Tong. Precedent 1 is a 2019 design shared with me by Ibu Sari, created by an unnamed Balinese architect, and depicts a single building containing a kitchen, cinema, and bamboo workshop. Precedent 2 is a 2020 design by Irish architectural designers, Jack Lehane, Seán Conlan-Smith, and myself, depicting two adjoining buildings containing an open plan yoga shala and creative workshop/ studio space, and a separate physiotherapy space (see Fig 8.2 for visuals of the PKP Bale Tong Tong design and Appendix A for visuals of Precedents 1 and 2).

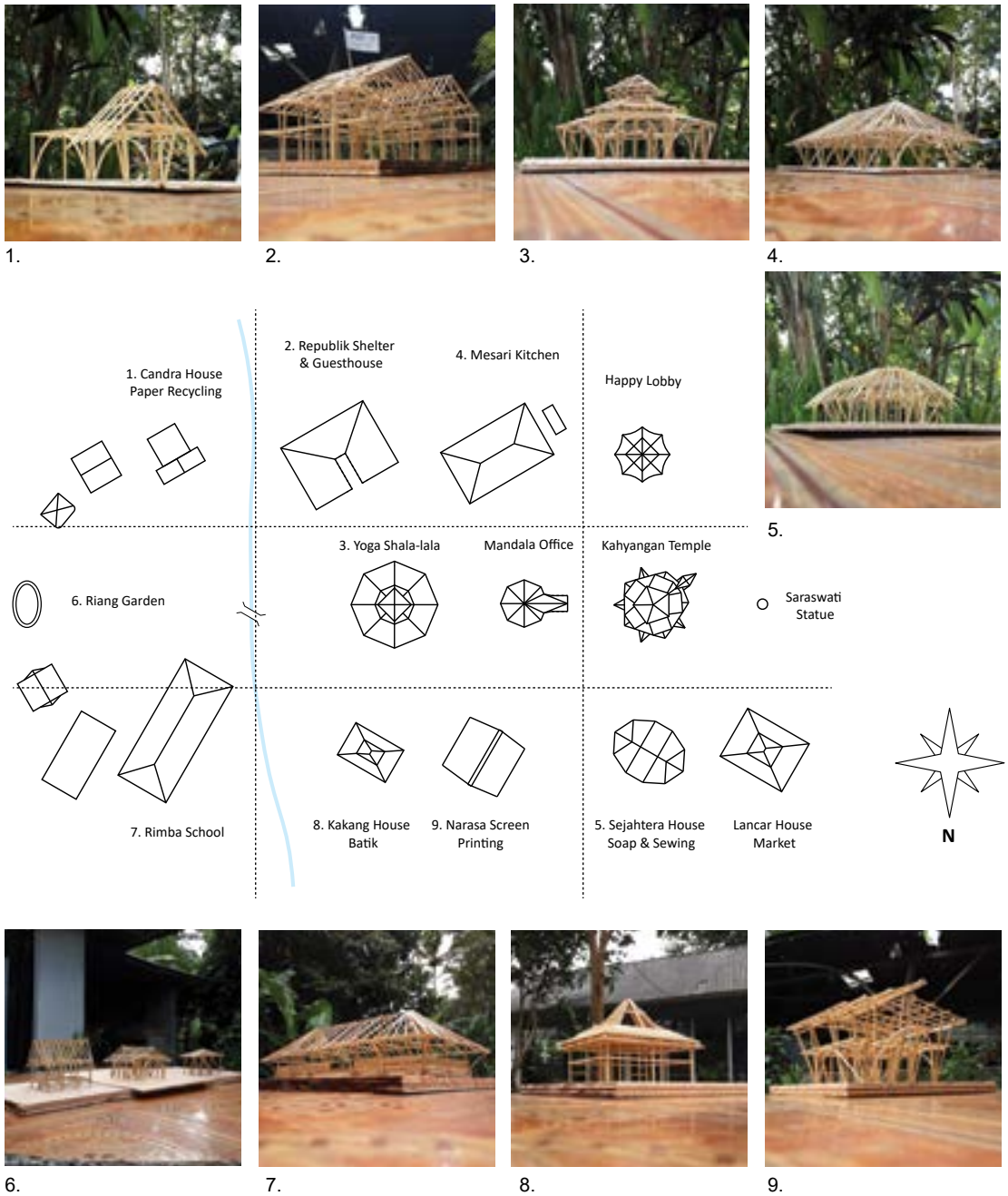


Fig 8.2 Architectural Characteristics of the PKP Bale Tong Tong (sample models and orientation)

Table 8.3- Architectural Characteristics of the PKP Bale Tong Tong

Layout: a structured arrangement of items within certain limits.

- The Mandala Office is the central point (representing the 'third position' or 'centre' that balances a binary axis, such as self/other) and would be the first building to be constructed. This could have been influenced by my *mandala* methodological framework (see 4.0).
- The Mandala Office and Yoga Shala-lala are arranged as a Bale Tong Tong and *Wantilan*; 'thresholds' or transition spaces between various architectural oppositions. The Mandala office design contains a ceremonial *Tong Tong* drum made from bamboo. The Yoga Shala-lala is a space for the community to gather, contemplate, and take actions. This could have been influenced by my *mandala* methodological framework (see 4.0).
- The overall layout of the PKP Bale Tong Tong reconceptualises the 9-grid structure of *Sanga Mandala.* This could have been influenced by the 'Think with Things' discursive workshop (see Table 6.4, Workshop 4) which arranged a site plan based on the PKP community's experiences of space. As the administrative space for the PKP Community Centre's social enterprises and shelter, the Mandala Office would engage the PKP community with binaries of self/ other, public/ private, past/ future- other people, other places, other knowledges and experiences, other generations past and future- in relation to their own self-determined identity.

Configuration: an overall form dependent on the relative arrangement of items within space.

- The *Tri Mandala* and *Sanga Mandala* reconfiguration of the overall site plan (see 7.3.4), prioritises education and the sharing of knowledge with new people in new spaces. This is achieved by privileging the Rimba School in the sacred North-east corner and placing publicly accessible sites of industry in the scared *Utama* region, such as Lancar House Market, Sejahtera House Soap & Sewing, Narasa Screen Printing, and Kakang House Batik. This could have been influenced by the 'User-Created Persona' discursive workshop (see Table 6.4, Workshops 1 and 3).

Circulation: how arrangements in space allow for, guide, or restrict movement.

- The Mandala Office has a one-way system for entrance and exit. This could have been inspired by the *mandala* as a prominent symbol within the methodology used with the PKP community, or as an important socio-cultural and architectural principles (see 4.0). *Mandalas* are an abstract architectural space, 'built' outwardly from a central point before being critically inhabited- signified by an inward return towards the central point whilst engaging in continuous acts of self-determination.
- The publicly accessible buildings reconceptualise the *Tri Angga* philosophy (see 7.3.3) to create circulation paths that could have been inspired by the narrative structure of the research (a "story" communicated by discourse). Visitors to these buildings would move through spatial narratives of process; experiencing the story of each space, what they produce there, and why.
- The overall site plan circulation priorities access to the Kahyangan Temple Space, Mandala Office, and Yoga Shala-lala as central nodes for the wellbeing of the community in general, whilst limited access to the Riang Garden and Rumba School, which are protected as key nodes of self-sustainment. The Riang Garden grows native fruits and vegetables, contains other natural resources (such as bamboo and clay), and has a workshop to treat these natural resources for use in construction. The Rumba School teaches through active-learning and engages students in the protection and preservation of natural resources and socio-cultural connections to land. This could have been influenced by the discursive workshops that helped form the architectural charge (see Table 6.6, Output 3).

Spatiality- the compositional properties of space related to place-based identity and meaning, including Indigenous colours, designs, patterns, shapes and geometries, forms, natural resources, materials, construction methods and technologies, or introduced materials, construction methods and technologies.

Indigenous Colours

- No colours are depicted in the design. However, different coloured plants and flowers were selectively placed within physical architectural models, representing different spatial events based on people's experiences, feelings, and emotions of those events (see Table 6.6, Output 4).

Indigenous Designs

- The Kahyangan Temple Space is depicted as a turtle, which could have been inspired by the 'Think with Things' (see Table 6.4, Workshop 4) and discursive output workshops (see Table 6.6). In Islamic faith, this symbolises a return to God through God's guidance. The Kahyangan Temple provides space for the five major religions; Islam, Buddhist, Konghua Buddhist, Christian, and Hindu in a mutual return to God's creations- the relationships between God, nature, and people.

Indigenous Patterns

- No patterns were depicted to my knowledge.

Indigenous Shapes and Geometries

- The Happy Lobby, Mandala Office, and Yoga Shala-lala have octagonal geometries, which could have been inspired by the *mandala* framework's circular structure divided into eight sections mirroring the eight cardinal directions and central divinity of the *Dewata Nawa Sanga* (or 'nine fold hierarchal space)- see Fig 4.3.

Indigenous Forms

- The Kakang House Batik and the Lancar House Market take the traditional Javanese Joglo form (that has a type of Mansard roof that slopes in all four directions from a small ridge, with a break in the middle, and the highest slope has the steepest angle).
- Other rectangular plan buildings take a traditional Balinese form dictated by the *Tri Angga* and *Tri Mandala* zoning philosophies. There is limited evidence that inspiration came from stories or discursive practices.

Indigenous Natural Resources

- The Riang Garden supplies ecological resources, and the facilities to use those resources, that help sustain people and place. This could have been partially inspired by the discursive output workshops (see Table 6.6, Output 3).
- The Rumba School supplies educational resources, primarily Indigenous Knowledges, that help remember and retell socio-cultural beliefs in ways that meet the contemporary needs of the community. This could have been partially inspired by the discursive output workshops (see Table 6.6, Output 3).
- The sites of production (Mesari Kitchen, Lancar House Market, Sejahtera House Soap & Sewing, Narasa Screen Printing, and Kakang House Batik) utilise ecological resources for the financial sustainment of the community. This could have been partially inspired by the discursive output workshops (see Table 6.6, Output 3).

Indigenous Materials

- Bamboo, stone, and rammed earth are the core materials used for every building design. Other Indigenous materials such as terracotta and woven grass/ palm leaf are incorporated into some designs. This could have been partially inspired by 'Model-Making' discursive workshops with Indonesian architects (see Table 6.6, Output 4).

Indigenous Construction Methods

- The bamboo designs follow traditional structural layouts. Traditional joints, which use minimal or no fixings, were preferred. Stone was suggested for the foundations, including the *nasarin* or 'laying of the first stone' ceremony. This could have been inspired by 'Model-Making' discursive workshops with Indonesian architects (see Table 6.6, Output 4).

Indigenous Technologies (Knowledges of Making and Doing)

- Building measurements are all based on the anthropometric measurements of the inhabitants using traditional Balinese form of measurement related to the measurements of the inhabitants. This could have been inspired by my Think with Things Workshop (see Table 6.1, Workshop 4) in which participants were guided to measure space using their own hand and foot dimensions, or the model making discursive workshops with Indonesian architects (see table 6.6, Output 4).

Introduced Materials

- Glass panels and windows were introduced to certain designs to help regulate temperature or lighting. There is limited evidence that inspiration came from stories or discursive practices.

Introduced Construction Methods

- 'Earthbag' construction (long bags, roughly 50cm diameter and many metres long, filled with compressed earth and stacked on top of each other to produce walls in a method similar to coiling in traditional pottery or contemporary 3D printed buildings) are used to help maintain temperature and humidity without the use of concrete. This could have been inspired by 'Model-Making' discursive workshops with Indonesian architects (see Table 6.6, Output 4).

Introduced Technologies

- The PKP community engaged in participatory design practices in the design of these buildings and have stated that they will continue to engage with architects in participatory ways (see 7.3.1).

A summary of this comparison can be found on the next page.

Table 8.4- Summary Comparison of Architectural Characteristics

Architectural Characteristics	**PKP** Bale Tong Tong	Precedent 1	Precedent 2
Layout	☒	☐	☐
Configuration	☒	☒	☐
Circulation	☒	☐	☐
Spatiality:			
Indigenous Colours	☐	☐	☐
Indigenous Designs	☒	☐	☐
Indigenous Patterns	☐	☐	☐
Indigenous Shapes and Geometries	☒	☒	☐
Indigenous Forms	☒	☒	☒
Indigenous Natural Resources	☒	☒	☐
Indigenous Materials	☒	☒	☐
Indigenous Construction Methods	☒	☒	☐
Indigenous Technologies	☒	☒	☐
Introduced Materials	☒	☐	☐
Introduced Construction Methods	☒	☐	☐
Introduced Technologies	☒	☐	☐

This comparison suggests that the Architectural Storywork methodology has the potential to influence architectural designs in ways that normative Indigenous and non-Indigenous practices might not. Precedent 2, which used non-Indigenous practices, produced a design with minimal similar architectural characteristics, suggesting that it would not have met the needs or goals of the PKP community. Precedent 1, which used Indigenous practices, produced a design with many similar architectural characteristics, but did not always reconceptualise or adapt these characteristics to meet the needs or goals of the PKP community. Not all of the architectural characteristics integrated into the PKP Bale Tong Tong design were influenced by the Architectural Storywork methodology and, instead, could have been influenced by other factors that I did not understand in my positionality as the researcher.

This suggests the need for greater relational accountability between architects, communities, and researchers as co-creators of architectural practice; so that the values and goals of communities are fully understood and integrated into all stages of architectural development, including pre-brief, brief, design development, construction, and inhabitation/ post-occupancy.

8.3. Relational Accountability

Whilst the architectural designs produced by this research move towards the three key values and goals of the PKP community- namely self-determined identity, architectural autonomy, and new knowledge production- there are significant barriers to achieving these goals within subsequent stages of architectural development. This is due to the current socio-cultural climate of Bali, where the influence of settler colonial values heavily guides urban planning policies and architectural education. However, Wheeler's (2020) Transformative Storywork, alongside other storytelling activities- see *Political Values and Narratives of Resistance* (Anciano & Wheeler 2021), sets the precedent that policy change for social betterment can be achieved through Storywork practices.

Relational Accountability is a core tenant of Storywork methodologies (and Indigenous Research Methodologies in general), and is related to the researcher developing and maintaining respectful relationships with their participants, as co-researchers, and the wider community they are working within (Davidson in Archibald et al., 2019). This goes beyond seeking permissions from university ethics committees or other institutional boards, and pertains to the permissions and blessings of Indigenous peoples to conduct research in/ with/ from/ by their communities, and devising a framework in which research is conducted on mutual respect, recognition, responsibility, and sharing (ibid). The development of my discursive methodology (see 4.1) begins to establish these relationships through conversations with Ibu Sari, the PKP community, Indigenous head of customs, *banjar* Elders, and Indigenous scholars. Authentic accountability in these relationships is a core principle in achieving a level of social change, which can be seen within Transformative Storywork's core practices (Wheeler et al., 2020) that support Miller et al.'s (2005) participatory checklist- see Appendix C, Table C.2, 'Humanising Practice'.

8.3.1 Relational Ethics

Key to this accountability is an understanding that what we see as 'just', 'right', or 'moral' evolves with time, place, or in relation to different socially constructed identities- including race, gender, class, caste, religion, age, ability, sexuality, etc. that are defined by territories of 'apartness' and underwritten by fear of the other (Anciano & Wheeler, 2021). The political values of individuals or groups are not fixed, or always legible to others. However, narratives

can be used as a means of surfacing and articulating these values (ibid). Whilst my study developed a set of ethical principles for me to follow in my research, it did not include the different values of morality and ethics that are unique to the individuals and collective group of the PKP community, maintaining an academic territory into which I failed to fully invite the absolute alterity of the study participants. This study also neglected to return to these ethical principles so that they could adapt over time, place, or due to the changing definitions of Indigeneity occurring within the PKP community. This neglect imposed certain limitations on the study:

Table 8.5- Limitations and Characteristics

Transferability/ generalisability
My initial Ethical Guidelines (see Chapter 5: Co-Authoring Architecture) attempt to establish a general framework for ethically applying Architectural Storywork, that aimed to navigate the fine line between Research Ethics Committee requirements and the practicalities of fieldwork ethics with Indigenous communities. The lack of adaptability within these guidelines fails to recognise that the PKP community that finished this study is not the same PKP community that began it; both literally as different participants joined or left the study, and metaphorically as each participant grew over time, place, and through changes to their definitions of self. This study was not transferable from the PKP community of 2021 to the PKP community of 2023 because it did not return to its core ethical guidelines and include the voices of the participants as they changed and developed throughout the two years. By this same token, this current study could not be transferred to other contexts or communities without stipulating an iterative return to its core ethical and moral guidelines that reflexively centre the values of its participants.
Level of depth achievable across an intersection of disciplines and protocols
My own Ethical Guidelines draw from a variety of disciplines outside of architecture, making it impossible for me to fully embed each concept faithfully within my practice. Simultaneously, these guidelines required me to balance discipline specific principles with the ethical protocols of Indigenous communities through the seven Storywork principles. Whilst these align on paper, in practice I found it difficult to navigate between the two, only achieving a broad but shallow understanding of each ethical topic rather than a fully immersed ethical framework. If I had taken steps to co-develop my Ethical Guidelines with the PKP community then; a) my research would have centred the values and morals of the PKP community in relation to other ethical considerations, giving me a much deeper insight into the needs of the community; and b) the PKP community could possibly have felt a greater inclusion within the research process itself and could hold me (and themselves) accountable to an agreed upon set of ethical criterion.
Time to embed within the community
As this study was developed and initially implemented remotely, there was limited time for me to embed myself within the community prior to beginning the study. Had I co-created a set of Ethical Guidelines with the PKP community and taken the time to understand the values of each individual by building mutual relationships of trust, it is possible that I would have been accepted more as a member of the PKP community rather than seen as an outsider researcher.

Anonymity and confidentiality vs the voice of the community

One of the longest amendment processes during my application to the University College Cork Social Research Ethics Committee was focused on participant anonymity. I eventually conceded and have agreed to maintain all participant anonymity within this study which includes the redaction of any information that can easily identify participants. However, this process curtails and censors the individual and communal voice of the community by distorting the contextual information that informs their journey; which includes marginalisation, oppression, emancipation, and empowerment that occur over time, place, and identity. Any changes, adaptations, or complete reconceptualisations of the Ethical Guidelines by participants could have mapped their journey authentically and faithfully, providing a way to contextually situate any censored data within a politically relevant format.

8.3.2 Facilitation of Ethically-led Architectural Storywork

I believe that future Architectural Storywork practices would benefit from a set of ethical guidelines co-constructed between the facilitating researcher and the community being researched with. These ethical guidelines should be returned to throughout the facilitation of Architectural Storywork and updated, adapted, or completely reconceptualised whenever and wherever appropriate, in an attempt to overcome the obstacles of oppressive urban planning policies and institutionalised practices.

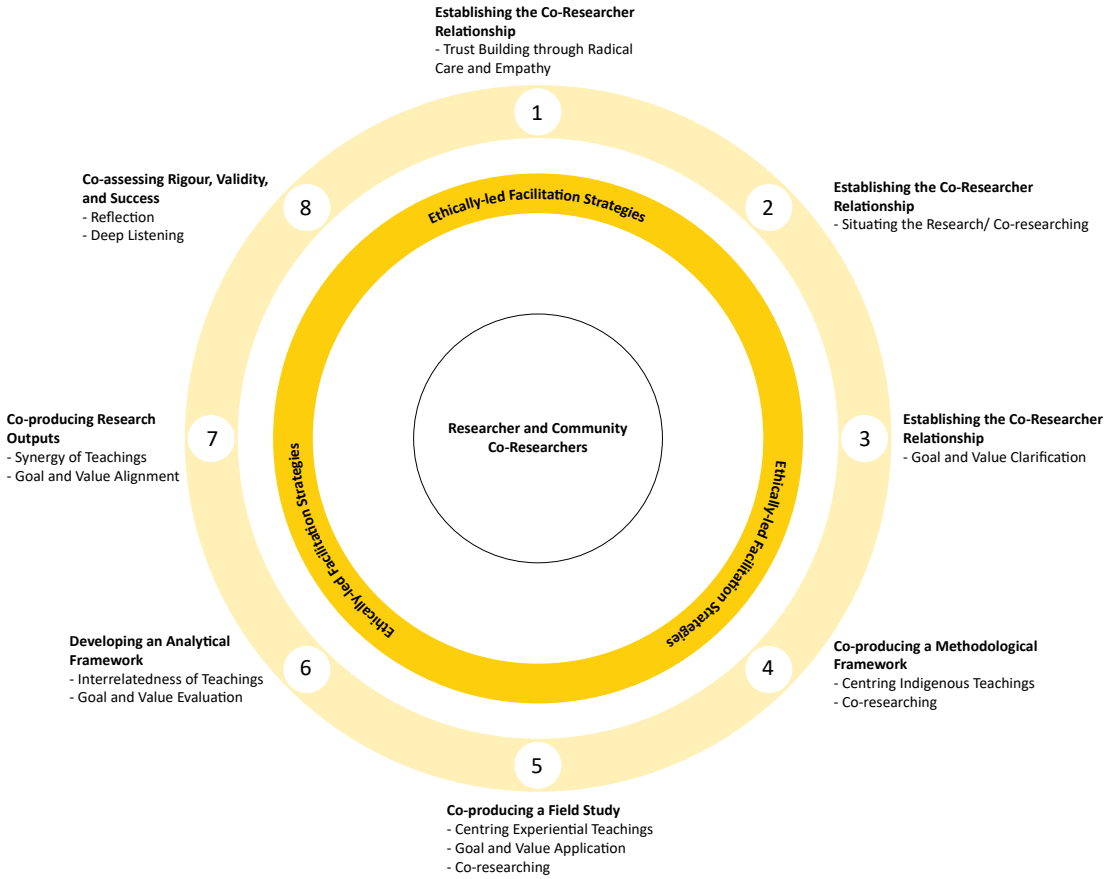


Fig 8.3 Ethically Led Facilitation Strategies

The practical implementation of my theoretical and ethical principles ethics within all four stages of my fieldwork (Fieldwork Initiation, Data Collection, Data Analysis, and Fieldwork Outputs), has defined eight facilitation strategies of Architectural Storywork to aid future researchers in implementing ethically-led Architectural Storywork. These are described below, taking precedent from Wheeler et als., (2020) core practices of Transformative Storywork:

Table 8.6- Facilitation Strategies for Ethically-led Architectural Storywork

Facilitation Strategies	Application
Urgently Patient Actions	Rather than follow a set order of steps, Architectural Storywork should co-create adaptive and iterative actions based on a community's histories, aspirations, and desires, that are responsive to the complex and changing realities and rhythms of daily life (Wheeler at al., 2020). These actions must reflect the urgency of which they are needed for the emancipation of communities from oppressive, marginalising, and colonial systems, whilst recognising the need for these actions to work longitudinally across time to sustain emancipation and work toward improved native quality of life (Schultz, 2018).
Surfacing Hidden Stories	Each action must work towards the recognition of 'stories within stories', the metaphorical layers of stories that provide opportunities for communities to connect to their own self-determined identities whilst questioning labels or histories imposed onto them by others- providing a sense of agency and autonomy over their futures (Archibald, 2008; Wheeler et al., 2020).
Spatial and Bodily Narratives	Architectural Storywork uses ethnographically found or created objects to carry and communicate those experiences through different discourses that represent architecture as 'models' (Wheeler et al., 2020; Martinez, 2021). This practice provides communities the opportunity to listen to their own stories in ways that go beyond hearing, so that they can question how their identity is being communicated within bodily and spatial narratives and take agency over them (Wheeler et al., 2020).
Iterative Sequencing	Iteration helps participants to develop a narrative sequence to their stories of architectural experience that considers the changing relationships and meanings between characters, settings, and events. Rather than constraining a participant's story to a singular version, iteration allows stories to be re-sequenced by changing the order of architectural experience; where characters, setting, and event can be mixed up, superimposed, dissolved, cut up, or given endless possibilities to distort well-known narratives of oppression into possibilities of emancipation by assigning new meanings to particular moments and sequences (Tschumi, 1994; Wheeler et al., 2020).

Deep Listening	The researcher must engage in 'deep listening' (Scharmer, 2016), where they recognise their own position in relation to what is communicated and listen to authentically connect with the experiences of the participants as co-researchers, going beyond the trappings of self and ego to genuinely focus on helping to bring the best possible future into being. As the listener, they try to understand the views, perspectives, and experiences of the storyteller and at the same time recognises that the story is created in the space between the teller and the listener (Kinloch & San Pedro, 2014; Windchief & Sand Pedro, 2019); thus taking into account their own position as a listener and recognising the existence of a 'subjective-in-between' that creates the possibility for action by the collective (Hernandez-Wolfe et al. 2015; Wheeler, 2018)
Collectively Constructed Knowledge	Ultimately, this practice recognises that the self only exists in relation to others (Oughourlian, 2016) and that our experiences- who we are, our stories or experience- are constructed in the space between ourselves and others (Kinloch & San Pedro, 2014). When communicating our experiences, our stories become joint constructions that have the power to shift our interpretations of self and other (Trees & Kellas, 2009; Wheeler et al., 2020). Within the research process, researchers and communities must be reflexive and question their own thought processes, values, assumptions, biases, privileges, and prejudices to unpack our own complex identities in relation to others and authentically engage in respectful relationships with their alterity (Vitale, 2018; Wheeler et al., 2020).
Reflexive Positionality	Architectural Storywork attempts to weave a thread between the different positionalities of researchers and their uses of storytelling- as generating data to answer questions, to generate messages aimed at influencing others, or as a process of healing- to continually question and reflect on the extent to which the researchers study realises the core values and goals of participants (Wheeler et al., 2020).
Engaging Autonomy	Involves the authentic integration of the seven Storywork principles so that the researcher can share ownership of the process with the community, jointly creating new spaces of safety for new Indigenous knowledge to be told to new people, and supporting groups in autonomous pursuits of emancipation by compassionately accompanying their articulation of deep personal stories with radical care and empathy (Archibald, 2008; Hobart & Kneese, 2020; Wheeler et al., 2020; Givens, 2021).

8.3.3 Pathways to Permission and Avenues of Analysis

Ethically-led Architectural Storywork must navigate different 'pathways to permission' and 'avenues of analysis' from within a complex power dynamic between the academic sphere,

including Research Ethics Committees, and the Indigenous sphere, including place-specific protocols to handling Indigenous Knowledge. Bellamy (2022, pp.304-309) describes the imbalance of power during architectural fieldwork, where the setting and stakeholders had more influence over the research process than the researcher. I believe that there is further fluctuation of power within research ethics throughout the entire process, where the researcher acts as the 'pivot point' between Research Ethics Committees and the communities with whom they work. Whilst Pollock (2012, p.9) states that ethical review and regulation is not an issue, ethical mechanisms intended to protect participants now threaten to undermine research, especially with hard to reach or marginalised groups.

Overall, the process of gaining full ethical approval from University College Cork's Social Research Ethics Committee took eight months, re-designing my fieldwork workshops to meet the subjective views of different committee members took another four months, whilst translating documents through institution approved organisations took another one month and incurred hefty monetary fees. Whilst frustrating and time-consuming, this process also exposed and emphasised my own understanding of the role of ethics in facilitating fieldwork with the PKP community, similarly to how Bellamy (2022) and Tutenal (2019) describe in their work. This is reflected in the answer to Question 11 of my evaluation questions with the PKP community, which asked; "Do you think that Alastair has treated the information you shared with respect and reverence? Why or why not?"

Discussing the ethical approval and consent forms, Q11:

Kakang: *"Yes, you have been treating this information with respect and reverence. It is proved by signing also the paper, that you will keep everything safely. As well as the community stories, has been talked amongst the PKP [community] and they haven't heard anyone coming to give negative information relating to these activities."*

8.3.4 'Micro-Ethics'

However, this trust in me was not entirely due to my application of standard research ethical practices, but also on my 'micro-ethics' (Bellamy, 2022) or 'ethically important moments' (Guillemin & Gillam, 2004) within the ever-changing landscape of qualitative fieldwork. My

Field Diary highlights certain key 'ethically important moments', that included:

- Changing the format of consent forms from digital to analogue to improve accessibility for the participants.
- Amending consent forms to provide the participants with autonomy in deciding their 'vulnerability' status, so not to automatically exclude participants who might not initially meet the required criteria.
- Adapting to the physical and emotional availability of the community when facilitating data collection workshops, guiding individuals at different times and in different locations based on their needs rather than facilitating mandatory group workshops.
- Providing participant's autonomy in the way they handled and processed their own data, including the freedom to change the format of data, the translation of data, and means of sharing data with me based on the technology available and their digital literacy.
- Iteratively adapting workshop materials in a co-design process with the community gatekeeper and facilitators to better align with the community's values.
- Consciously adopting a 'people over project' approach, placing the wellbeing of the community above the desires of my research by following Elizabeth Fast's radical approach (in Windchief & San Pedro, 2019) to be fully prepared to postpone, adapt, or completely throw out the research project if it was not a priority for the community.
- Developing my own analytical system from the intersections of my understanding of academic and Indigenous knowledges.

This responsiveness developed from my dual positionality as neither an insider/ outsider, which has been described as an oversimplified dichotomy of qualitative research that can deny the powerful, political complexities inherent in the research (Gair, 2011). Whilst Yu (2015, pp.276-277) felt that his status as an outsider researcher in Bali helped him examine critical issues related to ethics with a more objective lens that might be easily overlooked if he were an insider researcher with the same sociocultural values as the participant, my perspective was shaped by my position as a researcher that includes co-producing research content with the PKP community and having read much literature on the research topic

coming from Indonesian and Balinese scholars (Dwyer & Buckle, 2009), meaning that my insider vs outsider positionality is rather one of being 'in the middle' (Breen, 2007).

8.4 Generalisability and Reproducibility in Practice

Implementing 'micro-ethics' during fieldwork may help to align the values and goals of the three main stakeholders in Architectural Storywork: the community as co-researchers who have their own situated ethics that go beyond university standards, the researcher (with a big 'R') who must adhere to university Research Ethics Committees standards, and the architectural practitioner (as a researcher with a little 'r') who is guided by the codes of conduct of regulating architectural bodies.

The alignments of goals and values occurs longitudinally through situated practice, where each stakeholder learns from the others by sharing place-specific experiences. In this way, goals, values, and even ethics, are informed by the community in relation to the experiences of all stakeholders. This might increase relational accountability and lead to more diverse, pluriversal, and decolonial narratives being produced within the construction of Indigenous architecture. This would be evident through reconceptualisations of Indigenous architectural practices (see 8.2), such as compositions of colours, designs, patterns, geometry, sculptural forms, and shapes, Indigenous natural resources, materials, and construction methods, or newly introduced approaches that have been adopted, adapted, or nuanced to Indigenous cultural and social needs (Matunga in Grant et al., 2018).

8.4.1 A Community-informed Approach to Ethics

Architectural Storywork, as both a design-based and Indigenous practice, ultimately falls under the category of a 'decolonising design' approach. In an insightful interview between Elizabeth Tunstall and Peter Morin, first published in 2020 and republished in the recent Decolonizing Design book (Tunstall, 2023), decolonisation is described as the dismantling of oppressive systems of power, whilst decolonising design describes how culturally relevant objects created with love, kindness, care, and grace (rather than unrespectful us/them relationships) are powerful for future makers to liberate the Indigenous body from oppressive systems of power. Jones and Okun (2001) describe how power imbalances do not just manifest in the treatment of bodies but within sets of normalised codes of conduct and

attitudes, going on to describe some of the values of dominant oppressive systems and the decolonial antidotes to them.

Tunstall (2023, p.62) depicts some of these values and antidotes specific to decolonising design approaches. I parallel these values to those found in the standardised codes of conduct and attitudes of Research Ethics Committees, and use this to suggest a more community-informed approach to ethics within Architectural Storywork practice. For transparency, I also use this as a checklist to assess my ethical application of Architectural Storywork with the PKP community:

Table 8.7- Thirteen Community-informed Approaches to Ethics

1. Appreciation: An antidote to Perfectionism
• Make clear your appreciation for the work and efforts of the community as co-researchers, centring their voice as experiential experts, and providing personal and academic validity to their Indigenous Knowledge within academic systems. • Learning occurs through 'trial and error', where mistakes are expected and can either; a) lead directly to something positive; or b), lead indirectly to something positive by being used as opportunities to iterate and develop workshops, frameworks, or ethical guidelines. • Ask for specific contributions from community members directly on how to implement workshops, frameworks, or guidelines differently to ensure that researcher biases, privileges, and prejudices do not lead to greater marginalisation.
2. Realistic Expectations: An antidote to Haste (rushing opposed to urgency)
• Set realistic time-frames for developing and implementing each aspect of the study, understanding that things always take longer than expected. • Consider how setting goals and deadlines exclude people and limit diversity of data within research studies, and take the time to discuss and plan these with community members, facilitators, Elders or other cultural leaders.
3. Acceptance: An antidote to Defensiveness
• Understand that structures of hierarchy or frameworks for doing cannot prevent abuse and can, in some instances, facilitate it. The researcher should openly accept that they may not, and should not, always be in control and they must be open to spontaneous changes to workshop frameworks, ethical guidelines, or other structures that benefit the community. • Understand the link between defensiveness and a fear of losing power, losing face, or losing privilege, and work on naming and confronting your own defensiveness to new ideas if it becomes a problem.

Table continues on next page.

4. Values and Process: An antidote to Quantity over Quality

- Co-construct an ethical guideline with clear statements on both the researcher's and community's values and goals, expressing the desired relationship between the two.
- Make sure this is a living document that both you and the community can use in your day-to-day interactions with each other and with the research study.
- Try to recognise moments when you need to divert from these guidelines to address the underlying needs of community members. Consider what can be learnt from these experiences, returning to the document with the community to implement any changes that address the changing circumstances of the community.

5. Multiple Ways of Sharing: An antidote to the Privileging of the Written Word

- Accept that there are many avenues towards achieving yours or the community's goals and be adaptive to exploring multiple ways of knowing and doing that maybe be unfamiliar, other, or unplanned. Voice any concerns that you have about your own, or other peoples, biases towards a certain way of knowing or doing.
- Foster a democratic ecosystem with the community, inviting groups to discuss complex tensions and form a consensus on the most appropriate actions to take; honour that decision and see what lessons can be learnt from it (even, and especially, if it not the action you would have chosen).
- Be reflexive about your research approach based on what you learn from the community as co-researchers- how do they approach a research situation and how might this improve your own approach?
- Be clear and open that you have a lot to learn from the communities you are working with and engage in relationship building to authentically understand their ways of knowing and doing that do not isolate you from their socio-cultural practices.

6. Teamwork: An antidote to Individualism

- Avoid simplistic evaluations of participants and their data based on your own biases and perspectives; consider the complex ecosystem of the community and the individual roles and responsibilities of each member within that system.
- Ensure that each community co-researcher is able to contribute to your shared values and goals for the research through participation that is tailored to their unique lived experiences and role within the larger community.

7. Both/And Thinking: An antidote to Either/Or Thinking

- Be aware of dualisms and oppositions within the research practice and push for yourself and/ or participants to come up with more than two alternatives (or consider a third, balancing alternative that reduces the binary into a singular concept).
- Understand the risk of oversimplifying complex topics, especially through the censorship practices of academic research or when it feels that an urgent decision must be immediately made. Encourage yourself and/or others to engage in a deeper analysis of the topic, provide space for people to think creatively, and avoid making decisions under extreme pressure or without a group consensus.

8. Power Sharing: An antidote to Power Hoarding

- Make it clear to the study participants and other community co-researchers that changes to the research is inevitable and that they can challenge your decisions to ensure healthier and more productive implementation of the study.
- The research should maintain a commitment to the values and goals of the community, the guidelines co-produced and jointly amended between the researcher and the community, and the Indigenous systems of knowing and doing.

9. Subjectivity: An antidote to Objectivity

- Understand that everyone has a different worldview, including yourself, and that this worldview affects the way we understand and do things.
- Always assume that everyone holds valid knowledge and accept the different modes and methods that they may use to communicate that knowledge.
- Push yourself to accept discomfort and sit with alterity when participants are expressing themselves in ways that are unfamiliar.

10. Transparency: An antidote to Paternalism

- Understand that you, the researcher, are not the sole knower, doer, or decision maker within this process.
- Make it clear that your fellow community co-researchers (Elders, cultural leaders, participants, or other stakeholders) understand their roles and responsibilities to ensure the success of the research; every individual is part of the whole, contributing to achieving the communal values and goals set out at the beginning of the research.
- Always strive to include people who will be affected by decisions in the decision-making process, which can sometimes include those outside of your study.

11. Conflict Resolution: An antidote to Fear of Open Conflict

- Understand that conflicts of interest can be voiced in many different ways that may not be polite, considered acceptable, or be completely transparent or obvious; the researcher cannot ignore concerns based on the way they are communicated.
- Make sure that participants or other community co-researchers have access to, and understanding of, multiple ways to communicate their concerns or conflicts of interest with you.
- Revisit any conflicts of interest once actions have been taken towards a resolution to ensure that the community are happy and to learn from how you handled the situation.

12. Seventh Generation Thinking: An antidote to Bigger and More

- Seventh Generation Thinking requires you and the community to consider how the actions of the study now will affect people seven generations from now; will this study move towards an improved native quality of life, and will it allow future generations to show up, dwell, and live according to their own circumstances of alterity?
- Consider all of the various costs of the research actions, including costs in morale, credibility, and local resources.

- Ensure that every research actions speaks to how you want to conduct the study as well as what you want to do within the study.
- Ask participants and other community co-researchers (Elders, cultural leaders, knowledge holders etc.) to evaluate the success and rigour of the study from their own unique socio-cultural perspectives that assess the justification and validation of the research through place-specific understandings of knowing and doing.

13. Embrace Discomfort: An antidote to Right to Comfort

- A core principle of this practice is accepting the alterity of otherness, unlearning ways of rejecting or categorising otherness, and understanding that the discomfort associated with this provides opportunities for growth and learning that move towards new ways of knowing and doing.
- Allow discomfort to encourage reflective thinking on the self and your personal experiences, as a way position yourself as a researcher and community member within the larger picture.

The development and implementation of Architectural Storywork with the PKP community successfully included eleven of the above thirteen 'antidotes' to a power imbalance between academic and Indigenous protocols. The notable exceptions from my study include: realistic expectations of timeframes, with the initial expectations of the Research Ethics Committee being a six month period of data collection, which inevitably had to extent to an eighteen month period over multiple site visits; and, values and processes, as my own Ethical Guideline was submitted and accepted by the University College Cork Social Research Ethics Committee and, therefore, was treated as concrete guidelines as opposed to a living document that could be adapted or completely reconceptualised with, and by, the PKP community.

8.4.2 Beyond Academic Research

Whilst the above commentary focuses more on conducting Architectural Storywork as an academic researcher, I also acknowledge that architectural practitioners engage in 'research with a little r' within their daily practices as they; research their client and their needs, the site and its context, technical products and systems, spatial organisations and layouts, or the demonstration of specialist knowledge of an area (Frayling, 1993; Bellamy, 2022). Whilst there is no uniform guidelines for ethics within 'research with a little r', it is clear that "we need a deep research ethic to guide the art of intuition [to move the art of architecture forward]" (Kieran, 2007, p.31) that goes beyond the implied moral codes of responsibility and behaviour present within the codes of conduct of regulating architectural bodies (Bellamy, 2022).

Within her detailed evaluation of architectural ethics, Bellamy (2022) believes that the developing ethical practice of architecture champions the democratisation of design and the built environment to be critically responsive to the genuine needs of communities and future inhabitants, drawing from the positionalities of:

- Till and Schneider (n.d), who believe ethics in architecture has a sense of 'being-for the Other' or assuming responsibility for the Other that goes beyond the ethics of the profession to acknowledge and work towards the desires, needs, and alterity of these 'others'

- Tronto and Fisher (1990), who treat architecture as a form of care that includes everything that we do to maintain, continue, and repair our 'world' so that we can, in the words of Fry (2009), improve quality of life while reducing ecological damage through actions that make time for humanity.

As architectural practitioners work towards an 'architecture of care for the alterity of others', they may turn to both established and emerging research (with a big 'R') methodologies related to ethnography, which is a commonly used method in architectural qualitative studies to understand the socio-geographic context of the built environment. Considering the value that Architectural Storywork could bring to such encounters, I propose a set of 'actions', based on Jones and Okun's (2001) above 'antidotes', that can be followed by architectural researcher and practitioners alike as they implement the eight core steps of Architectural Storywork.

8.5 A Relational Framework for Architectural Storywork

This discussion provides an overall framework for Architectural Storywork (see Fig 8.4 in next page) as an ethics-led and relationally accountable methodology, that has the potential to inform self-determined Indigeneity and Indigenous architectural autonomy through architecture 'in' place; where ancestral stories and stories of lived experience are articulated within architectural layouts, configurations, circulation, and spatiality such as Indigenous colours, designs, patterns, geometry, and forms, Indigenous natural resources, materials, and construction methods, or newly introduced approaches that have been adopted, adapted, or nuanced to Indigenous cultural and social needs (Matunga in Grant et al., 2018).



Part 1: Steps 1, 2, and 3 (Establishing the Co-Researcher Relationship)

Co-produce regenerative, place and people specific, design practices that are accountable to a community's diverse cosmologies, axiologies,and epistemologies, and are grounded in their everyday lives experiences

Part 2: Steps 4 and 7 (Co-producing a Methodological Framework and Research Outputs)

Co-research using creative art-based methods that give voice to communities, inverting the colonial relationships between researcher/ researched by co-produce emancipatory research frameworks.

Part 3: Step 5 (Co-producing a Research Study)

Utilise ethnographic and dialogic tools for carrying and communicating stories of architectural experience, channeling a community's intimate ethno-architectural knowledges over space, its limits, boundaries, borders, and possibilities.

Part 4: Steps 6 and 8 (Developing an Analytical Framework and Co-assessing Rigour, Validity, and Success)

Engage in joint efforts to recognise, subvert, and harmonise any architectural oppositions that cause or perpetuate tensions within a community's daily experiences of architecture, so that new design cultures and architectural practices can be constructed with/ by/ from communities.



Ethical Principles (see Table 6.2)	Facilitation Strategies (see Table 8.6)	Community-informed Approaches (see Table 8.7)
1. Creating and Respecting Data Within Stories 2. The Respectful Retelling of Stories	• Collectively Constructed Knowledge • Reflexive Positionality • Engaging Autonomy	1. Appreciation 2. Realistic Expectations 3. Acceptance 4. Values and Process
2. The Respectful Retelling of Stories 6. Holistic Transformation of Trauma	• Urgently Patient Actions • Surfacing Hidden Stories • Spatial and Body Narratives	5. Multiple Ways of Sharing 6. Teamwork 7. Both-And Thinking
3. Reverence Between Teller and Listener 4. Responsible Narratives 5. Relational Reciprocity	• Urgently Patient Actions • Surfacing Hidden Stories • Spatial and Body Narratives	8. Power Sharing 9. Subjectivity 10. Transparency
7. Sharing Interrelated Stories 8. Synergetic Actions	• Iterative Sequencing • Deep Listening	11. Conflict Resolution 12. Seventh-Generational Thinking 13. Embrace Discomfort

Fig 8.4 A Framework for Architectural Storywork

For the purposes of reproducibility, this framework follows the trend of many design methodologies by neatly dividing and sequencing its contents. Architectural Storywork has been divided into 8 key steps. These steps are then grouped into 4 parts, or overarching themes of framework, literature, fieldwork, and findings. Each part has been assigned appropriate ethical principles, facilitation strategies, and community-informed approaches that appear, where applicable, in a numerical order informed by their relevance to each part or step. However, as facilitation strategy 'Urgently Patient Actions' outlines, Architectural Storywork must contradict its own internal logic and not follow a prescribed sequence of steps but, instead, should co-create adaptive and iterative actions that are responsive to the complex and changing realities and rhythms of daily life. The unpredictable reality of human behaviour can reconfigure, complicate, unfold, or expand linearly formatted frameworks that may not immediately resemble cyclical or iterative processes. Instead, these frameworks can be enacted in seemingly random and unorthodox manners that are guided, not by a 'universal' and prescribed pathway, but by ordinary forces, seemingly arbitrary decision making, and conditions of experience between the (co)researchers- with the hope that they can continue to adapt and evolve beyond the scope of a singular study.

Of 104 documented actions- principles, strategies, and community-informed approaches- applied in my Architectural Storywork study:

- 51 were disordered. Whilst the 'line of best fit' suggests a general adherence to the numerical progression of steps 1-8, 49% of my own actions were implemented in seemingly random and arbitrary ways in response to the changing human conditions of the study.
- 71 were implemented within their assigned steps, whilst 33 were disordered. Only 53% of my own actions were implemented within the steps or parts suggested in my framework. Of the 33 actions implemented disorderly, only 4 were instigated by the community i.e. suggested or proposed by a community member.

This reflexive inquiry highlights three key events- one compromise, one negotiation, and one adjustment- that emphasise the need for real-time, context-specific adaptions to, and beyond, the proposed framework. This does not refer to the fluidity or flexibility required in

fieldwork (see, for example, 9.3.2 Limitations of Human Behaviour), but points to specific instances where the underlying framework of the study- from invitation into the project through to co-evaluation of the outputs- required concessions to be made, new agreements to be reached, or alterations to be actioned and accepted. Both the major compromise and negotiation independently occurred in the transition between data analysis and output generation. Each event critiques the development of the co-researcher relationship from different perspectives. A separate adjustment also occurred within the co-development of the study itself, which critiques my distinct separation of 'fieldwork' from other methodological, literary, or analytical endeavours- or indeed, the compartmentalisation, order, and hierarchy of all study elements.

The compromise required me to concede ground as the 'primary' analyst and to provide space for all co-researchers to simultaneously input meaning to the analysis, whilst the community conceded ground to me as a contradictory 'insider/outsider', providing space for me to understand the relationships between their values, roles, and goals and their wider socio-cultural landscape, through active participation in social, cultural and spiritual events. These concessions occurred to mitigate the assumption that data analysis and output generation is a process of reflection instigated by the 'primary' researcher from a position of power, i.e. of processing participants' data through gatekept, complex, and rigorous academic procedures, before inviting the participants to re-engage with their processed data after the fact. This reflects similar limitations across other decolonial design studies where communities are prompted to 'take up' options presented to them from researcher-directed analyses, and modify their existing future trajectories. Storywork has offered some Indigenous researchers a way to iterative reframe these design methods over the course of a study; recentring the self-representation and self-determination of both storyteller and listener as their relationship is constructed in the discursive space between them (see 9.2.1). Similarly, this study returned to its foundational facilitation strategies, implementing 10 disordered actions (in comparison to 3 ordered actions) during the study's analytical steps, in an effort to re-construct the co-researcher relationship as we each took turns embodying the storytellers and the listener.

The negotiation required open discussions between the community and myself on how to re-situate and re-clarify the research in the transition from data analysis to output generation.

This negotiation helped the community to make better sense of the research findings by re-framing the context in which they were shared. These discussions allowed the meanings around community micro-cultures, practices, and identities that were constructed at the start of the research to be revisited and adapted. During this study, the PKP community instigated three separate instances of joint reflection and co-adaption of these meanings, two of which occurred within the transition between data analysis and output generation. During these negotiations, we agreed to reflexively implement the PKP rules as a form of situated community ethics. This aimed to mitigate any lingering biases in the findings, which could have been compounded by my isolated analytical process (see above). This helped the community to evaluate my analytical process and ensure that it was aligned with their continually changing values and goals, and to consider if/ where micro-ethics could support this alignment.

These might be better managed in future iterations of Architectural Storywork by approaching research processes with greater ethical stewardship; recognising community-ethics and meaning-making as fluid, highlight contextual, and organic processes that require constant care and co-adaption, being actively inclusive of co-researchers at every stage of the meaning-making process, and reconsidering how their values, roles, and goals for the study may have changed in response to previous research actions.

The adjustment, or alteration, to the framework follows Ewing et al's (2011) reflection on architectural 'field/work'- where the production of field data does not remain autonomous and separate from all the work that occurs in, from, through, or beyond the field, but is itself a product of the connections and relations between field and work as distinct entities. Adjusting the framework to recognise the simultaneously internality and heterogeneity of field and work to one other, required fieldwork (or field/work) to be actioned and accepted across different parts or steps of the proposed framework. In particularly, the PKP community instigated field/work practices whilst situating the research and clarifying its goals. This challenged and changed the pre-determined activities of the study in response to the community's loss of land ownership, 'working' through and beyond the 'field' in a way that gave the community more agency and autonomy over the production of their architectural sites (both physical and discursive) which, ultimately, produce more impactful architectural

outcomes related to their situated goals and values.

This might be better managed in future iterations of Architectural Storywork by treating field/work as internal to, and simultaneously internalising, all other core events, parts, steps, or actions of research; a process that traces the sites of architectural production (the intersection of physical and discursive, individual and collective, or material and social constructs of architecture) through the field, and speculates on their trajectories beyond the field. In this way, the seemingly random implementation of ethical practices, facilitation strategies, and community-informed approaches can be reflexively viewed as purposeful sites of architectural production towards better Indigenous futures.

9.0 A Conclusion

This concluding chapter brings together the findings and discussion chapters together to demonstrate; how this study has answered my research questions (referencing the successes and limitations of the study), what this research contributes to knowledge, what limitations this study faced, and what further research could be undertaken to advance Architectural Storywork as a methodology in both research and practice.

9.1 Answering Research Questions and Fulfilling Objectives

9.1.1 Primary Objective

The primary objective of this research study was:

1. To formalise a novel research methodology by applying the Indigenous practice of Storywork through an architectural lens.

Whilst there are singular instances of Storywork and other Indigenous Research Methodologies applied in design and art-based disciplines (see Chapter 3), my research indicates that there is limited evidence of a formalised methodology for Storywork within architectural research- until now.

My formalised methodology for Architectural Storywork has been constructed using an iterative and rigorous approach that encompasses the perspectives of the PKP community as co-researchers (Pusat Kegiatan Perempuan: *pusat*= centre, *kegiatan*= activity*, perempuan*= women community and their founder, Ni Komang Sariadi or Ibu Sari). Collaboration began with Ibu Sari and the PKP community in 2020, with four phases of research being undertaken between 2020 and 2023; Fieldwork Initiation, Data Collection, Data Analysis, and Fieldwork Outputs (see Chapters 5 and 6).

As the phases progressed, so too did the construction of a situated Architectural Storywork methodology that utilised discursive architectural techniques and Indigenous Knowledges of the Tong Tong drum that were contributed to by; the PKP community and wider village as co-researchers; my own study of relevant literature on Balinese Indigeneity and architecture, coming both directly and indirectly from Indigenous peoples, and; engaging in discussions

with Indigenous scholars, elders, and cultural leaders on the history and practice of Balinese Indigenous Knowledge and architecture.

9.1.2 Secondary Objectives

Through a situated implementation of Architectural Storywork with the PKP Community Centre, two further objectives were defined based on research questions:

2. To support new critical perspectives of Balinese culture that invest in PKP community futures by; firstly, revealing unmarked colonial influences within their experiences of architecture and, secondly, utilising architectural discourse to honour pre-colonial lifeways, support a re-discovery of themselves beyond the 'Indigenous Other' and demand recognition of their self-determined identity, and encourage respectful participation with alterity in contemporary society.
3. To support the PKP community in;
    - Defining self-determined identities through respectful relationships with alterity.
    - Reconceptualising their architectural autonomy.
    - Reflecting upon and retelling their Indigenous/ ancestral teachings through architecture.

Objective 2 was met within the Data Collection and Data Analysis phases (see Table 6.1 and Table 6.4), which include Step 5 (Co-Producing a Field Study) and Step 6 (Developing an Analytical Framework)- see Fig 8.1 and Table 8.1. These steps included thorough data collection, both remotely and on-site using Digital Storywork and Transformative Storywork methods, that included workshops on Archetypes, Life Design, User-Created Personas, and Think with Things model making (see Table 6.1 and Appendix E).

This data underwent a rigorous data analysis using both Deconstructive Discourse Analysis and Discursive Interpretative Phenomenological Analysis (see Table 6.4). Participants identified these two phases, in particular, as helping them to 'recognise', 'understand', and 'be guided' to 'make visible' these unmarked colonial experiences which are described as 'tensions', 'negative feelings', 'inconvenience', 'discomfort', things to be 'avoided' or 'forbidden', or

the ‘dangers of forgotten heritage’. Through this process, participants also referenced ‘remembering’ and being ‘connected’ to pre-colonial values through ‘explorations’ of their ‘own self’.

Objective 3 was met primarily within Fieldwork Outputs (see Table 6.6), which correlates to Step 7 (Co-Producing Research Outputs) and Step 8 (Co-assessing Rigour, Validity, and Success)- shown in Fig 8.1 and Table 8.1. These steps included the formalisation of Conceptual Story Narratives that directly informed the co-creation of an Architectural Charge (see Appendix F) and Draft Design Brief (see Appendix G) by myself and the PKP community as collaborative co-researchers (see Table 6.6), and a Focus Group of evaluation questions (see Appendix H) conducted with the PKP community.

- Whilst not all participants seemed to recognise relationships with alterity or use this as a way to define their self-determined identity, a thematic analysis of the participant’s Focus Group Evaluation and a narrative analysis of the architectural charge and draft design brief revealed descriptions of self-determination that move fluidly from individual identity to communal identity, expressing a relationship between the exploration of the self and respectful relationships with others.

- There is consistent evidence, with minor deviations, that the PKP community have reconceptualised their architectural autonomy by adapting the five core principles of the Asta Kosala Kosali. This evidence is based on a content analysis, using deductive coding, of triangulated data from the PKP community’s answers to my evaluation questions, extracts from the final architectural charge and draft design brief. This analysis also considered if and how the PKP community had implemented Indigenous architectural designs, such as patterns, geometries, materials, and construction processes, or newly introduced, adopted, adapted, or nuanced knowledges of making and doing to Indigenous cultural and social needs.

- A content analysis of the PKP community’s answers to my evaluation questions revealed evidence that the PKP community reflected upon and retold Indigenous knowledge by merging “the two sides” of professional and ethno-architectural knowledge. This is further reinforced by the implementation of Indigenous architectural design or newly introduced

architectural knowledges, as described above- giving the PKP community more freedoms to create new spaces of dialogue that share new knowledges with new people (such as teaching the PKP rules and micro-culture of the PKP community with others, and learning the diverse knowledges, histories, conditions, and realities of others).

9.2 Contribution to Knowledge

The application of Indigenous Research Methodologies, as practice based decolonial methods and discursive design cultures, have been inadequately represented within architectural research. I have addressed this gap by developing a new application of Storywork through an architectural lens by using discursive design practices. I have evaluated this methodology in a situated context with the PKP Community Centre to give insights into ways that it might support self-determined Indigeneity, architectural autonomy, and the re-telling of traditional knowledge through architecture.

This research builds upon various theories and concepts across a range of relevant disciplines, most significantly from areas of Indigenous Research Methodologies and decolonial and/or discursive architectural theories and practices. This is important as architectural scholars call on the discipline to develop new decolonial practices and discursive design cultures that aim to reinstate difference, value alterity, and engage with pluriversal narratives, whilst Indigenous scholars call to activate Indigenous Research Methodologies within architecture as practice-based and decolonising methodologies.

Rigour and validity were sought through the application of relevant design and architectural methods guided by an Indigenous ethical framework that extends beyond university standards, and rigorous data analyses (see Chapters 5 and 6). The overall process became more refined over the course of the study, where certain steps and practices were altered or discarded as the PKP community and I both learnt from our experiences and from situated Indigenous knowledges. The remaining steps and practices described in Chapter 8 were more easily utilised by the PKP community and myself as co-researchers. This research demonstrates core steps and practices related to the application of architectural methods and analyses (see Tables 8.1, 8.2, 8.6, and 8.7) that need to be carefully considered when applying Architectural Storywork.

This study contributes to both architectural and Indigenous pedagogies by weaving together non-Indigenous discursive design practices and Indigenous Storywork practices. New design processes are developed through this weaving, with the aims of intentionally supporting Indigenous peoples to show up and dwell in architectural spaces on their own terms, and encouraging a reconceptualisation of Indigenous architecture in relation to contemporary self-determined Indigeneity- as defined by a community's reflections on and appropriation of colonial experiences, and a re-remembering of pre-colonial lifeways as signified by the built environment and interrelated ecologies. Collectively termed Architectural Storywork, these processes develop a novel 'asset-based' approach (see 3.4.3) to architectural praxis by, firstly, anchoring design methodologies around the respectful participation of Indigenous voices, knowledges, histories, conditions, and realities, and, secondly, anchoring design actions and decision making processes around a responsibility to address the concerns, issues, and tensions experienced by a marginalised group through actionable changes to policies, cultures, or practices.

Specifically, this study adds to:

1. Critical architectural discourse by applying Storywork as a discursive design practice.
2. Indigenous Research Methodologies by applying an architectural and geographical specificity within Indigenous Storywork practices.
3. Practice-based decolonising methods that challenge and spark new ideas and new modalities as creative transformational praxis.

9.2.1 Contributions to Critical Architectural Discourse

This thesis cements Storywork as an Indigenous discursive design practice, framed to support the (re)construction of Indigenous meaning and identity around spatial discourses in the real world. It builds on existing discursive design dialogue by revising discursive design's critical architectural stance to align with a transitional-critical theory of architecture; a non-dualistic approach- statistically, theoretically, and literally- that casts a greater clarity on the needs of people inhabiting a physical and metaphorical 'transition region' between colonisation and decolonisation. (Tharp & Tharp, 2018; Escobar, 2018; Tonkinwise, 2014; 2015). This advances

discursive design's reflexive turn away from design as defined in the Global North, instead embracing 'design' in terms of Indigenous knowledges that originate with/by/from the Global South (Oliveira & Prado, 2014; Schultz, 2018; Sheehan, 2011). In this context, discursive design is reframed as discursive 'design' (apostrophes used to differentiate between Global North design and Global South 'design'); a process that depicts the ever-evolving shared identity of a collective through inaction- remaining still and observing the shifting patterns of others' diverse realities, histories, conditions, or knowledges (discursive elements) as a basis for future 'life-affirming' intent- and action- generating divergent spaces in the real social-world and its built environments, that contribute to the well-being of all things from an awareness that our individual view is always incomplete without our relation to all other things. This thesis exemplifies Storywork as an Indigenous method of discursive 'design' that specifically focuses on the self-representation and self-determined identity of the PKP community, and proposes Architectural Storywork as an Indigenous discursive 'design' practice for ethically exploring Indigeneity and Indigenous Knowledge in relation to space and the built environment.

9.2.2 Contributions to Indigenous Research Methodologies

This thesis contributes to Indigenous Research Methodologies by applying an architectural and geographical specificity within Indigenous Storywork practices, supporting articulations of Indigenous identity narratives through a people's relationship to 'space' and their wider natural and supernatural ecologies. It integrates discursive architectural paradigms into Storywork by advocating for discourse-through-design within the context of Indigenous sovereignty to Land, where Western notions of discursive architecture are returned to their origin and reconstituted into a 'discursive landscape'; a novel tool with the aim of uprooting us from binary, hierarchical logic and addressing the tensions around design's encounters with otherness and alterity. This explores design situated and composed as Indigenous discourse through the creation of tangible metaphorical landscapes, which can embody and communicate the systems of Indigenous thought and knowledge as shared through storytelling. Fictional actors can inhabit the landscape in a method of auto-ethnographical storytelling that may uncover and articulate hidden layers of teachable knowledge, including; design's responsibility to themselves and those to come, some kind of moral or

ethical guidelines around fulfilling that responsibility, and a proposition for preferable socio-material futures that enact that responsibility through new design cultures, policy-making, cooperative activism etc. (Tharp & Tharp, 2018; Kirby, 2010; Sanders, 2002; Thackara, 1988; Styhre, 2011).

9.2.3 Contributions to Practice-based Decolonising Methods

This thesis contributes to practice-based decolonising methods by developing an architecturally specific framework of ethical principles, facilitations strategies, and community-led approaches to design that challenge and spark new ideas and new modalities as creative transformational praxis. This is a tangible tool for vulnerable or marginalised communities, Indigenous allies within dominant architectural systems, and researchers with both a 'big R' and a 'little r', to act in the here-and-now towards the empowerment of Indigenous peoples and their futures. Evidence of this contribution can be drawn for the participants of this study, the PKP community as a whole, the wider Balinese community, Balinese architects, and architectural discourses and practices in general.

Contributions to the Study Participants

As suggested by my research findings (see Chapter 7 and Section 9.1), the longitudinal process of co-producing a Storywork methodology, including its framework, fieldwork tools, and outputs, has supported the participating members of the PKP community to:

1. Consider their individual and communal identity in acts of self-determinism that recognise colonially prescribed definitions of the 'Indigenous Other', as signified by the architecture of the PKP Community Centre, and redirect these definitions through the appropriation of relevant colonial practices and a remembrance of pre-colonial lifeways.

2. Empower their architectural autonomy through discursive design activities that explore their experiences, expectations, and anticipations of architectural space. This includes an affirmation of their own tacit and ethnoknowledge of architecture, giving them more confidence in articulating their architectural needs to architects and participating in co-design practices with architects.

3. Imagine new architectural spaces that have specific responsibilities to the future PKP community, articulating and fostering the unique micro-culture of the PKP Community Centre that encourages people to show up and dwell based on their own unique circumstances- worldviews, knowledges, conditions, histories, and realities.

These are communicated by the architectural charge and draft design brief (see Appendices F and G respectively), and supported by the polyphony of stories and accumulative narratives told by the participants throughout the study. The skills and knowledges both learnt and shared by the participants also contribute to the wider PKP community.

Contributions to the PKP Community and the Wider Balinese Community

During this study, I treated the participants as co-researchers and took the stance that all data they produce within the study would be owned by them- only becoming part of my research if willingly shared with me by the participants. Likewise, all data that I produced would be owned by me unless willingly shared with the participants. To that end, I made efforts to share as much of my data with the participants, including meta-data such as the three core strategies of this study (see 2.2), my Architectural Storywork methodology (see 4.1) and its theoretical and ethical principles (see Table 4.1 and Table 4.2), the discursive data collection guide (see Fig 6.2), all activity worksheets (see Appendix E), and the outputs of my data analysis coding alongside templates for all fieldwork outputs (see Table 6.6).

This provided the participants with a comprehensive toolkit that can be re-implemented, adapted, critically appraised, or completely changed for further iterations of the PKP Bale Tong Tong project or other projects at the PKP Community Centre, in the wider PKP community, or within other Balinese communities. It is my hope that any situated implementation of Architectural Storywork can be appropriated by Indigenous communities in that region, and developed using situated Indigenous Knowledges that have not yet been given voice within architectural and design discourses. In this way, I also attempt to fulfil my architectural responsibility by accepting my own non-knowledge and embracing the alterity of other knowledges, conditions, histories, and realities that might instigate stronger decolonial and redirective actions of architecture through adaptions to this methodology. This might also provide Balinese (or other Indigenous) architects with a precedent to engage in participatory

and co-design initiatives.

Contributions to Balinese Architects

Studies suggest that the gatekeeping of knowledge by traditional Balinese architects (Undagi), a lack of understanding and implementation of Balinese architectural guidelines (the Asta Kosala Kosali), and the introduction of non-Indigenous architectural principles, materials, and technologies, are weakening environmental sustainability and eroding the harmonious relationships between a building and its inhabitants, as well as between humans, nature, and the universe (see 4.4.1). Participants in this study are aware of the difficulties they may face in challenging this status quo using bottom-up practices (see 7.3.1).

Indonesian architects that I interacted with described feeling a lack of trust from 'clients' who questioned their architectural practice or wished to have more agency and autonomy within the architectural process, or showed limited interest in how the design agency of participants articulated their architectural experiences, expectations, or needs as a community.

Like most participatory and co-design initiatives, Architectural Storywork does not try to replace the role of an architect, but encourages architectural practitioners to utilise their skills and knowledges to facilitate the co-production of new design cultures and architectural space with/from/by Indigenous communities. This study highlights a willingness within Balinese communities to engage in collaborate design projects, emphasising a desire for architectural autonomy and self-determination in how they experience architectural space.

The Architectural Storywork framework (outlined in Chapter 8) provides practical and ethical guidance for Balinese community's and Balinese architects to approach this subject as researchers 'with a little r'- engaging in auto- and architectural-ethnography (see 8.4.2). This champions the democratisation of design by encouraging architects to apply their specialist skills and knowledge in critical response to the needs of a community, assuming responsibility for the needs of others (that might not reflect their own assumptions), and genuinely care about the maintenance and repair of Indigenous worlds by improving communities' quality of life. This development of this framework through academic research also expands its contributions to discourses and practices within the more generalised architectural field.

Contributions to Architectural Research

This research shows that similar processes applied in parallel disciplines, such as Schultz's (2019) articulatory design practices using Indigenous Research Methodologies, can be applied tangibly within architectural space. This work expresses the impact that Indigenous Research Methodologies can have in developing decolonial practices, discursive design cultures, and pluriversal narratives within architectural research. The research also creates new understandings of how architectural research can be co-produced with Indigenous communities through mutual goal and value clarification, application, evaluation, and alignment, as well as deep listening and reflection (see Table 8.1).

The identification of three core strategies (see Chapter 2) is based on an in-depth understanding of the settings of this study. Expanding on Bellamy's (2022) 'thematic' use of literature across chapters, these strategies are developed in Chapters 3 and 4 using relevant and contextual literature to construct my Storywork methodology- complete with theoretical and ethical principles. These strategies are then developed into practical fieldwork phases in Chapters 5 and 6 through the application of my Storywork methodology, utilising key literature throughout. The application of these developed strategies is then evaluated in Chapters 7 and 8. This provides an alternative approach for architectural researchers ('big R' research) and practitioners ('little r' research) to structure and undertake literature reviews that iteratively contribute to a practical, ever-evolving, and situated study with real-world impacts on communities (Indigenous, marginalised, or otherwise).

As a methodology, Architectural Storywork can also begin to advance the dialogical exchange between community-researcher and architectural-researcher (both with big 'R' and little 'r') around important Indigenous topics within practical architectural projects. The ethical framework outlined by this study is a significant step in supporting architectural researchers to engage in practical architectural projects with Indigenous communities. The practical application of ethically-led discursive design tools increases the likelihood that the symbolic capital of art and architecture can be utilised in both imaginative and real-world acts towards the empowerment of marginalised communities in the here and now.

There is a lack of support for architectural researchers in practically facilitating Indigenous Research Methodologies and pluriversal ways of thinking and doing architecture with/ by/

from communities; albeit a growing field within design research in general. This research begins to support architectural researchers in facilitating Architectural Storywork within possibly complex and evolving circumstances such as the SARS-CoV-2 pandemic, providing clear frameworks and examples of situated practice both remotely and on-site using a variety of relevant design and Indigenous methods (see Fig 8.4 and Tables 8.1 and 8.2).

In future applications of Architectural Storywork, I would suggest that the researcher and community co-researchers construct their own ethical guidelines based on the Architectural Storywork framework provided in this study, and continuously and reflexively evaluate them considering their joint experiences of 'micro-ethics'. This process helps to balance the university Ethical Research Committee standards with situated Indigenous ethical frameworks that extend beyond university standards. I believe that this adjustment can also promote a greater balance between rigour and the authentic adaptability of Indigenous research methods in situational contexts through the personal investment of researchers and community co-researchers in a communal ethical framework.

9.2.3 Implications for Research Goals

A central aim of this thesis was to understand if a situated practice of Architectural Storywork could support the context-specific goals of the PKP community. Based on the PKP Community Centre's role within Indigenous Tourism (Indigenous owned tourism on Indigenous sites in response to colonial cultural tourism), the PKP community seek self-determinable identity, architectural autonomy, and agency over their situated retelling of Indigenous knowledge.

The research is novel by showing how discursive and Indigenous oriented architectural practices, designed with/ by/ from the community, can support these goals. Community members engaged with these goals during the research process in ways that potentially altered the outcomes of the architectural charge or draft design brief. This research shows the potential of Architectural Storywork to engage architects with pluriversal narrative of knowing, making, and doing, as the PKP community expressed confidence in instigating participatory design practices in the future that centre ancestral stories or their own stories of experience.

Wider implications include a framework for applying Indigenous Research Methodological principles in architectural research and practice to bridge the gap between Research Ethics Committees and Indigenous, community-based ethics. This integrates aspects of moral-imagination that have emerged as part of this situated study, which compliment Indigenous ethical principles and decolonial architectural theories and practices.

This research supports the goal of developing practice-based decolonial and discursive design practices that activate Indigenous Research Methodologies within architecture. This thesis marks a point in time where research on the intersection between Indigenous Research Methodologies and decolonial architectural practices are beginning to emerge, which should start to bridge the broadly recognised gap of discursive, decolonial, and pluriversal practices in architectural research. My research contributes to the bridging of this gap.

9.3 Limitations and Preventative Actions

Whilst the research findings suggest that all objectives were met, I cannot conclusively state that the PKP community have; a) already defined, or are moving towards the definition of, self-determined identities through respectful relationships with alterity, or b) reconceptualised their architectural autonomy by adapting the five core principles of the Asta Kosala Kosali. These limitations are related to methodological restrictions that limited community articulation and my own understanding of data, and the unpredictability of human behaviour.

9.3.1 Methodological Restrictions

The first data collection workshops of this research study was conducted remotely over the course of a six-month period between August 2021 and January 2022. The inability to facilitate on-site workshops using tangible analogue mediums- such as physical artworks, models, and engaged activities- limited the ways in which the PKP community could articulate their architectural experiences and engage in redirective actions. However, I adapted to these circumstances and developed a way to engage with the participants through iterative trials of digital data collection with Ibu Sari and a sample selection of participants as co-researchers. This involved an integration of 'Digital Storywork' techniques and a consistent re-evaluation of data collection methods based on the PKP community's goals for the research (which were constantly shifting due to the emergence of a land dispute- see 2.1.2) and values (such

as integrating the PKP rules- see Table 2.1- into established data collection techniques- see Table 6.1).

Other limitations did arise due to the digital nature of remote research with a community that lack access to digital technology or knowledge on digital literacy skills. This required constant flexibility in data collection techniques, an extension of timeframes, and a move from group workshops to individual sessions. Further limitations were placed on the 'Digital Storywork' method as I was unable to supply digital equipment or relevant software, facilitate workshops on the use of digital equipment or software, or collect data as a synchronous video narrative created and edited by participants to articulate their stories in uniquely personal ways. However, by working closely with Ibu Sari and the participants over an extended period of time, we were able to co-develop and implement successful data collection workshops that contributed significantly to the end outputs (see Sections 7.2.1 and 7.3.1 for examples within participant feedback).

The remaining data collection workshops and the production of fieldwork outputs were conducted on-site, each over the course of one month in July 2022 and February 2023 respectively. These site visits were reduced to one-month periods of time, seven months apart, due to financial restrictions as a self-funded researcher. The PKP community are active participants in the wider Balinese cultural society, whose calendar is dictated by daily rituals and weekly ceremonies, limiting their availability to engage in research activities. This reduced the number of ways in which I could normally embed myself within the community.

However, I made all efforts to engage in the day-to-day activities of the PKP Community Centre outside of the research, including helping with the preparation of food and offerings for ceremonies, attending local *banjar* and larger regional festivals at the local temples, engaging with Elders and the heads of village duties, spending time with the families of the participants, accompanying members of the PKP community on charitable trips to donate supplies to marginalised communities, attending meetings between Ibu Sari and financial investors, donors, and clients, and joining self-empowerment and educations workshops with members of the PKP community. These engagements helped me establish relational accountability with the community within constricted timescales, which I believe contributed

to the success of on-site workshops.

9.3.2 The Unpredictability of Human Behaviour

Due to the longitudinal nature of the study and the PKP Community Centre's role within the community, not all participants were available during each workshop of data collection. The unpredictability of human behaviour, particularly within the context of vulnerable and marginalised individuals who often live nomadic lifestyles, limited my ability to capture full data sets or feedback for every participant. In an effort to empower participants, I relinquished control of study data as much as possible within the research parameters - giving them ownership of their data and agency over if, how much, and in what ways to share it with me.

As such, I had no control over whether participants would respond to my requests for data. Inevitably, some did not continue or engage fully with all activities. The data and feedback from those who completed every activity and were fully engaged throughout suggest that the practice of Architectural Storywork was beneficial. Those who didn't fully engage, also did not fully engage in other PKP activities, suggesting that they may not have fully engaged in any case. Despite some participants not continuing with the study, I retained the minimum group sample size for qualitative studies using Discourse and Interpretative Phenomenological analyses.

It was possible for me to maintain validity in these circumstances by treating each participant as both themselves and the collective at the same time, viewing each output as the work of the community. When a participant had to step back from the study, I was able to facilitate another participant to continue their work. This proved significant during Fieldwork Outputs as a new participant was able to continue the work of previous participants who had studied the shelter building- arguably one of the most important spaces to consider at the PKP Community Centre. Viewing the participants as a collective also emphasised the impact that each individual member could have on the collective whole and vice versa (Grande, 2004; Tuck, 2009).

Self-determination and autonomy are important factors in this research- both generally within Storywork as a decolonial Indigenous Research Methodology, and its situated practice at the PKP Community Centre. Therefore, careful considerations would need to be made

to future applications of Architectural Storywork to increase the possibilities of community articulation and researcher understanding. Participants did not feel that the structure or guidance of activities impacted their understanding or engagement, retaining the framework for Architectural Storywork laid in out in Tables 8.1 and 8.2. However, participants did suggest that in-person activities using visual, oral, and tactile mediums instead of written mediums, or having the researcher embedded within the community for an extended period of time, could lead to greater understanding or engagement.

9.3.3 Translation Barriers

This study required the use of translators, both prior to the fieldwork commencing and during all fieldwork activities. Before the fieldwork could begin, I made sure to translate the most applicable information regarding the study (such as information sheets, data protection notices, and consent forms- see Appendix D) using a company approved by my university. However, in the field, I had to rely on community translators to facilitate rigorous and in-depth interactions between myself and the participants. I also considered community ethics within this process, such as the protocols and requirements of sharing and receiving stories as data within the PKP community, to select appropriate translators.

Ibu Sari acted as the primary community translator. Her intimate knowledge and relationship with the study participants provided a unique understanding of cultural and personal sensitivities that may affect the vulnerability of prospective participants. Ibu Sari's unique understanding also helped assure participants that their data is respected, whilst also increasing my accuracy in comprehending and processes participant's data. Ibu Sari appointed a secondary community translator to translate verbatim text when she was unavailable. Whilst this was essential to the successful facilitation of the study, various barriers caused by translation were identified and steps taken to reduce their risks:

- There is a risk that translators may knowingly or unknowingly censor, fabricate, or misrepresent data in ways that neither the participant nor myself could comprehend due to language. I took steps to make sure that each translator was aware of the significances of their role and what their obligations were, including:
    - To accurately guide members of their community through workshop activities,

accurately and honestly documenting the information provided.

- To maintain the confidentiality of other community members and keep all of their information private and secure.
- To understand that they are in a position of trust, handling personal data of participants, which cannot be taken lightly. They must not break the trust of their community.
- To understand that their relationship with the study participants may make them perceive and interpret information differently than was meant.
- To agree to do their best to correctly perceive and interpret the information of other participants.

- Not all translation were directly verbatim. In many cases, both mine and participant's voices were summary translated- meaning that the translators summarised what the speaker was saying and repeated it in a format and vocabulary suited to the comprehension of the listener. Whilst this was useful during long and in-depth conversations, or discussing topics that were not generally understood by everyone (such as my limited understanding of Balinese terms, or the participant's limited understanding of architectural and research related terms), summary translations leave open the potential for key information to not be relayed or for misunderstandings to occur within conversations. In most cases, I was present for the summary translations and was able to ask more questions if I felt that information was inadvertently censored in some way by the translator. However, despite the guarantees provided by the translator and my own presence to clarify summary translations, I acknowledge that some bias is still present in the translation process and/or that my presence may have changed the dynamic of conversation between the participant and translator- inadvertently impacting the data.
- Summary translations cannot be analysed using a Discourse Analysis- my primary method of analysis. Whilst discourse analysis is integral to conducting translations, it cannot be correctly conducted on non-verbatim translations as the main findings would focus on how the translator, rather than the participant, framed the argument in English. New discursive approaches to Interpretative Phenomenological Analysis allowed me to still

analyse this data through a discursive lens by considering how discourses are lived in the life of a person.

Whilst the initial remote data collection workshops (see Table 6.1, Workshops 1 and 2) were essential to the participant's explorations of self in relation to their architectural spaces, participants made it clear that the mostly written (English UK) format was difficult to engage with and that they would have preferred to engage directly with the drawing and physical model making activities of on-site workshops (see Table 6.1, Workshops 3 and 4). Future applications of Architectural Storywork might consider wider use of visual and tangible activities to overcome language barriers and participant engagement.

However, it should be noted that summary translations occurred more frequently within on-site, kinaesthetic workshops for two reasons: 1) describing complex visual material required in-depth conversations and multiple rounds of questioning that needed to be re-formatted into a vocabulary suited to the comprehension of the listener, and 2) it is harder for both the participant and the translator to break down visual material into easy to translate discursive elements or 'visual grammar', unlike written sentences which can be easily compartmented into sentences. Therefore, steps must be put in place by the researcher to ensure the ethical application of summary translations when collecting visual data.

9.3.4 Democratising Voices

Whilst my study attempts to democratise the many voices within the process of creating an architectural charge (defining the responsibilities of the PKP Community Centre's future architecture based on the goals and values of the PKP community), maintaining a true polyphony (where multiple, diverse, worlds are voiced simultaneously without being reduced, redacted, altered, or judged by another authoritative voice) is nearly impossible. This is partly due to:

- My involvement as a researcher with my own research intent. In attempts to reduce my own bias and influence on the project, I took the time to align my research strategies and questions with the goals and values of the PKP community (see Chapter 2), developed these strategies into a Storywork methodology based on culturally relevant stories to produce an ethical framework that centres the voices of the PKP community (see Chapters

3 and 4), and attempted to maintain these principles throughout my fieldwork with the PKP community in ways that reduced unnecessary processing of participants' data and aimed to maintain the diversity of, sometimes contradictory, worldviews (see Chapters 5 and 6).

- The subconscious hierarchies within the PKP community itself. Ibu Sari approaches the PKP community as a democratic and harmonious whole, where men and women of different ages and worldviews work together for the benefit of the community. Despite this, Ibu Sari is a cultural leader, counsellor, public speaker, and recipient of many accolades for her work. Similarly, some participants have taken leadership roles within the community under the mentorship of Ibu Sari. These individuals are respected by other participants and were indispensable in supporting my facilitation of data collection workshops due to language barriers. However, their roles in the community can lead to unwitting bias and influences on participant's work, placing limitations on true polyphony. Similar to translators, I made sure that any leading participants understood the significance of their role in guiding others and asked each of them to take responsibility for their influences on other participants. These relationships was based on the trust built between myself and the PKP community over the course of the study, through my above actions.

Throughout each phase of research (defined in my study as Fieldwork Initiation, Data Collection, Data Analysis, and Fieldwork Outputs), the key role of the researcher/ architect is to resist synthesising data, trying not to reduce multiple and potentially complex data sets into a more manageable format. Instead, it is their responsibility to compose data material in ways that authentically maintain as many voices within the data as possible. I believe that my relational accountability to the complexity and diversity of participant's data is the main reason why this study was able to maintain a high level of polyphony throughout.

As each phase progressed, my relationship with the PKP community strengthened based on their interpretations of my role as a researcher- how I handled their data, the information that I abstracted from their data, and who and how I shared that information with (see 7.2.2). In any collaborative work, it is possible that some participants may feel disappointed by the way a faciliatory integrates their voice into the project. Composing data is a way for a researcher

to be transparent about their analysis process, openly showing how each participant's voice (and the values, goals, or abstract concepts they articulate) contribute to the final output. This allows participants to reflect upon their individual inputs as part of a larger whole and, where applicable, to amend their contribution.

9.3.5 Limitations of Professional Practice

Other professional stakeholders who may be involved in the architectural design process, such as local architects and craftspeople, were not consulted as part of this research, were not integrated into the workshops at a deeper level of participation, or asked to provide feedback from their experiences. Tensions may occur between the realities of professional practice and the application of research practice within a community.

One tension highlighted at multiple points within this study is the difficulty of breaking down entrenched ways of learning. This includes my own, ongoing, process of 'unlearning' colonial settler mentalities and Western conceptions of knowledge, design, and architecture- whilst attempting to develop respectful and reciprocal relationships with Indigenous peoples, their ontologies, epistemologies, and methodologies. I also have a responsibility to recognise and temper the impact of colonial and Western ideologies on the lifeways and Indigenous technologies (ways of knowing and doing) of the communities I engaged with.

The contemporary specialisation of architecture places greater legal liability on an architect, including a practitioner's duty of care to understand and meet recognised standards for planning (site surveys etc.), design (amenities etc.), and construction (materials etc.). This might make architects less inclined to engage in co-design or participatory projects, particularly on large and complex sites such as the PKP Bale Tong Tong project, in which they can be held responsible for any problems.

Small resistance to my Architectural Storywork methodology from Indonesian architects (see 9.2.3) also suggests that architects may view co-design or participatory projects as signifying a lack of trust in their knowledge. Balinese and, in general, Indonesian society show great reverence to the role of an architect, who is viewed as possessing sacred knowledge. This might explain why Balinese architects have become gatekeepers of both Indigenous architectural knowledge and newly introduced architectural technologies in recent decades (see 4.4.1).

However, recent studies have shown that this gatekeeping has weakening environmental sustainability and began to erode the harmonious relationships between a building and its inhabitants, as well as between humans, nature, and the universe (Aryani & Tanuwidjaja, 2013; Idham, 2018; Satria, 2019). My own interactions with Indonesian architects suggest that tensions surrounding co-design and participatory project can be navigated with the help of a research facilitator and the application of non-binary research epistemologies.

The binary concept of colonial and Indigenous architecture can reduce the complex experiences of architects and communities-as-co-designers into two binary 'worlds' that they must walk between; 'my architectural knowledge' or 'your architectural knowledge' (Bunten & Graburn, 2016). In reality, it is more appropriate to call this "living with two laws"- a duality of laws between the Indigenous way of architecture- represented by the architectural autonomy of the Asta Kosala Kosali- and "proper" colonial way of architecture that has perpetuated historical injustices (De Santolo in Archibald et al., 2019).

As the PKP community exemplify (see 7.4.2 and 7.4.3), the injustices of this binary can be overcome through a merger, or weaving together, of ethno-architectural knowledge present within Indigenous communities and professional architectural knowledge entrusted within architectural practitioners. Exactly how this is navigated is not yet fully understood and Architectural Storywork does not, so far, include definitive answers to these obstacles. Tentative suggestions have been made in Tables 8.4 and 8.5. This needs to be addressed further so that all stakeholders have a better chance of working together.

The difficulty in accessing regional or local village governments restricted my ability to assess how the data from this research could potentially affect policy changes around architectural autonomy. The limited timeframes to engage longitudinally with local architects restricted my ability to consider how the data from this research could potentially affect architectural practice around participatory or Indigenous research methods.

9.3.5 Questions of Validity

I recognise that my methods of data collection changed as the research progressed. This was to; a) align more with the PKP rules (see Table 2.1) and situated micro-culture of the PKP Community Centre, b) reflect the feedback of the PKP community participants during and

after remote data collection, and; c) allow for the flexibility required when collaborating with a fluctuating team of individuals who work with vulnerable and marginalised groups. The changes to data collection methods could raise questions about the validity of the research. However, the Storywork methodology recognises the ever-changing contexts of story-based methods in the space between the teller and listener (Kinloch & San Pedro, 2014). Following the Seven Principles of Storywork (Archibald, 2008) and my own ethical guidelines (adapted from best practice and built upon during the research- see Appendix C) allowed me to maintain rigour whilst allowing for authentic changes to occur based on situated contexts.

9.4 Further Research

Before attempting to replicate or develop Architectural Storywork in other contexts, it is important that the longitudinal impacts of the methodology are studied as the PKP community progress into design development, construction, and inhabitation. In recognising that a community's goals may change over time, it would be important to consider what values are centred by the PKP community as they move forward and how Architectural Storywork can be applied in these further stages. A future study with the PKP community, that investigates the repeated use of the Architectural Storywork methodology over the full length of an architectural project with consistent participants and methods, should further evolve the findings of this study. Equivalent research in other locations with other communities could also contribute to the generalisability of the methodology, whilst also giving community's space to hear the unique and often unheard voices of communities around the world through architectural discourse.

Architectural Storywork has already been considered as applicable to local LGBTQ+, refugee, and nomadic communities who have an interest in developing community-led architecture. Whilst each application of Architectural Storywork is unique, situated to a specific place and people, the frameworks outlined in Chapter 8 provide a strong foundation for this work to be replicated elsewhere with other communities. Future projects could help test, develop, and distil these frameworks into a handbook for more generalised practices.

This highlights opportunities for the principles of Architectural Storywork to be applied outside of the research domain (with a big 'R') by architects who conduct research in their role (with

a little ‘r’) in relation to the construction of an architectural charge- defining architecture’s responsibility to communities through imaginative, critical, and ethical contributions to the construction of a design brief. These principles (see Tables 8.2, 8.6, and 8.7) are a way to authentically include communities in architectural projects using co-created discursive practices that engage in pluriversal narratives and bottom-up methods- unsettling ‘universal’ architectural history. It would be interesting to see how Architectural Storywork approaches translate over to, or have influence on, architectural practice; comparing the processes over longitudinal studies that include pre-brief, brief, design, construction, and post-occupancy studies. My research has attempted to provide a series of example workshops and loose guides that offer ways in which others might explore Indigenous Research Methodologies within architecture, or explore architecture as a decolonial and discursive practice.

9.5 Reflection

The significance of this project for the PKP community cannot be understated as, at the time of writing, they are still living in the shadow of possible displacement after over two years of feeling ‘homeless’. Despite developing an intimate understanding of the PKP community’s urgent needs, I did not truly grasp the importance of this study to the participants until the final days of my fieldwork output workshops.

During the course of the study, I treated the participants’ data as an abstraction of themselves; performances of their lived experiences that created semi-fictional narratives playing out in semi-fictional discursive spaces. During this process, I was engaged in a dual conversation- one with the participants as real people, and one inside my own head engaging constantly in a meta-analysis of their semi-fictional stories. This meta-analysis produced a dissonance between my data analysis and my real-world relationships with the participants, in which I did not fully understand or appreciate the impacts of the study on the participants.

This dissonance become apparent to me during the focus group evaluation session I conducted with the participants (see Table 6.4, Output 4 and Appendix H). This reflexive process allowed me to take time to connect with my inner self, to the PKP community, and to their goals and values, in order to appreciate the true meanings and outputs of this study. During discussions on potential improvements to the study, the participants described how I

helped to guide them in “explor[ing] our own self”, “recognis[ing] all the tension in our daily activities in a space”, and “putting connect[ions] amongst those cultural spirits”- thanking me for being “the best teacher” and “guiding us to remember what has been forgotten”.

This moment was emotionally overwhelming for me as, unguided, the participants directly affirmed how the study contributed towards their goals of self-determinism, architectural autonomy, and the transmission of new Indigenous knowledges. For the first time, participant’s showed a level of genuine ownership over their architectural space, rather than a temporary incursion into someone else’s space; one participant pointed to her bamboo model and, through tears of joy, repeatedly told me, “this is *my* kitchen”. These moments abruptly brought into focus the redirective power of Architectural Storywork as an imaginative and emancipatory act for the participants.

This thesis has become a ‘boundary object’ in itself, a discursive architectural work that carries and communicates connective stories across different contexts- stories shared and interwoven between myself and the PKP community, giving meaning to the participants’ experiences of architectural space in ways that navigate and celebrate the different practices, competences, tools, or languages we both use. In attempting to meet my architectural responsibilities to the PKP community, I have opened myself up to the unknown knowledges, conditions and realities of the Balinese people. Within this project, I have tried to position these diverse worldviews alongside my own in a form of polyphony. I try not to reduce the principles of Balinese architectural philosophy or the micro-culture of the PKP community into a well-known generalisability or frame it within Western philosophies of architecture but, instead, interweave them with architectural movements working at the edge of or beyond Western philosophy such as discursive, decolonial, Indigenous, and deconstructive practices.

This task has been personally transformative, irrevocably impacting my design and research practices, my teaching philosophy, and shifting my own worldview. In the final days of fieldwork activities, there was a palpable sense of empowerment and ownership from the PKP community over their experiences of architectural space and expectations of architecture’s responsibility to them- both abstractly within their new understandings of professional and ethno-architectural knowledge, and materially tangible within their visual stories and physical models.

Ultimately, this study was undertaken to trigger new thoughts or deepen existing ideas about emancipation by learning from the stories told about, and within, the discursive architectural spaces of the PKP community's stories. To reference the participants' Focus Group Evaluation (see Appendix H), these stories were "very helpful to guide the imagination to be aligned" so that the PKP community are "able to share with someone else about the building… through the activities, people will understand more and deeper about the essence of the building we are going to build, the story behind [it] and the overall history".

The activities also helped to guide "the circumstance amongst the community; that there is no difference among us, no matter what is the background, we are the same here", by firstly helping "everyone to understand themselves, then the cycles will be *tat twam asi*: "I'm you, you're me, we are one", so everyone can understand each other."

This gives the PKP community confidence to "be able to explain why this is like that, where this [idea is] coming from" and to demand that "the architect [is] responsible for what [knowledge, skills, and experiences they] share". If the architect is "not honest, or [doesn't] put things in place [that the community] want, that [they have] shared", then "it's back again to the building affect[ing] individuals".

Because "there is no ownership, no ego, involved" in these activities, "this knowledge [can] help [contribute to] social change in the community". I hope that the emancipatory power held within these design practices and architectural knowledges can continue, adapt, and evolve in new space with new people.

References

Akama, Y. (2017). Kokoro of Design: Embracing Heterogeneity in Design Research. *Design and Culture*, vol.9, no.1, pp.79-85

Akama, Y. & Ivanka, T. (2010). What Community? Facilitating Awareness of Community through Playful Triggers', in Bodkier, K., Bratteteig, T., Loi, D., & Robertson, T. (eds.), *PDC 2010: Participation, The Challenge*. New York: ACM, pp.11-20

Alit, I. (2003). Kinerja Undagi dalam Pembangunan Rumah. *Jurnal Permukiman Natah*, vol.1, no.2.

Ambroz, A. (2022). Glissant and Derrida: Deconstructing Colonial Imaginary from Within and from Without. *Decolonisation and Poststructuralism*, Madrid, Spain, February 23

Anciano, F. & Wheeler, J. (eds.) (2021). *Political Values and Narratives of Resistance: Social Justice and the Fractured Promises of Post-Colonial States*. Oxon: Routledge.

Andersen, N. (2003). *Discursive Analytical Strategies: Understanding Foucault, Koselleck, Laclau, Luhmann*. Bristol: Policy Press

Archibald, J. (2008). *Indigenous Storywork: Educating the Heart, Mind, Body, and Spirit*. Vancouver, BC: UBC Press

Archibald, J., Lee-Morgan, J., & De Santolo, J. (eds.) (2019). *Decolonising Research: Indigenous Storywork as Methodology*. London: Zed Books

Archibald, J. (2019). *Dr. Jo-Ann Archibald on Indigenous Storytelling*. National Centre for Collaboration in Indigenous Education. [YouTube Video]. Available at: < https://www.youtube.com/watch?v=5rSHifM35i4> [Accessed: 2 May 2023]

Archibald, J., & Parent, A. (2019). 'Hands Back, Hands Forward for Indigenous Storywork as Methodology', in San Pedro, T. & Windchief, S. (Eds.) *Applying Indigenous Research Methods: Storying with Peoples and Communities*. New York, Routledge, pp.3-20

Arthana, I. (2018). Functions and Meanings of 'Pengurip' in Balinese Architecture: Interpretation of the Manuscript Asta Kosala Kosali. The International Journal of Engineering and Science, vol.7, no.9, pp.8-14

Arthana, I. (2019). The Knowledge Building of Construction Process of Bali Arya's Architecture: Interpretation of The Manuscript Asta Kosala Kosali. Journal of Architectural Research and Education, vol.1, no.2, pp.168-175

Aryani, N., & Tanuwidjaja, G. (2013). Sustainable Architectural Design in a Traditional Balinese Housing in Accordance to the Concept of Tri Mandala. *Architecture and Environment*, vol.12, no.2, pp.113-124

Austin, P. (2010). Reading the Lontars: Endangered Literary Practices of Lombok, Eastern Indonesia. *Language Documentation and Description*, vol.8, pp.27-48

Bachelard, G. (2014). The Poetics of Space. New York: Penguin

Bal, M. and Bryson, N. (1991). Semiotics and Art History. *Art Bulletin*, vol.73, pp.174-208

Bandoni, A., Meroz, J., & Paz, S. (2010). 'Objects: Two Sides of the Story', in Lomme, F., & Capio, M. (eds.) *Pre Specifics: Access X!* Eindhoven: Onomatopee, pp.73-82

Batuan, D. (2009). *Mandalas of Bali*. California (CA): Michael Wiese Productions

Barcham, M. (2023). Towards a Radically Inclusive Design- Indigenous Story-telling as Codesign Methodology. *CoDesign*, vol.19, no.1, pp.1-13

Bastidas, E. & Gonzales, C. (2009). Social Cartography as a Tool for Conflict Analysis and Resolution: The Experience of the Afro-Colombian Communities of Robles. *Peace and Conflict Studies Journal*, vol.15, no.2, Article 1

Bataille, G. (2009). *The Cradle of Humanity: Prehistoric Art and Culture*. New York: Zone Books

Bazeley, P. (2020). *Qualitative Data Analysis: Practical Strategies*, 2nd Edition. London: SAGE Publications

Bazeley, P. & Jackson, K. (2013). *Qualitative Data Analysis with NVivo*, 2nd Edition. London: SAGE Publications

Behrendt, L. (2016). *Finding Eliza: Power and Colonial Storytelling*. St Lucia: University of Queensland Press

Beier, J. (2005). *International Relations in Uncommon Places: Indigeneity, Cosmology, and the Limits of International Theory*. New York: Palgrave Macmillan

Bellamy, A. (2022). *Designing Dying Well: Towards a New Approach to the Co-Production of Palliative Care Environments for the Terminally Ill*. PhD Thesis. The Welsh School of Architecture, Cardiff University

Berardi, A. et al. (2017). 'Using Visual Approaches with Indigenous Communities', in Oreszczyn, S. & Lane, A. (eds.) *Mapping Environmental Sustainability: Reflecting on Systemic Practices for Participatory Research*. Bristol: Policy Press, pp.103-128

Berkes, F. (2018). *Sacred Ecology*. New York: Routledge

Borbo, M. (1990). Ethnomathematics and Education. *For the Learning of Mathematics*, vol.10, n.1, pp.39-43

Borden, I. & Randell, J. (eds.). (2000). *Intersections Architectural Histories and Critical Theories*. London: Routledge

Bosmans, G., Van Vlierberghe, L., Bakermans-Kranenburg, M., Kobak, R., Hermans, D., & van IJzendoorn, M. (2022). A Learning Theory Approach to Attachment Theory: Exploring Clinical Applications. *Clinical Child and Family Psychology Review*, vol.25, pp.591–612

Brayboy, B. (2006). Toward a Tribal Critical Race Theory in Education. *The Urban Review*, vol.37, no.5, pp.425-446

Breen, L. (2007). The Researcher In the Middle?: Negotiating the Insider/Outsider Dichotomy. *The Australian Community Psychologist*, vol.19, no.1, pp.163-174

Brown, J. (2018). *Mediated Space*. London: RIBA Publishing

Brown, J. (2019). 'The Production Sites and Production Sights of Broadcasting House', in Psarra, S. (ed.) *The Production Sites of Architecture*. London: Routledge, pp.129-143

Brunette, P. & Wills, D. (1989). *Screen/Play: Derrida and Film Theory*. Princeton, NJ: Princeton University Press

Broffman, A. (2018). 'Tangentyere Design: Architectural Practice and Cultural Agency in Central Australia', in Grant, E., Greenop, K., Refiti, A., & Glenn, D. (eds.) *The Handbook of Contemporary Indigenous Architecture*. Singapore: Springer Nature, pp.381-412

Bryant, B. (2003). *The Wheel of Time: Sad Mandala*. New York: Snow Lion Publications

Bühnemann, G. (2003). *Mandalas And Yantras in The Hindu Traditions*. New Delhi: D.K. Printworld

Bunn-Marcuse, K. (2018). 'Streams of Tourists: Navigating the Tourist Tides in Late-Nineteenth-Century Southeast Alaska', in Bunten, A. & Graburn, N. (eds.) *Indigenous Tourism Movements*. Toronto: University of Toronto Press, pp.165-197

Bunten, A. (2008). Sharing Culture or Selling Out? Developing the Commodified Persona in the Heritage Industry. *American Ethnologist*, vol. 35, no. 3, pp.380-395

Bunten, A. & Graburn, N. (eds.) (2018). *Indigenous Tourism Movements*. Toronto: University of Toronto Press

Burnett, B. and Evans, D. (2016). *Designing Your Life: How to Build a Well-Lived, Joyful Life*. New York: Alfred A. Knopf

Byrd, J. (2011). *The Transit of Empire: Indigenous Critiques of Colonialism*. Minneapolic, MN: University of Minnesota Press

Cabrero, D. (2016). User-Created Persona: Personas beyond the Global North. *ACM Conference on Human Factors in Computing Systems,* San Jose California, USA, May 7-12

Cabrero, D., Álvarez, C., Rocha, M. & Abdelnour-Nocera, J. (2016). User-Created Personas in rural Mexico and in rural Spain: Approaches neither from the North nor from the South. *Avances en Interacción Humano-Computadora*, [S.l.], no.1, pp.13-17

Chambers, R. (1995). Poverty and livelihoods: whose reality counts? *Environment and Urbanisation*, vol.7, no.1, pp.173-204

Charmaz, K. (1995). The Body, Identity, and Self: Adapting To Impairment. *The Sociological Quarterly*, vol.36, no.4, pp.657-680

Chatman, S. (1978). *Story and Discourse: Narrative Structure in Fiction and Film*. London: Cambridge University Press

Chilisa, B. (2011). *Indigenous Research Methodologies*. London: SAGE Publications

Chouliaraki, L. (2008). Mediation as Moral Education. *Media, Culture and Society*, vol.30, no.6, pp.831-852

Clague, P. (2019). Indigenous Storytelling: Deconstructing the Archetypes. *Artlink*, vol.39, no.2, pp.10-19

Cleen, B. & Stavrakakis, Y. (2017). Distinctions and Articulations: A Discourse Theoretical Framework for the Study of Populism and Nationalism. *Javnost: The Public*, vol. 24, no.4, pp.301-319

Clendinning, E. (2022). Adapting to Desa, Kala, Patra (Place, Time, Situation): Balinese Dance in American Universities. *Journal of Dance Education*

Couldry, N. (2002). *Media Rituals: A Critical Approach*. Oxon: Routledge

Couchez, E., Heynickx, R., & Schoojans, S. (2019). 'The Burned Map: Military Theory and Architectural Education', in Psarra, S. (ed.) *The Production Sites of Architecture*. London: Routledge, pp.195-214

Coyne, R. (2011). *Derrida for Architects*. London: Routledge

Creanza, N., Kolodny, O., & Feldman, M. (2017). Cultural Evolutionary Theory: How Culture Evolves and Why it Matters. *Proceedings of the National Academy of Sciences*, vol.114, pp.7782- 7789

Crowley, C., Harre, R., & Tagg, C. (2002). Qualitative Research and Computing: Methodological Issues and Practices in Using QSR NVivo and NUD*IST. *International Journal of Social Research Methodology*, vol.5, no.3, pp.193-197

Dalla Costa, W. (2018). 'Metrics and Margins: Envisioning Frameworks in Indigenous Architecturein Canada', in Grant, E., Greenop, K., Refiti, A., & Glenn, D. (eds.) *The Handbook of Contemporary Indigenous Architecture*. Singapore: Springer Nature, pp.193-221

Damayanthi, M. (2017). The Undagi Lexicon in The Manufacture of Residential Houses Based on Asta Kosala Kosali Concept in Denpasar. *RETORIKA: Jurnal Ilmu Bahasa*, vol.3, no.2, pp.290-296

Datta, R., Khyang, N., Khyang, H., Kheyang, H., Khyang, M., & Chapola, J. (2015) Participatory Action Research and Researcher's Responsibilities: An Experience with an Indigenous Community, *International Journal of Social Research Methodology*, vol.18, no.6, pp.581-599

Datta, R. (2022). *An Introduction to Indigenist Community-Based Participatory Action Research.* Sage Video. [Streaming Video]. Available at: <https://doi.org/10.4135/9781529609691> [Accessed 2 May 2023]

Davidson, S. (2016). *Following the Song of K'aad 'Aww: Adolescent Perspectives on English 10 First Peoples, Writing, and Identity*. Unpublished PhD Thesis. University of British Columbia

Davidson, S. (2019). 'Following the Song of K'aad 'Aww: Using Indigenous Storywork Principles to Guide Ethical Practices in Research', in Archibald, J., Lee-Morgan, J., & De Santolo, J. (eds.) *Decolonising Research: Indigenous Storywork as Methodology*. London: Zed Books, pp.31-46

De Santolo, J. (2019). 'The Emergence of Yarnbar Jarngkurr from Indigenous Homelands: A Creative Indigenous Methodology', in Archibald, J., Lee-Morgan, J., & De Santolo, J. (eds.) *Decolonising Research: Indigenous Storywork as Methodology*. London: Zed Books, pp.252-272

De Santolo, J. (2021). 'Holding Water and Fire for Survival' in Smith, L. *Decolonising Methodologies: Research and Indigenous Peoples*, 3rd Edition. London: ZED Books

De Schryver, C. (2022). "The Crisis of the Crisis": Deconstruction and Decolonisation. *Decolonisation and Poststructuralism*, Madrid, Spain, February 23

De Seta, G. (2020). Three Lies of Digital Ethnography. *Journal of Digital Social Research*, vol.2, no.1, pp.77-97

Dei, G., Hall, B., & Rosenberg, D. (eds). (2000). *Indigenous Knowledge in Global Contexts: Multiple Readings of Our World*. Toronto, ON: University of Toronto Press

Derrida, J. (1974). White Mythology: Metaphor in the Text of Philosophy. Translated by Moore, F. *New Literary History*, vol. 6, no. 1, pp.5-74

Derrida, J. (1976). *of Grammatology*. Translated by Spivak, G. London: John Hopkins University Press

Derrida, J. (1982). *Margins of Philosophy*. Translated by Bass, A. Chicago: Chicago University Press

Derrida, J. (1986). *Glas*. Translated by Leavey, J. & Rand, R. London: University of Nebraska Press

Derrida, J. (2008). *The Animal that Therefore I Am*. Translated by Wills, D. New York: Fordham University Press

Derrida, J. (2011). *Voice and Phenomenon*. Translated by Lawlor, L. Evanston, IL: Northwestern University Press

Derrida, J., Brunette, P., & Wills, D. (1994). 'The Spatial Arts: An Interview with Jacques Derrida', in Brunette, P. & Wills, D. (eds.) *Deconstruction and the Visual Arts: Art, Media, Architecture*. Cambridge: Cambridge University Press, pp.9-32

Desnanjaya, I. & Sudipa, I. (2019). The Control System of Kulkul Bali Based on Microcontroller. *5th International Conference on New Media Studies (CONMEDIA)*, Bali, Indonesia, October 9-11, pp.244-250

Dey, P. (2007). *On the Name of Social Entrepreneurship: Business School Teaching, Research, and Development Aid*. Unpublished PhD Thesis. University of Basel

Dibia, I., & Ballinger, R. (2004). *Balinese Dance, Drama and Music: A Guide to the Performing Arts of Bali*. Singapore: Periplus Editions

Dokras, D. (2022). *Architecture & Mandalas: Mandala Book IV*. Stockholm: Indo Nordic Author's Collective

Dollah, S., Abduh, A., & Rosmaladewi, R. (2017). Benefits and Drawbacks of NVivo QSR Application. *2nd International Conference on Education, Science, and Technology (ICEST 2017)*, Makassar, Indonesia, March 11-12, pp.61-63

Douny, L. (2018). 'The Commodification of Authenticity: Performing and Displaying Dogon Material Identity', in Bunten, A. & Graburn, N. (eds.) *Indigenous Tourism Movements*. Toronto: University of Toronto Press, pp.140-164

Drugan, J. & Tipton, R. (2017). Translation, Ethics and Social Responsibility. *The Translator*, vol.23, no.2, pp.119-125

Duff-Cooper, A. (1985). Duality in Aspects of a Balinese Form of Life in Western Lombok. *Cosmos*, vol.1, pp.15-36.

Dunbar-Hall, P. (2001). Culture, Tourism and Cultural Tourism: Boundaries and Frontiers in Performances of Balinese Music and Dance. *Journal of Intercultural Studies*, vol.22, no.2, pp.173-187

Dunne, A. & Raby, F. (2013). *Speculate Everything: Design, Fiction, and Social Dreaming*. Cambridge (MA): The MIT Press

Dwijendra, N. & Mahardika, M. (2018). The Influence of Globalization on the Existence of Local Culture in Indonesia. *Asian Academic Research Journal of Social Sciences & Humanities*, vol.5, no.6, pp.82-94

Dwijendra, N., Adhika, I., Putra, I., Mananda, I., & Adnyana, I. (2020). Design Model Innovations for Tourism Villages in Bangli, Bali Indonesia: Debate between Environmental and Cultural Protection Versus Community Economic Development. *International Journal of Advanced Science and Technology*, vol.29, no.7, pp. pp. 1428-1443

Dwijendra, N. & Adhika, I. (2022). The Resilience of Undagi's Role in Traditional Balinese Architecture Based on Asta Kosala Kosali in Bali, Indonesia. *Res Militaris*, vol 12., no.6

Dwyer, S., & Buckle, J. (2009). The Space Between: On Being an Insider-Outsider in Qualitative Research. *International Journal of Qualitative Methods*, vol.8, no.1, pp.54–63

Dyczkowski, M. (ed. and trans.). (2009). *Manthānabhairavatantram: Kumārikākhaṇḍaḥ. Volume 2 of 14: Introduction*. New Delhi: Indira Gandhi National Centre for the Arts

Eatough, V. & Smith, J. (2017). 'Interpretative Phenomenological Analysis', in Willig, C. & Rogers, S. (eds.) *The SAGE Handbook of Qualitative Research in Psychology*. London: SAGE Publications, pp.179-194

Edwards, K., Lund, C., & Gibson, N. (2008). Ethical Validity: Expecting the Unexpected in Community-Based Research. *Pimatisiwin: A Journal of Aboriginal and Indigenous Community Health*, vol.6, no.3, pp.17-30

Edwards, R. & Mauthner, M. (2012). 'Ethics and Feminist Research: Theory and Practice', in Miller, T., Birch, M., Mauthner, M., & Jessop, J. (eds.). *Ethics in Qualitative Research*. London: SAGE Publications, pp.14-28

Escobar, A. (2018). *Designs for the Pluriverse: Radical Interdependence, Autonomy, and the Making of Worlds.* Durham and London: Duke University Press.

Escobar-Tello, C., Ruette-Orihuela, K., Gough., K., Fayad-Sierra, J., & Velez-Torres, I. (2021). Decolonising Design in Peacebuilding Contexts. *Design Studies*, vol. 73

Evans B., & Wheeler C. (1969). *Emerging Techniques *2: Architectural Programming*. Washington, DC: American Institute of Architects

Ewing S, McGowan, J, Speed, C, & Bernie, V.C., (eds.) (2011) *Architecture and Field/Work*, AHRA Critiques Series, London, Routledge.

Fairclough, N. (2010). *Critical Discourse Analysis: The Critical Study of Language*. London: Routledge

Fast, E. & Kovach, M. (2019). 'Community Relations within Indigenous Methodologies', in Windchief, S. & San Pedro, T. (eds.) *Applying Indigenous Research Methods: Storying with Peoples and Communities*. New York: Routledge

Forty, A. (2000). *Words and Buildings: A Vocabulary of Modern Architecture*. London: Thames and Hudson

Frayling, C. (1993). *Royal College of Art Research Papers 1993/4: Research in Art and Design*. London: Royal College of Art

Frichot, H. (2010). Following Hélène Cixous' Steps Toward a Writing Architecture. *Architectural Theory Review*, vol.15, no.3, pp.312-323

Fritsch, M. (2002). Derrida's Democracy to Come. *Constellations*, vol.9, no.4, pp.574-597

Fromin, I. (2019). Memes, Genes, and Signs: Semiotics in the Conceptual Interface of Evolutionary Biology and Memetics. *Semiotica*, vol. 230, pp.327-340.

Frost, N., Nolas., M., Brooks-Gordon, B. et al. (2010). Pluralism in Qualitative Research: The Impact of Different Researchers and Qualitative Approaches on the Analysis of Qualitative Data. *Qualitative Research*, vol.10, no.4, pp.441-461

Fry, T. (2009). *Design Futuring*. Sydney: UNSW Press

Fry, T. (2012). *Becoming Human by Design*. London: Berg

Fry, T. (2017). Design For/By the Global South*. Design Philosophy Papers*, vol.15, no.1, pp.30-37

Gair, S. (2009). Feeling Their Stories: Contemplating Empathy, Insider/Outsider Positionings, and Enriching Qualitative Research. *Qualitative Health Research*, vol.22, no.1, pp.134-43

Gallop, A. (2019). Southeast Asian manuscripts from the collection of Sir Hans Sloane in the British Library. *WACANA Journal of the Humanities of Indonesia*, vol.20, no.1, Article 2

Gantini, C. (2020). ‘‘Bale Kulkul’ Architecture as the Representation of Balinese Autonomy Tradition’, in Suartika, G. & Nichols, J. (eds.) *Reframing the Vernacular: Politics, Semiotics, and Representation*. Cham: Springer Nature, pp.31-41

Gajendran, T., Tucker, C., Ware, S., & Tose, H. (2022). Integrating Indigenous, Western and Inclusive Pedagogies for Work-integrated Learning Partnerships in Architecture and Design Disciplines. *International Journal of Work-Integrated Learning, Special Issue*, vol. 23, no.2, pp.259-277

Garcia, J. & Shirley, V. (2012). Performing Decolonisation: Lessons Learned from Indigenous Youth, Teachers and Leaders? Engagement with Critical Indigenous Pedagogy. *Journal of Curriculum Theorising*, vol.28, no.2, pp.76-91

Gardiner, M. (2023).*55 Faces: Global Edition*. Waikiki: KMD Books

Gaver, W., Dunne, A., & Pacenti, E. (1999). Design: Cultural Probes. *Interactions*, vol.6, no.1, pp.21-29

Gee, J. (2011). *How to do Discourse Analysis: A Toolkit*. New York: Routledge

Geoman, M. (2013). *Mark My Words: Native Women Mapping Our Nation*. Minneapolis, MN: University of Minnesota Press

Gerharz, E., Uddin, N., & Chakkarathet P. (eds.) (2018). *Indigeneity on the Move: Varying Manifestations of a Contested Concept*. New York: Berghahn Books

Gilleland, J. (2022). *Think with Things*. [Online Resource]. Available at: < https://www.thinkwiththings.com/remote> [Accessed 2 May 2023]

Girard, R. (1987). *Things Hidden since the Foundation of the World*. Translated by Bann, S. & Metteer, M. Stanford: Stanford University Press

Givens, T. (2021). *Radical Empathy: Finding a Path to Bridging Racial Divides*. Bristol: Policy Press

González, D. (2020). *Towards a Buen Vivir-centric design: Decolonising Artisanal Design with Mayan Weavers from the Highlands of Chiapas, Mexico*. PhD Thesis. Auckland University of Technology

Gonzáles, D. (2022a). Weaving Decolonising Metaphors: Backstrap Loom as Design Research Methodology. *LINK 4th International Conference of Practice and Research in Design & Global South*, vol.3, no.1, Online Event, December 8-10, pp.33-36

Gonzáles, D. (2022b). *Weaving Decolonising Metaphors: Backstrap Loom as Design Research Methodology.* [Online Presentation]. LINK International Conference of Practice and Research in Design and Global South, Online Event, December 8-10

González, D. & Wilson, J. (2023). 'Woven Decolonising Approaches to Design Research: Jolobil and Mahi-Toi', in Rodgers, P. & Yee, L. (eds.). *The Routledge Companion to Design Research*. London, Routledge, pp.285-298

Gordon, A. (1997). *Ghostly Matters*. Minneapolis: University of Minnesota Press

Gosseye, J., Stead, N., & Plaat, D. (eds.) (2019). *Speaking of Buildings: Oral History in Architectural Research*. New York: Princeton Architectural Press

Gothe, J. & De Santolo, J. (2022). Decolonising Design Practices and Research in Unceded Australia: Reframing Design-Led Research Methods. *Architecture_MPS*, vol.21, no.1

Graham, M. (2007). 'Introduction to Kummara Conceptual Framework: A Discourse on a Proposed Aboriginal Research Methodology'. In: *Stronger Indigenous Families Project*, Brisbane. Kummara Association Inc, pp. 1-12

Grande, S. (2004). *Red Pedagogy*. Lanham (MD): Rowman and Littlefield

Grant, E. & Greenop, K. (2018) 'Affirming and Reaffirming Indigenous Presence: Contemporary Aboriginal and Torres Strait Islander Community, Public and Institutional Architecture in Australia', in Grant, E., Greenop, K., Refiti, A., & Glenn, D. (eds.) *The Handbook of Contemporary Indigenous Architecture*. Singapore: Springer Nature, pp.57-106

Grant, E., Greenop, K., Refiti, A., & Glenn, D. (eds.) *The Handbook of Contemporary Indigenous Architecture*. Singapore: Springer Nature

Gray, D. (2018). *Doing Research in the Real World*, 4th Edition. London: SAGE Publications

Grosfoguel, R. (2013). The Structure of Knowledge in Westernised Universities: Epistemic Racism/Sexism and the Four Genocides/Epistemicides of the Long 16th Century. *Human Architecture: Journal of the Sociology of Self-knowledge*, vol.11, no.1, pp.73-90

Gruenewald, D. (2003). The Best of Both Worlds: A Critical Pedagogy of Place. *Educational Researcher*, vol.32, no.4, pp.3–12.

Guillemin, M., & Gillam, L. (2004). Ethics, Reflexivity, and "Ethically Important Moments" in Research. *Qualitative Inquiry*, vol.10, no.2, pp.261-280

Habegger, S., & Mancila, I. (2006). El poder de la Cartografía Social en las prácticas contrahegemónicas o La Cartografía Social como estrategia para diagnosticar nuestro territorio. *Revista Araciega*, 14

Harrison, C. (1994). The Effects of Landscape, in Mitchel, W. (ed.) *Landscape and Power.* Chicago: The University of Chicago Press, pp.203-340

Hatim, B. & Mason, I. (1990). *Discourse and the Translator.* New York: Routledge

Hauser-Schäublin, B. (2017). The Dancers Who Became Transformed into Wood: the Mai Masks of the Iatmul, Papua New Guinea. *Oceania*, vol.83, no.3, pp.224-260

Heidegger, M. (1962). *Being and Time*. Translated by Macquarrie, M. & Robinson, E. New York: Harper and Row

Hendry, P. (2007). The Future of Narrative. *Qualitative Inquiry*, vol.13, no.4, pp.487-498

Hernandez-Wolfe, P., Killian, K., Engstrom, D., & Gangsei, D. (2015). Vicarious Resilience, Vicarious Trauma, and Awareness of Equity in Trauma Work. *Journal of Humanistic Psychology*, vol.55, no.2, pp.153-172

Hillier, B. (2007). *Space is the Machine*. London:Space Syntax. Available at: < https://spaceisthemachine.com/> [Accessed 2 May 2023]

Hobart, A., Ramseyer, U., & Leemann, A. (1996). *The Peoples of Bali*. Oxford: Blackwell.

Hobart, H. & Kneese, T. (2020). Radical Care: Survival Strategies for Uncertain Times. *Social Text*, vol. 38, no. 1, pp.1-16

Hodge, R., & G. Kress. (1988). *Social Semiotics*. Cambridge: Polity

House, J. (2014). *Translation Quality Assessment: Past and Present*. New York: Routledge

Howe, L. (1980). *Pujung, an Investigation into the Foundations of Balinese Culture*. PhD Thesis. Edinburgh University.

Hunt, T. (2018). *Futurability*. [Online Resource]. Available at: <http://www.ted-hunt.com/FUTURABILITY.html> [Accessed 2 May 2023]

Idham, N. (2018). Javanese Vernacular Architecture and Environmental Synchronisation Based on the Regional Diversity of Joglo and Limasan. *Frontiers of Architectural Research*, Vol.7, No.3, pp.317-333

Ingold, T. (2000). *The Perception of the Environment: Essays on Livelihood, Dwelling, and Skill*. London: Routledge

Ingold, T. (2011). *Being Alive: Essays on Movement, Knowledge and Description*. London: Routledge

International Collaboration for Participatory Health Research (ICPHR). (2013). Position Paper 2: Participatory Health Research: A Guide to Ethical Principals and Practice. *International Collaboration for Participatory Health Research.* Berlin, Germany, October

Iseke, J. & Moore, S. (2011). Community-based Indigenous Digital Storytelling with Elders and Youth. *American Indian Culture and Research Journal*, vol.35, no.4, pp.19-38

Jensen, G., & Suryani, L. (1992). *The Balinese People: A Reinvestigation of Character*. Singapore: Oxford University Press.

Johnson, R. & Stefurak, J. (2014). Dialectical Pluralism: A Metaparadigm and Process Philosophy for "Dynamically Combining" Important Differences. *QMiP Bulletin*, Issue. 17, pp.63-69

Jones, K. & Okun, T. (2001). *White Supremacy Culture, From Dismantling Racism: A Workbook for Social Change Groups*. [Online]. Available at <https://www.cwsworkshop.org/PARC_site_B/dr-culture.html> [Accessed on 2 May 2023]

Jung, C. (1981). *The Archetype and the Collective Unconscious*. Princeton (NJ): Bollingen

Kanekar, A. (2002). Diagram and Metaphor in Design: The Divine Comedy as a Spatial Model. *Philosophica*, vol.70, no.2, pp.37-58

Kanekar, A. (2015). *Architecture's Pretexts: Spaces of Translation.* New York: Routledge

Kanekar, A. (2019). 'Fictional Sites of Architecture; Architectural Sites of Fiction', in Psarra, S. (ed.) *The Production Sites of Architecture*. London: Routledge, pp.146-164

Kant, I. (1952). *The Critique of Judgement*. Translated by Creed, J. London: Oxford University Press

Karami, S. (2019). Stories We Can't Tell: On Writing Dissident Architecture. *TEXT Special Issue*, no.55

Karami, S. (2018). *Interruption: Writing a Dissident Architecture*. PhD Thesis. The University of Edinburgh

Kelly, J. (2019). 'Discourses, Ephemeral Sources, and Architectural History: Personality and the Personal in the Story of J. M. Richards', in Gosseye, J., Stead, N., & Plaat, D. (eds.) *Speaking of Buildings: Oral History in Architectural Research*. New York: Princeton Architectural Press, pp.76-93

Kenniff, T. (2019). 'Making Room for Difference: Altering Architectural Research through Interviews and Fieldwork', in Gosseye, J., Stead, N., & Plaat, D. (eds.) *Speaking of Buildings: Oral History in Architectural Research*. New York: Princeton Architectural Press, pp.76-93

Keshavarz, M. (2016). *Design-Politics: An Inquiry into Passports, Camps and Borders*. PhD Thesis. Malmo University

Khamdevi, M. (2020). 'Revisiting the Minangkabau Traditional House in the Central Area of Sumatra: The Case of Limapuluh Koto and Bangkinang', in Suartika, G. & Nichols, J. (eds.) *Reframing the Vernacular: Politics, Semiotics, and Representation*. Cham: Springer Nature, pp.239-250

Kieran, S. (2007). Research in Design: Planning Doing Monitoring Learning. *Journal of Architectural Education*, vol.61, no.1, pp.27-31

Kimbell, L. (2011). Rethinking Design Thinking: Part 1. *Design and Culture*, vol.3, no.3, pp.285-306

Kinloch, V. & San Pedro, T. (2014). The Space Between Listening and Storying: Foundations for Projects in Humanisation. *Humanising Research: Decolonising Qualitative Inquiry with Youth and Communities*, pp.21-42

Kirby, D. (2010). The Future is Now: Diegetic Prototypes and the Role of Popular Films in Generating Real-world Technological Development. *Social Studies of Science*, vol.40, no.1, pp.41-70.

Kirkness, V. & Barnhardt, R. (1991). First Nations and Higher Education: The Four Rs- Respect, Relevance, Reciprocity, Responsibility. *Journal of American Indian Education*, vol.30, no.3, pp.1-15

Kipnis, J. & Leeser, T. (eds.) (1997). *Chora L Works*. New York: Monacelli Press

Kovach, M. (2009). *Indigenous methodologies: Characteristics, Conversations, and Contexts*. Toronto, ON: University of Toronto Press

Kovach, M. (2010). Conversation Method in Indigenous Research. *First Peoples Child and Family Review*, vol.5, no.1, pp.40-48

Kress, G. & van Leeuwen, T. (2006). *Reading Images: The Grammar of Visual Design*, 2nd Edition. London: Routledge

Kurniawan, A., Salain, P., Dwijendra, N., & Rajendra, I. (2020). Revealing the Meaning behind Mandala of Agung Karangasem Palace, Bali Indonesia: Investigating Through Semiotics for Preservation of Historic Value. *International Journal of Advanced Science and Technology*, vol.29, no.7, pp.1417-1427

Kusno A. (2020). 'Reframing the Vernacular and Other Tales', in Suartika, G. & Nichols, J. (eds.) *Reframing the Vernacular: Politics, Semiotics, and Representation*. Cham: Springer Nature, pp.1-12

Laland, N., Odling-Smee, J. & Myles, S. (2010). How Culture Shaped the Human Genome: Bringing Genetics and the Human Sciences Together. *Nature Reviews Genetics*, vol.11, pp.137-148

Lambert, J. (2018). *Digital Storytelling: Capturing Lives, Creating Community*, 5th Edition. New York: Routledge

Lansing, J. (1987). Balinese "Water Temples" and the Management of Irrigation. *American Anthropologist, New Series*, vol.89, no.2, pp.326-341

Lansing, J. (1995). *The Balinese*. Fort Worth, TX: Harcourt Brace College Publishers

Lansing, J. (2019). 'Interview with J. Stephen Lansing, Complexity Institute Wakil Direktur', in Watson, J. *Lo-TEK Design by Radical Indigenism*. Cologne: TASCHEN GmbH, pp.109-116

Lawlor, L. (2022). Jacques Derrida. *The Stanford Encyclopaedia of Philosophy* (Fall 2022 Edition). Available at: <https://plato.stanford.edu/archives/fall2022/entries/derrida/> [Accessed 2 May 2023]

Leach, N. (ed.) (1997). *Rethinking Architecture: A Reader in Cultural Theory*. New York: Routledge

Lederach, J. (2005). *The Moral Imagination: The Art and Soul of Building Peace*. Oxford: Oxford University Press.

Lee-Morgan, J. (2019). 'Indigenous Storywork in Aotearoa New Zealand', in Archibald, J., Lee-Morgan, J., & De Santolo, J. (eds.) (2019). *Decolonising Research: Indigenous Storywork as Methodology*. London: Zed Books, pp.95-100

Levinas, E. (1963). La trace de l'autre. *Tijdschrift Voor Filosofie*, vol.25, no.3, pp.605-623

Lévy-Bruhl, L. (1926). *How Native's Think*. London: Unwin Brothers

Liu, H., Sun, J., Wang, S., Yang, Q. and Li, Y. (2019). Conceptual Story Modeling and Model-driven Architecture for Story Creation. *7th International Conference on Model-Driven Engineering and Software Development*, Prague, Czech Republic, February 20-22, pp.307-314.

Lykes, M., & Scheib, H. (2015). 'The Artistry of Emancipatory Practice: Photovoice, Creative Techniques, and Feminist Anti-Racist Participatory Action Research', in Bradbury, H. (ed.) *The SAGE Handbook of Action Research*. London: SAGE Publications, pp.130-141

Lykourioti, I. (2019). 'When Does Space Afford a Fleeting and Contingent View of You?', in Psarra, S. (ed.) *The Production Sites of Architecture*. London: Routledge, pp.165-190

Macleod, C. (2002). Deconstructive Discourse Analysis: Extending the Methodological Conversation. *South African Journal of Psychology*, vol.32, no.1, pp.17-25

MacRae, G. (2006). 'Banua or Negara? The Culture of Land in South Bali', in Reuter, T. (ed.) *Sharing the Earth, Dividing the Land: Land and Territory in the Austronesian World*. Canberra AU: ANU E Press, pp.83-112

Macrae, G., & Parker, S. (2002). Would the Real Undagi please stand up? On the Social Location of Balinese Architectural Knowledge. *Journal of the Humanities and Social Sciences of Southeast Asia*, vol.158, no.2, pp. 253-281

Madison, S. (2005). 'Introduction to Critical Ethnography', in Madison, S. (ed.) *Critical Ethnography: Method, Ethics, and Performance*. London: SAGE Publications, pp 1-16

Majumdar, D. (1937). *A Tribe in Transition: A Study in Culture Pattern*. London: Longmans, Green & Company Limited

Mallarmé, S. (1897). Un coup de dés jamais n'abolira le hasard (A Throw of the Dice will Never Abolish Chance). *Cosmapolis*, vol.6, pp.417-27

Marco, E., Williams, K., Oliveira, S., & Sinnett, D. (2021). The Architectural Model as Augmenting a Sensory Ethnography. *The Design Journal*, vol.24, no.6, pp. 843-864

Markham, A. (2020). Doing Ethnographic Research in the Digital Age. *SocArXives*. [Pre-publication Chapter]. Available at: <https://doi.org/10.31235/osf.io/hqm4g> [Accessed 2 May 2023]

Martinez, F. (2021). *Ethnographic Experiments with Artists, Designers and Boundary Objects: Exhibitions as a Research Method*. London: UCL Press

Martins, G. (2014). *Drumming My Way Home: An Intergenerational Narrative Enquiry about Secwépemc Identities*. PhD Thesis. University of British Columbia.

Martins, G. (2019). 'Le7 Q'7es te Stsptekwll re Secwépemc: Our Memories Long Ago', in Archibald, J., Lee-Morgan, J., & De Santolo, J. (eds.) *Decolonising Research: Indigenous Storywork as Methodology*. London: Zed Books, pp.63-78

Matthews, N. & Sunderland, N. (2017). *Digital Storytelling in Health and Social Policy: Listening to Marginalised Voices*. New York: Routledge

Matunga, H. (2013). 'Theorising Indigenous Planning', in Walker, R., Jojola, T., & Natcher, D. (eds.), *Reclaiming Indigenous Planning*. Montreal: McGill-Queen's University Press, pp. 3–32

Matunga, H. (2018). 'A Discourse on the Nature of Indigenous Architecture', in Grant, E., Greenop, K., Refiti, A., & Glenn, D. (eds.) *The Handbook of Contemporary Indigenous Architecture*. Singapore: Springer Nature, pp.303-330

Merriam, S., & Tisdell, E. (2016). *Qualitative Research: A Guide to Design and Implementation*, 4th Edition. San Francisco (CA): Jossey Bass

Mignolo, W. (2011). *The Darker Side of Western Modernity*. London: Duke University Press

Miller, V., VeneKlasen, L., Clark, C. (2005). Rights-based Development: Linking Rights and Participation- Challenges in Thinking and Action. *IDS Bulletin*, vol.36, no.1, pp.31-40

Mitchell, S. (1988). *Relational Concepts in Psychoanalysis: An Integration*. Cambridge: Harvard University Press

Moran, U.C., Harrington, U.C, & Sheehan, N. (2018). On Country Learning. *Design and Culture*, vol.10, no.1, pp.71-79

Munday, J. & Zhang, M. (eds.) (2017). *Discourse Analysis in Translation Studies*. Amsterdam: John Benjamins

Nielsen, L. (2013). *Personas: User Focused Design*. London: Springer

Northway, R. (2010). Participatory research. Part 1: Key Features and Underlying Philosophy. *International Journal of Therapy and Rehabilitation*, vol.7, no.4, pp.174-179

Ockman, J. (1985). *Architecture, Criticism, Ideology*. Princeton (NJ): Princeton Architectural Press

Ó Fathaigh, C. (2022). Decolonising the Syllabus: The Name and End of Deconstruction. *Decolonisation and Poststructuralism*, Madrid, Spain, February 23

Ourghourlian, J. (2016). *The Mimetic Brain: Studies in Violence, Mimesis, and Culture*. Translated by Merrill, T. East Lansing: Michigan State University Press

Oughourlian J. & Girard, R. (2009). *The Genesis of Desire*. Translated by Webb, E. East Lansing: Michigan State University Press

Palomino-Schalsa. (2018). 'Beyond Neoliberalism and nature: Territoriality, Relational Ontologies, and Hybridity in a Tourism Initiative in Alto Bío Bío, Chile', in Bunten, A. & Graburn, N. (eds.) *Indigenous Tourism Movements*. Toronto: University of Toronto Press, pp.222-241

Paris, D., & Winn, M. (2014). *Humanising Research: Decolonising Qualitative Inquiry with Youth and Communities*. London: SAGE Publications

Parker, I. (1989). 'Discourse and Power', in Shotter, J. & Gergen, K. (eds.) *Texts of Identity*. London: Sage Publications, pp. 56–69

Patel, L. (2015). *Decolonising Educational Research: From ownership to Answerability*. New York: Routledge

Perec, G. (1974). *Species of Space and Other Pieces*. London: Penguin

Perec, G. (2008). *Life, A User's Manual*. Translated by Bellos, D. London: Vintage Classic

Peters, J, & Wardana, W. (2013). *Tri Hita Karana: The Spirit of Bali*. Jakarta: Kepustakaan Populer Gramedia

Phillips, N. & Hardy, C. (2002). *Discourse Analysis: Investigating Processes of Social Construction*. London: Sage

Picard, M. (1997). 'Cultural Tourism, Nation-building, and Regional Culture: The Making of a Balinese Identity', in Picard, M. & Wood, R. (eds.) *Tourism, Ethnicity, and the State in Asian and Pacific Societies*. Honolulu, Hawaii: University of Hawai'I Press, pp.181-214

Pink, S. (2009). *Doing Sensory Ethnography*. London: SAGE Publications

Pitana, I. (1993). 'Subak, Sistem Irigasi Tradisional di Bali: Sebuah Deskripsi Umum', in Pitana, I. (ed.), *Subak, Sistem Irigasi Tradisional di Bali: Sebuah Canangsari*. Denpasar:Upada Sastra, pp. 1-32

Plato. (1941). *The Republic of Plato*. Translated by Cornford, F. London: Oxford University

Pollock, K. (2012). Procedure Versus Process: Ethical Paradigms and the Conduct of Qualitative Research. *BMC Medical Ethics*, vol.13, no.1

Potter, J. (1996). 'Discourse analysis and constructionist approaches: Theoretical background', in Richardson, J. (ed.) *Handbook of Qualitative Methods for Psychology and the Social Sciences*. Leicester: British Psychological Society, pp. 125-40

Prado, L. & Oliveira, P. (2014). *Cheat Sheet for a Non- (or Less-) Colonialist Speculative Design.* [Online]. Available at: <https://medium.com/a-parede/cheat-sheet-for-a-non-or-less-colonialist-speculative-design-9a6b4ae3c465> [Accessed on 2 May 2023]

Pramartha, C. & Davis, J. (2016). Digital Preservation of Cultural Heritage: Balinese Kulkul Artefact and Practices. *Digital Heritage. Progress in Cultural Heritage: Documentation, Preservation, and Protection*, Nicosia, Cyprus, October 31 - November 5, pp.491–500

Pringle, R. (2004). *Bali: Indonesia's Hindu Realm*. Crows Nest: Allen & Unwin.

Przybylski, L. (2020). *Hybrid Ethnography: Online, Offline, and In Between*. London: SAGE Publications

Psarra, S. (2018). *The Venice Variations: Tracing the Architectural Imagination*. London: UCL Press

Psarra, S. (ed.) (2019). *The Production Sites of Architecture*. London: Routledge

Ramakers, R. (2002), *Less + More: Droog Design in Context*. Rotterdam: 010 Publishers

Reuter, T. (2002). *The House of Our Ancestors: Precedence and Dualism in Highland Balinese Society*. Leiden: KITLV Press

Reuter, T. (ed.) (2006). *Sharing the Earth, Dividing the Land: Land and Territory in the Austronesian World*. Canberra AU: ANU E Press

Reuter, T. (2009). 'Origin and Precedence: The Construction and Distribution of Status in the Highlands of Bali', in Vischer, M. (ed.). (2009). *Precedence: Social Differentiation in the Austronesian World.* Canberra AU: ANU E Press, pp.13-39

Rix, E., Wilson, S., Sheehan, N,. & Tujague, N. (2019). Indigenist and Decolonising Research Methodology. *Handbook of Research Methods*, pp.253-267

Robson, C. & McCartan, K. (2016). *Real-world Research, 4th Edition*. Hoboken (NJ): Wiley

Rodik, P. & Primorac, J. (2015). To Use or Not to Use: Computer-Assisted Qualitative Data Analysis Software Usage among Early-Career Sociologists in Croatia. *Forum Qualitative Sozialforschung*, vol.16, no.1, Article 12

Ronnberg, A., & Martin, K. (eds.) (2010). *The Book of Symbols: Reflections on Archetypal Images*. Cologne: TASCHEN GmbH

Rose, G. (2016). *Visual Methodologies: An Introduction to Researching with Visual Materials*, 4th Edition. London: SAGE Publications

Rousseau, J. (1973). *The Social Contract and Discourse*. Translated by Cole, G. London: Dent Rundstrom, A. (1995). GIS, Indigenous Peoples, and Epistemological Diversity. *Cartography and Geographic Information Systems*, vol. 22, no.1, pp.45-57

Sabarathinam, S. (1995). Agamic Treatment of Mahabhutas in Relation to Mandalas and Arts. In, Biiumer, B. (ed.). *Prakrti: The Integral Vision. Volume 3: The Agamic Tradition and the Arts*. New Delhi: D.K. Printworld, pp.47-66

Salmón, E. (2012). *Eating the Landscape: American Indian Stories of Food, Identity, and Resilience*. Tucson, AZ: University of Arizona Press

Samadhi, T. (2004). Making Cosmo-religious Landscapes: The Design of a Balinese Town's Civic Center (Bali, Indonesia). *Habitat International*, vol.28, no.1, pp.103-122

Sanders, E. (2002). 'From user-centred to participatory design approaches', in Frascara, J. (ed.). (2002). *Design and the Social Sciences: Making Connections.* London: CRC Press, pp.18-25

Sanoff, H. (2016). *Visual Research Methods in Design* (Routledge Revivals). New York: Routledge

Sanusi, I. (2019). *Strengths and Weaknesses of Using Nvivo Software in Analysing Qualitative Data*. Masters Thesis. Universitas Islam Negeri Ar-Raniry Banda Aceh

Sasaki, J. (2013). Promise and Challenges Surrounding Culture– Gene Coevolution and Gene–Culture Interactions. *Psychological Inquiry*, vol.24, pp.64-70

Satria, M. (2019). A Study of Balinese Traditional Houses through Lontar as a Guideline to Sustainable Design. *KnE Social Sciences*, vol.3, no.21, pp.496–507

Scharmer, C. (2016). *Theory U: Leading from the Future as it Emerges,* 2nd Edition. Oakland, CA: Berrett-Koehler Publishers

Schefold, R., Nas, P., Domenig, G., & Wessing, R. (eds.) (2008). *Indonesian Houses Volume 2: Survey of Vernacular Architecture in Western Indonesia*. Leiden: KITLV Press

Schneider, F. (2013). *Discourse Analysis and Foreign Languages*. [Online Article] Available at: <https://www.politicseastasia.com/studying/discourse-analysis-and-foreign-languages/> [Accessed on 2 May 2023]

Schultz, T. (2018). Mapping Indigenous Futures: Decolonising Techno-Colonising Designs. *Strategic Design Research Journal*, vol.11, no.2, pp.79-91

Schultz, T., Abdulla, D., Ansari, A., Canlı, E., Keshavarz, M., Kiem, M., Prado de O. Martins, L., & Vieira de Oliveira, P. (2018). What Is at Stake with Decolonising Design? A Roundtable. *Design and Culture*, vol.10, no.1, pp.81-101

Schultz, T. (2019). *Decolonising Design: Mapping Futures*. PhD Thesis. Queensland College of Art.

Seppälä, T., Sarantou, M., & Miettinenet, S. (2021). *Arts-Based Methods for Decolonising Participatory Research*. New York: Routledge

Sertori, T. (2014). *In the Time of Giants*. [Online]. Available at <https://www.thejakartapost.com/news/2014/11/27/in-time-giants.html> [Accessed on 2 May 2023]

Shah, A. (2017). Ethnography? Participant Observation, a Potentially Revolutionary Praxis. *Hau: Journal of Ethnographic Theory*. vol. 7, no. 1, pp.45–59

Shaw, R. & Frost, N. (2015). 'Evolving Mixed and Multimethod Approaches in Psychology', in Hesse-Biber, S. & Johnson, R. (eds.) *The Oxford Handbook of Multimethod and Mixed Methods Research Inquiry*. Oxford: Oxford University Press, pp.375-392

Sheehan, N. (2011). Indigenous Knowledge and Respectful Design: An Evidence-Based Approach. *Design Issues*, vol.27, no.4, pp.68-80

Sheehan, N. (2013). *Respectful Design: Connective Art, Indigenous Cultural Development and Wellbeing*. South Brisbane, QLD: Link-Up (Qld) Aboriginal Corporation

Sheehan N., Dunleavy, J., Cohen, T. & Mitchell, S. (2010). 'Denatured Spirit: Neo-Colonial Social Design', in Martin, G., Houston, D., McLaren, P. & Suoranta, J. *The Havoc of Capitalism: Publics, Pedagogies and Environmental Crisis*, pp.99-116

Shepherd, R. (2002). Commodification, Culture, and Tourism. *Tourism Studies*, vol.2, no.2, pp.183-201

Simpson, L. (2014). Land as Pedagogy: Nishnaabeg Intelligence and Rebellious Transformation. *Decolonisation: Indigeneity Education, and Society*, vol 3, no.3, pp.1-25

Simpson, T. (2022). *(Indigenous Storytelling as a Political Lens) The Intergenerational Wisdom Woven into Indigenous Stories*. TEDx. [Streaming Video]. Available at: < https://www.ted.com/talks/tai_simpson_the_intergenerational_wisdom_woven_into_indigenous_stories> [Accessed 2 May 2023]

Smith, L. (2021) *Decolonising Methodologies: Research and Indigenous Peoples*, 3rd Edition. London: ZED Books

Smith, J., Flowers, P., & Larkin, M. (2021). *Interpretative Phenomenological Analysis: Theory, Method and Research*, 2nd Edition. London: SAGE Publications

Smith, J. & Osborn M. (2007). Pain as an Assault on the Self: An Interpretative Phenomenological Analysis. *Psychology and Health*, vol.22, pp.517-534

Smith, J., & Osborn, M. (2015). Interpretative Phenomenological Analysis as a Useful Methodology for Research on the Lived Experience of Pain. *British Journal of Pain*, vol.9, no.1, pp.41-42

Spankie, R. (2019). 'In the Cimeras: Space of Imagination', in Psarra, S. (ed.) *The Production Sites of Architecture*. London: Routledge, pp.42-57

Stanton, C. (2014). Crossing Methodological Borders: Decolonising Community-Based Participatory Research. *Qualitative Inquiry*, vol.20, no.5, pp.573–583

Stanton, C., Hall, B., & Ricciardelli, L. (2016). Cross-Cultural Digital Storywork: A Framework for Engagement with/in Indigenous Communities. *Engaging with Indigenous Communities*, vol.2, no.1, pp.247-265

Stake, R. (1995). *The Art of Case Study Research*. Thousand Oaks, CA: Sage

Star, S., & Griesemer, J. (1989). Institutional Ecology, 'Translations' and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39. *Social Studies of Science*, vol.19, no.3, pp.387-420

Stewart, P. (2015). *Indigenous Architecture through Indigenous Knowledge: Together we will Build a Village*. PhD Thesis. University of British Columbia

Styhre, A. (2011). Sociomaterial Practice and the Constitutive Entanglement of Social and Material Resources: The Case of Construction Work. *VINE Journal of Information and Knowledge Management Systems*, vol.41, no.4, pp.384–400.

Suryawan, I. & Juniantari, M. (2021). Undagi Bali Ethnomathematic Study and How to Acquire its Knowledge. *Proceedings of the First International Conference on Science, Technology, Engineering and Industrial Revolution* (ICSTEIR 2020), pp.384-390

Tafuri, M. & Dal Co, F. (1979). *Modern Architecture*. New York: Abrams

Thackara, J. (1988). *Design after Modernism: Beyond the Object*. New York: Thames and Hudson

Tharp, B. & Tharp, S. (2018). *Discursive Design: Critical, Speculative, and Alternative Things.* Cambridge MA: MIT Press

Theodossopoulos D. (2018). 'Indigenous Tourism as a Transformative Process: The Case of the Emberá in Panama', in Bunten, A. & Graburn, N. (eds.) *Indigenous Tourism Movements*. Toronto: University of Toronto Press, pp.99-116

Till J., & Schneider, T. (n.d). *Spatial Agency: Why?* [Online] Available at: <https://www.spatialagency.net/database/why/ professional/> [Accessed 2 May 2023]

Tlostanova, M. (2017). On Decolonising Design. *Design Philosophy Papers*, vol.15, no.1, pp.51-61

Toffa, T. (2020). 'How to Draw a Line when the World is Moving: Architectural Education in Times of Urgent Imagination', in Troiani, I., & Ewing, S. (eds.) *Visual Research Methods in Architecture*. Bristol: Intellect, pp.58-75

Tonkinwise, C. (2014). Design's (dis) orders & transition design. *Verified* , vol.8, no.8, 2016.

Tonkinwise, C. (2015). Just design: being dogmatic about defining speculative critical design future fiction. *Experimental thinking/design practices*. Brisbane: Griffith University Art Gallery .

Townsend, S. & Patsarika, M. (2022). 'Rethinking Cultural Probes in Community Research and Design as Ethnographic Practice', in Comunello F., Martire, F., & Sabetta, L. (eds.). *What People Leave Behind: Marks, Traces, Footprints and their Relevance to Knowledge Society*. Cham: Springer, pp.37-57

Trees, A., & Kellas, J. (2009). Telling tales: Enacting Family Relationships in Joint Storytelling about Difficult Family Experiences. *Western Journal of Communication*, vol.73, no.1, pp.91–111

Tronto, J., & Fisher, B. (1990) 'Toward a Feminist Theory of Caring', in Abel, E. & Nelson, M. (eds.) *Circles of Care*. New York: SUNY Press, pp.36-54

Tschumi, B. (1994*). The Manhattan Transcripts*. London: Academy Editions

Tschumi, B. (1996). *Architecture and Disjunction*. Massachusetts MA: MIT Press

Tuck, E. (2009). Suspending Damage: A Letter to Communities. *Harvard Educational Review*, vol.79, no.3, pp.409-428

Tuck, E. & McKenzie, M. (2015). *Place in Research: Theory, Methodology, and Methods*. New York: Routledge

Tunstall, E. (2023). *Decolonising Design: A Cultural Justice Guidebook*. Cambridge, MA: The MIT Press

Tutenel, P. (2019). Conversations between Procedural and Situated Ethics: Learning from Video Research with Children in a Cancer Care Ward. *The Design Journal*, vol.22, no.1 pp.641-54

Vasquez, V. (2017). Critical Literacy. *Oxford Research Encyclopaedia of Education*. [Online]. Available at: < http://education.oxfordre.com/view/10.1093/acrefore/9780190264093.001.0001/acrefore-9780190264093-e-20 > [Accessed on: 2 May 2023]

Vergani, G., Shinoda, P., & Kesler, D. (1987). Fragments of a Conversation with Jacques Derrida. *Precis: The Journal of the Columbia University Graduate School of Architecture, Planning and Preservation,* vol.6, no.49

Vickers, A. (2012). *Bali: A Paradise Created*. Tokyo: Tuttle Publishing

Vince, R. & Warren, S. (2012). 'Participatory Visual Methods', in Symon, G. & Cassell, C. (eds.) *Qualitative Organisational Research: Core Methods and Current Challenges*. London: SAGE, pp.275-295

Vitale, F. (2018). *The Last Fortress of Metaphysics: Jacques Derrida and the Deconstruction of Architecture*. Translated by Senatore, M. Albany: State University of New York Press

Ward, E. & Gahagan, B. (2010). Crossing the Divide Between Theory and Practice: Research and an Ethic of Care. *Ethics and Social Welfare*, vol.4, no.2, pp.210-216

Watson, J. (2019). *Lo-TEK Design by Radical Indigenism*. Cologne: TASCHEN GmbH

Wheeler, J. (2009). 'The Life That We Don't Want': Using Participatory Video in Researching Violence. *IDS Bulletin*, vol.40, no.3, pp.10-18

Wheeler, J. (2011). 'Seeing like a Citizen: Participatory Video and Action Research for Citizen Action' in Shah, N., & Jansen, F. (eds.) *Digital AlterNatives with a Cause? Book 2 – To Think*. Bangalore: Print 2 Last Solutions, pp.47-60

Wheeler, J. (2018). Troubling Transformation: Storytelling and Political Subjectivities in Cape Town, South Africa. *Critical African Studies*, vol.10, no.3, pp.329-344

Wheeler J., (2020). 'Storytelling across social divides'. *Research OUTREACH*, vol. 117. [Online]. Available at: <https://researchoutreach.org/articles/storytelling-across-social-divides/> [Accessed 2 May 2023]

Wheeler, J., Shahrokh, T., & Derakhshani, N. (2020). 'Transformative Storywork: Creative Pathways for Social Change', in Servaes, J. (ed.) *Handbook of Communication and Social Change*. Singapore: Springer

Wikkerink, T. & Cruikshanks, N. (2012). The Seven Storywork Principles from Jo-Ann Archibald's Indigenous Storywork: Educating the Heart, Mind, Body, and Spirit. [Presentation], *Social Studies Methods*. 28 February. Available at: < https://slideplayer.com/slide/6912468/> [Accessed 2 May 2023].

Wilkinson, M., Dumontier, M., Aalbersberg, I. et al. (2016). The FAIR Guiding Principles for Scientific Data Management and Stewardship. *Sci Data*, vol.3, 160018

Willig, C. (2003). 'Discourse analysis', in Smith, J. (ed.) *Qualitative Psychology: A Practical Guide to Research Methods*. London: Sage, pp.159-83.

Willis, A. (2007). Ontological Designing. *Design Philosophy Papers*, vol.4, no.2, pp.69-92

Willis A. (2014). Designing Back from the Future. *Design Philosophy Papers*, vol.12, no.2, pp.69-92

Willox, A., Harper, S., & Edge, V. (2013). Storytelling in a Digital Age: Digital Storytelling as an Emerging Narrative Method for Preserving and Promoting Indigenous Oral Wisdom. *Qualitative Research*, vol.13, no.2, pp.127–147

Wilson, S. (2008). *Research as Ceremony: Indigenous Research Methods*. Blackpoint, Nova Scotia: Fernwood Publishing

Windchief, S. (2015). The Act of Claiming Higher Education as Indigenous Space: American Indian/Alaska Native Examples. *Studies of Migration, Integration, Equity, and Cultural Survival*, vol.9, no.4, pp.267-283

Windchief, S. & San Pedro, T. (eds.) (2019). *Applying Indigenous Research Methods: Storying with Peoples and Communities*. New York: Routledge

Windhu, O. (1985). *BangunanTradisional Bali Serta Fungsinya.* Denpasar: Departemen P & K Propinsi Bali

Wigley, M. (1997). *The Architecture of Deconstruction: Derrida's Haunt*. Cambridge, MA: The MIT Press

Woman. (2020). [Streaming]. Directed by Anastasia Mikova & Yann Arthus-Bertrand. France: Hope Productions

Wood, J. (2009). Love, Iranian Style: A New Novel Pits Passion and Repression. *The New Yorker*, June 29th 2009

Yaneva, A. (2009). *Made by the Office of Metropolitan Architecture: An Ethnography of Design*. Rotterdam: 010 Publishers

Yu, A. (2015). *On Moral Imagination and Indigenous Wisdom: How Leaders Approach Moral-Ethical Tension in Post-Modern Bali*. PhD Thesis. University of San Diego

Zittoun, T. & Brinkmann S. (2012). 'Learning as Meaning Making', in Seel, N. (ed.) *Encyclopedia of the Sciences of Learning*. Boston: Springer, pp. 1809-1811

Appendix A

Precedents for the PKP Bale Tong Tong Project

I first met Ibu Sari through a business venture I started with two colleagues, Jack Lehane and Seán Conlan-Smith from University College Cork and the Dublin Institute of Technology now Munster Technological University Dublin, in partnership with the Five Pillar Foundation in Bali. Together, we founded a Social Enterprise in Ireland called 'Design Student Global Network International', or DSGN for short. DSGN's goal was to expand the skillset of third-level design students by supplementing their academic education with experiential workshops, focusing on practical (hands-on), 1:1 scale architectural projects in differing geopolitical, social, and cultural regions. A mutual friend of ours, Nadine Vroom, became an advisor to DSGN and, through her connections across the Austronesian region, we began planning out first workshop in Bali, Indonesia.

The DSGN team were adamant that we would only work with communities that met certain criteria; a) that truly needed an architectural space to better a community's quality of life, b) had a vision of how this space would better their community's quality of life, and c) lacked the resources to make their vision a reality. With this in mind, we were introduced us to Wira (I Putu Wiraguna), a Balinese native, and Dr. Alan Yu, an Asian-American, in mid-2017. Together, Wira and Alan had founded a small community development organisation (Five Pillar Foundation), which focused on bringing 'sustainable tourism' to rural Bali. For Wira and Alana, sustainable tourism creates economic, social, and cultural agency for indigenous Balinese communities, particularly in rural regions, who may be most adversely affected by degradation caused by traditional tourism.

Wira wanted to construct a learning centre in rural West Bali, from which the Five Pillar Foundation could incubate sustainable tourism initiatives in the local community. Sadly, he felt that this dream was out of reach both financially and logistically. The DSGN team believed that our business plan- to involve third-level students in 1:1 scale architectural projects- could help Wira achieve his dream by outsourcing the design and construction of his learning centre to third-level students. During 2018, DSGN and the Five Pillar Foundation worked together to a) launch an international architecture competition for students to design the learning centre, the winners of which would work with Balinese architects to make their design contextually and practically feasible, and b) host a summer school in which students would learn how to build the learning centre through practical lessons with local architects and builders.

Students would pay fees for both the competition and the workshop, which would pay for roughly 33% of the logistical and construction costs. We successfully launched the initial architectural competition in early 2018, selected winners, and exhibited the project through online publications and physical events into the summer of 2018. The project gained notability through high level partnerships, international exhibitions (such as Milan Design Week 2018), winning local awards (JCI Humanitarian Award), and being shortlisted for

international awards (RICS/ UNESCO Cities For Our Future 2018 competition).

In April 2018 I formally began my PhD studies at the Cork Centre for Architectural Education (CCAE) at University College Cork (UCC). With the successful launch of the DSGN competition, I decided to entwine my thesis with the DSGN project in Bali. However, by the end of 2018 the DSGN project was stalling due to a growing list of problems, including tensions between site owners and our partners, bureaucratic issues with local regency governments, and a general lack of sustainable income. By October 2018, a member of the DSGN team had returned to Bali in an attempt to resolve some of these issues. At the same time, I began the UCC Ignite/ Blackstone Launchpad 7-week business accelerator program. These two events culminated in a new joint initiative between DSGN and the Five Pillar Foundation to fund the learning centre. The DSGN team agreed to develop sustainable tour packages with the Five Pillar Foundation that focused on practical, experiential activities in design and architecture. These would be marketed to third-level students directly or through their institutions, with 50% of the profits going towards the logistical and construction costs of the learning centre. Five Pillar Foundation would be in charge of delivering these tours, whilst DSGN would continue to focus on the construction of the learning centre. This business concept was developed through early 2019 until it was completed at the UCC Student Incubator 2019 business summer school (in conjunction with Institute of Technology Tralee and the Cork Institute of Technology- now Munster Technological University).

At this point, four design and architecture tours were developed and ready to launch with the Five Pillar Foundation. In October 2019, I travelled to Bali again with the DSGN team to pilot these tours and to begin to plan the construction of the learning centre building foundations. On our arrival to Bali, it became apparent that this would not be possible. Five Pillar Foundation had moved from rural Bali to the outskirts of Denpasar, the island's capital, and did not have an available site for project. However, we managed to view three possible site options- the most suitable of which was located far from both the Five Pillar Foundation's headquarters and from the communities that they initially intended to help. This meant that the planned learning centre would not be serving the people it was designed to serve, nor could the Five Pillar Foundation or the local community maintain the structure. At the end of 2019, the DSGN team prompted a pause on the community hall project, whilst committing to the continued implementation of the design and architecture tours. By spring 2020 these tours were put on indefinite hold due to the SARS-CoV-2 pandemic. By the summer of 2020, DSGN was forced to voluntarily liquidate, pay up its debts, and close as a business.

During the same visit to Bali in 2019, I conducted a pilot study that considered if and why different Balinese community members would support the construction of a new community building through design-based Indigenous Tourism. Ibu Sari discussed her motivations for wanting a new community building at the PKP

Community Centre, which would create an architectural site for Indigenous Tourism practices that encompass Ibu Sari's vision of a matristic and care orientated 'community'. She already had a design for an architectural structure, created by an unnamed Balinese architect, that depicts a single building containing a kitchen, cinema, and bamboo workshop (see Fig A.1). This is treated as Precedent 1 in Section 8.2.1.

In early 2020 Ibu Sari asked me to help design an alternative community building with a group of international third level creative students, based on an established architectural brief that included; a location, on a narrow stepped terrace following the natural sloping topology of a small river valley; the hall site and dimensions, roughly 120 square metres (approximately 7x18 metres) which was assessed by local contractors; and the purpose of the hall– a space to summon the community together, in a 'call-to-arms', to share their lived experiences and learn skills through a variety of workshops, activities, and social enterprises that empower women, families, and the community in general (Sariadi, 2020- personal communication). This summons, or 'call-to-arms', represents the PKP Community's primary aim- a space for sharing traumas and overcoming stigmas.

The PKP Community Centre provides many programs for the local women as a way for them to connect with others, share their stories, and collaborate with all members of the community for their collective growth. The building space would house up to 50 individuals who would be involved in craft workshops, language classes, singing and dance lessons, creative studio work, yoga, and meditation within one large public space, with a separate space for private physiotherapy and a toilet with a sink. The space would also welcome international visitors who come to learn and share activities with the local community. Other key points to have considered include; access to electricity and water; sustainability considerations such as using local wood and preserving foliage; and geographical considerations such as a sturdy roof to combat monsoon rains, falling fruits, and wild animals in a jungle setting, and enough light and air circulation in a high humidity climate (Sariadi, 2020- personal communication).

Between January and April 2020, Jack Lehane, Seán Conlan-Smith, and I treated the PKP Community as a pro-bono architectural client, and designed the community building for them. We designed the community building to be built over a 2-month period by third-level students, alongside skilled artisans and architects, in a summer school setting during 2021. This had the support of the *Institut Desain dan Bisnis Bali* (Institute of Design and Business Bali) alongside other local groups including Study Abroad Bali. Whilst designing this first iteration of the community building, we appraised traditional Balinese pattern and form languages for architecture through two Balinese architects, *Kayon Mas* architects and *Chiko Living* architects, and by studying four key (non-Indigenous) academic works (Schefold et al., 2004; Schefold & Nas, 2008; Janssen,

1995; Yukito, 2015). Most importantly, we were also inspired by the powerful story of Ibu Sari, taken from my 2019 pilot study, which was analysed using an interpretative phenomenological approach to unearth her hidden needs for the community building design. However, despite taking on the PKP project for reasons we believed to be just, the realities of a tight time frame, bad environmental conditions, and insufficient funding meant that we could not fully commit to the longitudinal task of a co-design or participatory methodology. Such projects require a deep understanding of, and relationship with, the community, inviting them to participate in the process as co-researchers, co-scholars, and co-designers. Despite our inclusion of Balinese architects, academics, and community members, we relied heavily on our own Euro-centric architectural knowledge and colonial contexts to form a design that could be easily built by European third-level architectural students. Our draft design (see Fig A.2- This is treated as Precedent 2 in Section 8.2.1.) is now one of multiple architectural designs for the current PKP Community Centre's site, the rest being drafted by native architects or- thanks to my PhD fieldwork- by the PKP community themselves. In the end, two significant factors halted this design being constructed; the health risks related to the SARS-CoV-2 pandemic inclusive of the Indonesian government's travel bans, and the unforeseen need for the PKP community to move sites.



Fig A1. Precedent 1- 2019 Proposed Building Containing a Bamboo Workshop, Cinema, and Kitchen (adapted from unnamed architect with permission from Ni Komang Sariadi)



Fig A2. Precedent 2- 2020 Proposed Building Containing a Yoga Shala and Therapy Space (adapted from DSGN with permission from Jack Lehane and Seán Conlan-Smith)

Appendix B

De-Spacing Examples

Table B.1 Examples of 'De-spacing'

'Writing Architecture' (Derrida, 1986)	Derrida engages in a process that he has called 'spacing' or, more descriptively, 'writing architecture' (Vitale, 2018). 'Writing architecture' is to write by drawing, spacing out words on a page so that architecture is no longer the object of writing but, instead, the writing becomes an architectural artefact in itself by opening up and crafting discursive space on the page (Vergani et al., 1987). Derrida challenges the discourses privileged by Western philosophy, most notable in his 1974 work, *Glas*, in which the page is divided into two columns that vary in size and shape based on the length or importance of the text. The reader must read the two columns as architectural artefacts themselves; independent, autonomous, seemingly unrelated and uncommunicative with each other- yet sustaining another building, another text, another architectural artefact- see Fig 3.2 (Vitale, 2018). Derrida hopes to finally read "what wrote itself between the lines… that is why, beginning to write without the line, one begins also to reread past writing according to a different organisation of space" (Derrida, 1976, p.86). He feels that he cannot always draw out an architecture model from his text but, instead, invites (or challenges) us to "inhabit the text if [we] can" between the lines (Vergani et al., 1985, p.48).
'Writing Dissident Architecture' Karami, 2018; 2019)	Like Derrida, Karami (2019) quotes Hélène Frichot's (2010) definition of 'writing architecture' as not to write about architecture, but to write architecture- to make it emerge through writing. Both authors situate their 'written architecture' within political sites. Karama aims to provide a discourse for those with impossibilities of direct speech. Similarly, Karami's (2018) *Interruption* and (2019) *Stories We Can't Tell* write a 'dissident' architecture in between the lines of dominant systems by co-authoring discursive architectural artefacts with them. This process operates between creativity and politics, between fiction and reality. Karami duplicates real architectural space in writing, forming a fictional site of architecture that fictional characters and real readers can 'critically inhabit', exploring and transforming in unconventional ways through their movement through the text (ibid, pp. 267-297). Karami (2018, p.57) defines critical inhabitation as "a way to expand the architectural site from a finished project to a political, continuous practice of making spaces", based on an inhabitants' knowledge over space, its limits, boundaries, borders, and possibilities. Examples include; the light spilling over the steps of a stairway is depicted line by line, a single word illuminated on each line to form the essence of stairs (p.280), or the maze represented by distorted lines of text connected by a hand drawn line, as if the author themselves are searching for a way out (p.286)- see Fig 3.3.
'Sequences' (Tschumi, 1994; 1996)	Karami (2018, pp.170-172) briefly, but importantly, references Tschumi's contributions to 'pause spaces' and 'expanded sequences', which help define the occupation of 'in-between' spaces. Similarly, Tschumi moves from real to fictional architectural spaces by breaking down architecture's conventional components and rebuilding them along different axes of knowing and doing (Tschumi, 1994, p. 7). Tschumi creates his own lexicon using 'frames'- square bounded boxes that contain imagery of architectural space, performers in motion, and the diagrammatic movements of performers- and 'spaces' that sequences frames similar to written words; frame / space / frame / space / frame- see Fig 3.4 (Tschumi, 1994; 1996). Tschumi applies three types of sequencing to his frames: • Transformational sequences, which tend to rely on known rules or devices for transformation and are generally based on intuition, habits, or an understanding of precedents. • Spatial sequences, which tend to be based on typological precedents (types of building) and morphological variations (forms and structures) that are constant throughout history. Spatial sequences usually align space along a common axis with specific architectural organisations and configurations- planned paths, fixed halting points, a family of spatial points linked by movement.

	• Programmatic sequences, or 'expanded sequences', tend to be sequences of events, use, activities, or incidents superimposed over the top of spatial sequences, suggesting secret maps, impossible fictions; a collection of events alongside a collection of spaces that can be indifferent to one another, repeat each other, or work against each other. Tschumi (ibid) believes that these 'expanded' programmatic sequences can transform the space in between frames into something solid and tangible as part of the architectural discourse; becoming a corridor, a threshold, a doorstep, or other symbol inserted between each event.
'Space' (Perec, 1974; Bachelard, 1957)	In Georges Perec's (1974, p.5) *Spaces as Species*, he exemplifies Lewis Carols 'Map of the Ocean', a square frame with nothing inside, as an exploration not of "the void exactly, but rather what there is round about or inside it". In the foreword, Perec (ibid) explores both the space between letters and their positioning within the spaces of a page, such as margins and footers (see Fig 3.5). In the 2014 reprint of Bachelard's (1957) *The Poetics of Space*, Danielewski's foreword exemplifies the analogous links between poetry and the spaces, structures, and ornaments of a house, providing poetic excerpts that bend, upturn, or rotate text on the page- forcing the reader to continually engage with the spaces between words and the spaces of the page. Moreso, Danielewski highlights Bachelard's (1957) ideology that words and letters themselves are spaces to inhabit, losing oneself down distant corridors of history and memory. Karami (2018) is also inspired by Perec's other (1978) *Life: A User's Manual*, which chapter by chapter, room by room, tell a series of architectural tales that manipulate words and sentences across the pages to create prose, puzzles, and illusions. Similar to Tschumi's (1994; 1996) works, this allows the spaces between and within the text to be inhabited, as doorways or corridors, by the reader as much as the fictional rooms are inhabited by the characters of the story.
'Mapping Textual Landscape' (Mallarmé, 1897)	Lykourioti (in Psarra, 2019) reads Mallarmé's (1897) *A Throw of the Dice* as if it were a map by considering how the reader inhabits these spaces between and within words, and considering how letters, words, and stanzas are sequenced on singular pages and between multiple pages. She analyses the movement of the reader as they navigate the textual landscape of words and space, exploring which direction the reader will take as they move from text to space and back again (see Fig 3.6). This exploration also considers the reader's peripheral vision. When we focus on reading a section of text, an afterimage is imprinted on our retina for a few moments. As the reader moves to another section of text, Lykourioti (ibid) describes how this afterimage can be momentarily seen in the blank spaces of the page; connecting or sequencing sections of text that might not otherwise have been connected and changing the meaning of the entire prose. In this way, we can physically see how the in-between space can be inhabited as doorways or corridors between text, allowing a completely different story to emerge to different readers. Despite the intricate ways in which this text can be read, Mallarmé's (1897) offer a syntax for the entire poem which, similar to Tschumi's (1994) syntax for the *Manhattan Transcript*s, can be perceived by the rhythmic repetition of features and the symmetrical arrangement of the pages (see Fig 3.5). These same features allow works that are written or visual to be spoken and examined through the experiences and inhabitation of individual readers.

Appendix C

Theoretical and Ethical Principles of Architectural Storywork with the PKP Community

C.1 Constructing Theoretical Principles

Table C.1 weaves together principles of the Asta Kosala Kosali and Derridean architectural theory, developing three theoretical principles that are situated within the uniquely complex settings, strategies, and stories explored in this study and are not generalisable to other, equally uniquely and complex, contexts.

Table C.1 Three Theoretical Principles for Applying Architectural Storywork in Bali

Theoretical Principles	Characteristics
A 'Third Centre'	Five Core Lexicons of the Asta Kosala Kosali are identified by Damayanthi (2017) and Samadhi (2004). These are the Manik Ring Cucupu, Tri Hita Karana, Tri Angga, Tri Mandala, and Sanga Mandala. Each principle sequentially develops the concept of a 'third centre' that balances divisive oppositions by containing them within each other in harmony (Samadhi, 2004). Similarly, Radical Hermeneutics tasks community's to "breach" architecture by uncovering privileged oppositions within spatial dichotomies and, secondly, prove that their privilege does not hold up to critical analysis- usually by showing how both oppositions of a duality are contained within each other, i.e. light is contained within dark and visa versa (Derrida, Brunette, & Wills, 1994, p.27; Coyne, 2011). This forms a wholistic system of three unified components, a common feature of Balinese philosophy, that are embodied in spatial groupings related to sacred, neutral, or profane space- see Fig 4.2 (Damayanthi, 2017). These unified systems of spatial territory, whilst open to the inclusion of 'newcomers', still cultivate a sense of homogeny- dictating common traditions in the absence of a common ancestry and cultural heritage (Reuter in Wischer 2009). In the hopes of avoiding such homogeny within the PKP community, any 'third centre' created between spatial dichotomies will focus on building respectful relationships with alterity that cannot be based on what we (myself or the PKP community) already know. Instead, we must account for the complete alterity of each other and unknown others, so that we might exceed what is already known and create something absolutely new (Vitale, 2018, pp.36-38).
The Space Between a Building and its Inhabitants	Damayanthi (2017) and Arthana (2018) describe the Asta Kosala Kosali's instructions for defining spatial dimensions. The determination of dimensions begins with making a Gegulak, a wooden ruler marked with notches based on the anthropometric measurements of the intended inhabitants of a building. An extra measurement, called a *pengurip*, is added on to the Gegulak to allow some error in the measuring and processing of material by everyday community members. This tolerance is mandatory within Balinese construction, as it creates space for the building to have life (Damayanthi, 2017); transforming an inanimate artefact into a living entity with a 'soul' that can live in harmony with its environment (Windhu, 1985). The 'extra space' of the *pengurip* embodies the essence of Derrida's chora (Kipnis & Leeser, 1997; Coyne, 2011); a space that receives and gives place to form and 'soul' but remains blank and unchanged by it, implying a return movement through physical and metaphorical boundaries or thresholds. This study treats the *pengurip* as an imaginative space between the buildings and the PKP community, into which multi-layered materiality and memory can be inscribed using discursive design practices (Matunga, 2013). This discursive space holds within it all that is materially and memorably possible, hypothetical, never existed, or perhaps will never exist but might have existed (Psarra, 2018).

A Neutral Origin	Satria (2019) and Arthana (2019) detail narrative metaphors that connect the material aspects of a building to the human body. Through an analysis of metaphor and analogy within the Asta Kosala Kosali, Satria (2019) and Arthana (2019) both identify a significant relationship between humanity and wood, where the life of wood is contained within humanity. The Balinese word for wood itself, *kayu*, consists of '*ka*', meaning origin, and '*yu*', meaning mind. In Article 1 of the Asta Kosala Kosali, *kayu* is associated with the term '*wi*', as in '*wisesa*', which means having the duty to neutralise negative things inside a human (ibid). These direct metaphors and analogies define vernacular Balinese architecture as an ecological process for Indigenous communities to return to a neutral origin by 'returning' living wood to the ground (replanting) and dead wood to the sky (burnt for industry, i.e. metalsmiths, agriculture, and cooking). This mirrors Derridean 'deconstruction', a process of subverting the hierarchal oppositions identified in Radical Hermeneutics by returning them to an irreducible neutral origin. Often, Derrida would then reduce the opposition into a singular term that removes the need for the original dichotomy- see 2.2.6 (Wigley, 1993; Coyne, 2011; Vitale, 2018). Situated within the context of colonial tourism and its impacts on vernacular Indonesian architecture, this study focuses on a return to an ecologically beneficial origin; prioritising the relational connections and impacts of architecture within larger social and ecological systems through a recovery of pre-colonial knowledge and critically reflected colonial experience (Fry, 2009; 2017).

C.2 Constructing Ethical Principles

Table C.2 describes the composition of eight ethical principles derived from (Cross-Cultural) Digital Storywork (Stanton et al., 2016), the Validity Criteria for Digital Storytelling (Sitter et al., 2020), the principles of Indigenous Projects of Digital Storytelling (Smith, 2021; Willox et al., 2012), and Transformative Storywork (Wheeler et al., 2020). These principles can be more generally replicated or adapted to other contexts.

Each Principle is detailed in the table below, with each principle on it's own individual page for ease of reading.

See Table C.2 on next page

Table C.2 Eight Ethical Principles of Architectural Storywork (read row by row, left to right)

Eight Ethical Principles of Architectural Storywork	Digital and Transformative Storywork Principles
1. Creating and *Respecting* Data within Stories • Storywork and other Indigenous Research Methodologies are more impactful when the community invite the project in, set its parameters, and outline project goals that a) centre Indigenous Knowledges and, b) require oppressive structures to align with those goals through the creation of new policies, cultures, or practices (Sitter et al., 2020; Smith, 2021). • When relaying a story, the relator must make efforts to; • Listen deeply and reflexively to what cultural knowledge holders are saying, how they are saying it, in what context, and with what purpose. 'Deep listening' (Scharmer, 2016) aims to authentically connect with the experiences of Indigenous people as co-researchers, going beyond the trappings of a relators self and ego to genuinely focus on helping to bring Indigenous goals and values into being. • Understand the roles of stories in teaching and learning Indigenous Knowledges, be respectful of the people who own and tell these stories, and make sure that the information is recorded and retold truthfully- following the place and people specific protocols of storytelling (Archibald, 2008; Archibald & Parent in Archibald et al., 2019). • Radically care and empathise with the everyday stigma and oppressions of marginalised communities, instigating dialogue between Indigenous and non-Indigenous peoples to tackle systemic injustices (Smith, 2021; Wheeler et al., 2020). 'Radical care' and 'radical empathy' engage in communal care that recognises what it means for individuals and groups to feel; providing care and taking actions that will not help others survive, but even thrive in environments that challenge their very existence-improving society as a whole (Hobart & Kneese, 2020; Givens, 2021). • Validate Indigenous ownership over the research data that is created within and through their stories. This requires a joint understanding that the academic researcher is not the sole person making or keeping research data; acknowledging that participants engage in the discovery, expression, and understanding of their own worlds, identities, and experiences as co-researchers (Stanton et al., 2016; Wheeler et al., 2020; Smith, 2021). This may contribute to a more equal balance of power within who owns, controls, and can use the lessons embedded within stories (Przybylski, 2020).	**Creating** For Smith (2021), is the act of creating is a catalyst for new invention and discovery that facilitates simple improvements to people's lives. Creation projects should channel creativity as a collective action towards Indigenous goals and values (Willox et al., 2012). Creating includes participatory validity, where Indigenous peoples take an active part in the research process (ICPHR, 2013). **Humanising** practice must centre people and places that have been made hidden or invisible through systemic injustice. It allows individuals and groups to live the freedoms that underpin what it means to be human (Paris & Winn, 2014), by expressing and understanding their own identities and lived experiences, in different places and times, using their own creativity (Wheeler et al, 2020). Ultimately, it challenges the origins of research as an objective process of evidence building or knowledge extraction, and is actively engaged in supporting equality, dignity, and care by becoming more aware of social and political issues in discussion with others (ibid). Humanising practice is foundational to Miller et al's (2005) checklist: • Include marginalised groups as protagonists and decision makers, fostering their critical consciousness and ability to influence the systems that affect their lives. This requires involving local groups in agenda setting, decision making to hold dominant systems accountable. • Build new leadership, strengthen local organisation, expand strategic and political experience and foster a sense of active, informed citizenship. This aims to change public decision-making structures and processes to be more inclusive of citizens' interests as well as promote individual and group awareness of rights. • Unpack prevailing myths and assumptions about all "stakeholders" being equal and poor communities being homogeneous. This includes efforts to weave expert knowledge into community-designed strategies and analysis, so that groups can deal more effectively with the range of national and global institutions, forces and policies shaping their choices and livelihoods. • Create and affirm a sense of individual empowerment, dignity and autonomy, as a basis from which to organise and engage with dominant systems and to negotiate with existing power structures. This requires participatory space where communities can use their resources strategically to affect change rather than being diverted by agendas that have little relevance or impact.

2. The *Respectful* Re-telling of Stories • Storying methods aim to provide a platform for Indigenous community members to tell their own stories, in their own words, and in the way they want others to hear it (Smith, 2021). Stories share a wealth of interrelated ideas, events, and experiences, and should be treated as valued and legitimate contributions to an interdependent knowledge system that encompasses Indigenous outcomes as well as research and design outcomes (Brayboy, 2006; Edwards et al., 2008; Kovach, 2009). • Listening to, recording, and relaying stories may require the use of translator to navigate barriers to a researcher's understanding of complex Indigenous value systems. Cross-cultural communication brings with it added responsibilities to mitigate impartiality, conflicts of interest, linguistic uncertainty, or misunderstandings when translating data. Working with translators who have an intimate knowledge and relationship with the community can provide a unique understanding of cultural and personal sensitivities, respect for the privacy of individual and communal data, and accuracy in comprehending and conveying personal stories (Drugan & Tipton, 2017). • A nuanced understanding of institutional ethics is required when processing Indigenous stories under the observation of university ethics committees. As research data is processed, Indigenous teachings can undergo censorship or 'fabrication' (edited, translated, scrambled, rephrased, anonymised, cropped, or blurred) due to pre-determined institutional rules, timeframes, or funding (Markham, 2020; de Seta, 2020). Transparency about the biases, limitations, and agendas of data processing are integral to the relationship between a researcher and community co-researchers. Where possible, Indigenous ethical frameworks should be implemented to protect Indigenous Knowledge in ways that go beyond university standards (Davidson in Archibald et al., 2019).	**Self and Collective Representation** is a "fundamental right" as both a political act and as a form of voice and expression (Smith, 2021, p.150). Digital storytelling can provide a platform for people to tell their own stories, in their own words, in the way they want others to hear them. It has ethical validity by valuing Indigenous ideas, events, and experiences as valid contributions to research and design outcomes (Edwards et al., 2008; Willox et al., 2012) **Humanising** (see Principle 1).

3. *Reverence* between Teller and Listener • Storytelling provides a platform for community members to connect to themselves, their realities, histories, conditions, and knowledges- including ancestry and ecologies- and weave together multiple worldviews through shared narratives (Willox et al., 2012). • Time should be devoted to tracing the mundane trajectories of individuals as they move through and experience space. However, it is not the researcher's responsibility to decide whether spatial experiences are more important to a person's daily life than their culture, or if their culture explains how their spatial experiences are constructed (Yaneva, 2009). • The researcher has a responsibility to work with the storyteller to consider the extent that each spatial experience has relevance to their lives or to the lives of others who are directly connected to the study (Sitter et al., 2020). This focuses on seeing a smaller ethnography well, whilst still recognising the broader values, contexts, and cultures present within the Indigenous experience of space (Yaneva, 2009).	**Networking** requires an appreciation for and emphasis on regional, territorial, provincial, national, and international relations between and among individuals and communities. This provides an intersubjective validity by viewing research as both credible and meaningful to multiple stakeholders (ICPHR, 2013). Relationships are developed by the respectful dissemination of Indigenous knowledge and information, authentically listening to the stories of others and truthfully sharing of our own stories (Smith, 2021; Willox et al., 2012) **Humanising** (see Principle 1).

4. *Responsible* Narratives • By preferencing the shorter stories of everyday experience over the grander narratives of culture and society (which may be culpable to oppression and stigmatisation), it is possible to foreground non-universal truths, pluriversal worldviews, and a polyphony of voices that can give greater meaning to a shared cultural narrative (Ramakers, 2002). This purposefully usurps the grander references to architectural theory and Western metaphysics as the dominant standards of explanation and, instead, focuses its attention on tracing the ordinary forces and everyday actions of individuals as they make sense of their own world building activities (Yaneva, 2009). • Objective rules to world building are given arbitrarily within socio-cultural norms. The final experience of space depends, instead, upon the subjective application of these rules by individual people (Tschumi, 1994). Only by understanding the world building processes of individual people can we evaluate the otherwise 'random' application of socio-cultural rules (Bandoni, Meroz, & Paz, 2010). Stories provide Indigenous people with the opportunity to share their own world building processes, interact with the world building processes of others, and give voice to ideas not previously shared (Willox et al., 2012). • It is the responsibility of all storytellers and listeners, including the researcher, to practice ethical care to their fullest extent by sharing, listening, teaching, or learning with compassion and attentiveness, and take accountability for any errors that may occur within these processes (Archibald, 2008; Sitter et al., 2020; Wheeler et al., 2020).	**Storytelling** is a way to link individual stories and community narratives together; inciting and eliciting dialogue between and among diverse peoples and groups (Smith, 2021). This encourages participatory validity as individuals actively weave together multiple stories in a polyphony of voices (ICPHR, 2013), creating opportunities to give voice to ideas and experiences not previously spoken, or interact with the stories of others through a shareable medium (Willox et al., 2012) **Accountability**, as researchers and practitioners, includes a responsibility for the way we construct and guide our research with/ within communities. Importantly, we must examine our biases and privileges, responding to them reflexive in relation to any tensions that may emerge. This must be embedded in an "ethics of care" - a commitment to mutual care, compassion, and attentiveness between the researcher and the community (Ward and Gahagan 2010; Edwards and Mauthner 2012). This entails that both the researcher and the participants must have a commitment to learning, reflexivity, and change in themselves (Madison 2005; Wheeler et al., 2020).

5. Relational *Reciprocity* • When engaging with multiple mediums of storytelling, it is possible that the storyteller may articulate multiple personas and worldviews that can leave the listener feeling 'deceived' (Przybylski, 2020). When researchers engage in the double hermeneutic approach (making sense of the participants whilst they make sense of their own world building activities), they are engaged in a dual conversation- one with the storyteller and one inside their own head engaging constantly in a meta-analysis of the story. It is important to understand that this meta-analysis can put the researcher in a state of doubt or mistrust in relation to the storyteller, which must be overcome (Hendry, 2007; de Seta, 2020). • Whilst additional data points can be used to cross-examine and cross-reference multiple stories to find common narratives (Przybylski, 2020), the researcher must also accept contradiction and not attempt to assert authority by superseding, reducing, or redacting multiple voices. It is important for the researcher not to become lost in their own analysis and, instead, to take time to connect with their inner self, to the storyteller, and to the Indigenous topic being discussed, in order to appreciate its true meanings (Archibald & Parent in Archibald et al., 2019). • The reciprocal sharing of stories between the researcher and Indigenous communities also helps to build trust, connect to others, and also connect to our own individual and collective histories (Willox et al., 2012). Sharing stories with Indigenous people allows the researcher to locate themselves within the context of the research, giving more credibility to the knowledge that is shared and disseminated through their research practices (Sitter et al., 2020; Smith, 2021).	**Connectedness** positions individuals in relation to other people and their environments (Smith, 2021). This connection ranges from respecting and representing creation stories, to making linkages with familial and ancestral histories. This supports contextual validity, which a) considers the extent to which research is connected to local settings (ICPHR, 2013) b) considers how Indigenous stories can be processed in respectful and enhancing ways that are relevant to the lives of those connected to the research (Sitter et al., 2020), and c) provides the platform for people to not only remember their roots, but also to connect to themselves, their histories, their ancestors, and their culture through stories (Willox et al., 2012) **Accountability** (see Principle 4)

6. *Holistic* Transformations of Trauma • Storying is an educational process with the purpose of teaching, protecting, preserving, and learning the power of particular Indigenous knowledges in new spaces with new listeners (Archibald, 2008; Garcia & Shirley, 2012). This process can challenge how certain ways of seeing and knowing are privileged over others by, firstly, recognising oppression and, secondly, instigating actional change by authoring new stories and teaching new lessons 'between the lines' of oppressive structures; creating spaces that can communicate multiple meanings (Karami, 2019). • This process involves remembering, accepting, and celebrating trauma by bringing it into the present as a healthy transformation in relation to oneself, family, or community (Willox et al., 2021; Sitter et al., 2020; Smith, 2021). Rather than 're-living' trauma by telling stories that have already been told, this is about harnessing the performative potential of telling new stories, constructing new spaces, and introducing new characters into those spaces that engage in new design culture around spatial experience (Archibald, 2008; Karami, 2019). • By inviting participants to co-author transformative stories in the space between academic research and Indigenous Knowledge, new methods of knowledge production and articulation can evolve with, and from within, the community- moving towards actionable social changes and new design cultures that emerge from reflexive, critical, and discursive learning practices.	**Remembering** is about connecting to a past and bringing the history of communities into the present moment. It involves remembering all moments from collective histories, including pain, trauma, and people's responses to those moments. By not idealising history, but remembering and celebrating its lows, 'remembering' involves an empathic validity that considers the potential of research to transform the emotional disposition of people, forming greater understandings and compassion (ICPHR, 2013; Smith, 2021). Healing and transformation become crucial strategies in helping communities to remember what they may have unconsciously or consciously forgotten (Willox et al., 2012; Smith, 2021). **Emancipatory** practice involves drawing from critical theories that challenge how certain ways of seeing and knowing are privileged over others. Therefore, methods of knowledge production and transmission towards social change must continually evolve and change with, and from within, the community. This is not just a method of understanding the experiences of a community, but of moving towards transformative and actionable change through reflexive, critical, and dialogic learning- drawing from participatory action research (Wheeler et al., 2020).

7. Sharing *<u>Interrelated</u>* Stories

- Sharing Interrelated stories is a catalytic process where community members have opportunities to;

a. Re-examine and re-story their lived experiences as shared topics.

b. Learn the core values, beliefs, and essence of shared stories which could transcend time and place.

c. Recognise interconnections across many core areas and experience between members of their own community and between Indigenous people throughout the world (Archibald, 2008; Willox et al., 2012; Sitter et al., 2020).

- To better enable this process, as much research data as possible, including meta-data such as algorithms, tools, and workflows, must be accessible to Indigenous people so that they can openly share replicable data with each other and other Indigenous communities. Similar data should, as much as possible, be made available to other researcher and the general public for reproducibility purposes (Wilkinson et al., 2016).

Sharing builds upon storytelling, creating, remembering, and connecting- creating networks between and among Indigenous people throughout the world through situated oral literacies and formal, ritualistic occasions that feature in Indigenous life (Smith, 2021). This leads to catalytic validity, in which delf-determination is connected to participation through a collective re-telling of Indigenous experiences- recognising an interrelatedness across core areas of potentially disparate experiences (Sitter et al., 2020)

Emancipatory practice (see Principle 6)

8. *Synergetic* Actions • Ultimately, research is conducted to trigger new thoughts or deepen existing ideas around emancipation, by learning from the characters, and the events that occur within the discursive spaces of stories (Archibald et al., 2008). This process can be more impactful when project stakeholders listen deeply and reflexively to what cultural knowledge holders are saying, how they are saying it, in what context, and with what purpose. 'Deep listening' (Scharmer, 2016) aims to authentically connect with the experiences of Indigenous people as co-researchers, going beyond the trappings of a relators self and ego to genuinely focus on helping to bring Indigenous goals and values into being. • Bottom-up, participatory practices allow the iterative development of research processes based on the reflexive experiences of the community (Wheeler et al., 2020; Escobar-Tello et al., 2021). Group reflection does not focus on reporting individual interpretation, as they are not readily separable from the interpretations of the community (Sim & Waterfield, 2019), but thoughtfully considers how different experiences are woven together to re-construct diverse worldviews towards new possibilities of public action and improved quality of life (Lather, 1986; Sitter et al., 2020).	**Interventions** can only occur if the community itself invites the project in and sets out its parameters. Catalytic validity is enforced by the willingness of the researcher (and other stakeholders) to change themselves in some way- to create new policies, cultures, or practices (Sitter et al., 2020; Smith, 2021). Therefore, intervening is directed at changing institutions that engage with Indigenous people and not about changing Indigenous people to fit into other structures (Smith, 2021). This requires the roles of, and relations between, the 'researcher' and 'researched' to change that is founded on a level of trust and partnership between them as co-researchers (Willox et al., 2012). **Emancipatory** practice (see Principle 6)

Appendix D

University College Cork Ethics Application Process and Key Fieldwork Documents

- Video Introduction Screenshots
- Information Sheets
- Data Protection Notices
- Consent Forms

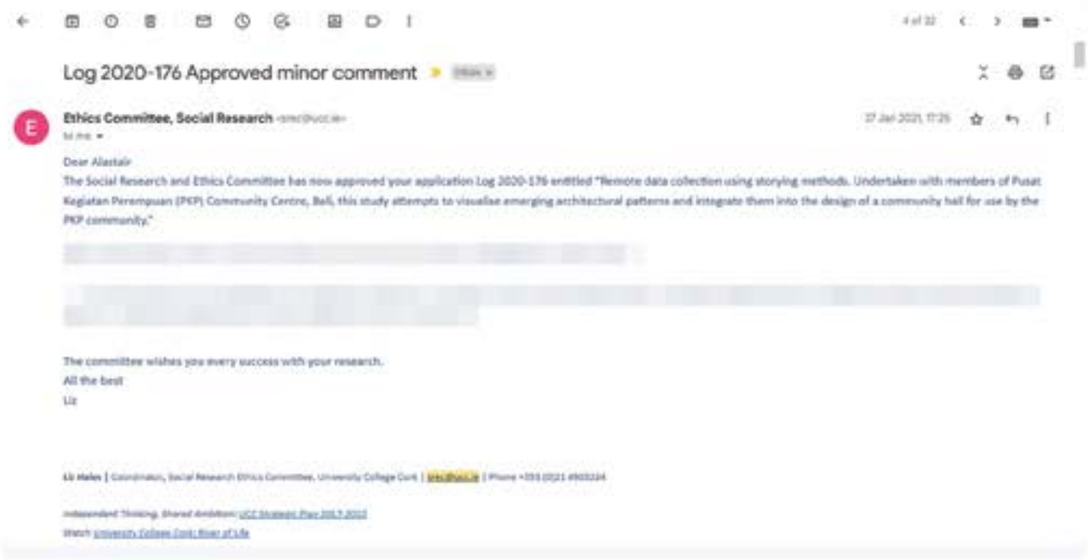


Fig D1. P27/ 01/ 2023 University College Cork Social Research Ethics Committee (SREC) Ethical Approval Log 2020-176

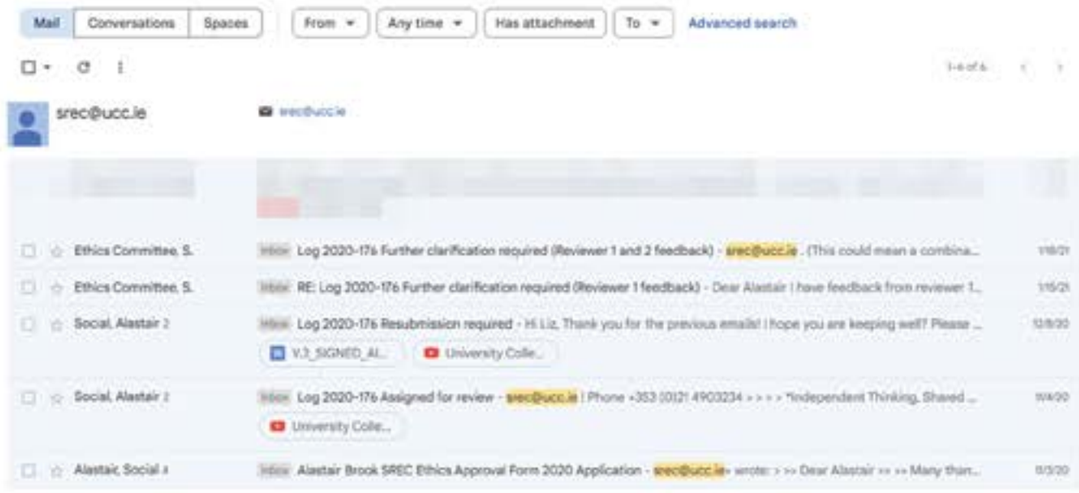


Fig D2. Logged emails between SREC and Alastair Brook between November 2020 and January 2021



23/ 10/ 2020- Submission of Ethics Form



04/ 11/ 2020- Assigned Log 2020-176 & Sent for Review



24/ 11/ 2020- Reviewers Comments & Resubmission Required



08/ 12/ 2020- Submission V2 with Ammendments



18/ 01/ 2021- Reviewers Feedback



22/ 01/ 2021- Submission V3 with Ammendments



26/ 01/ 2021- Reviewer 1 & 2 Final Feedback

27/ 01/ 2023- Approval

Fig D3. Approval Journey (for Illustrative Purposes Only)

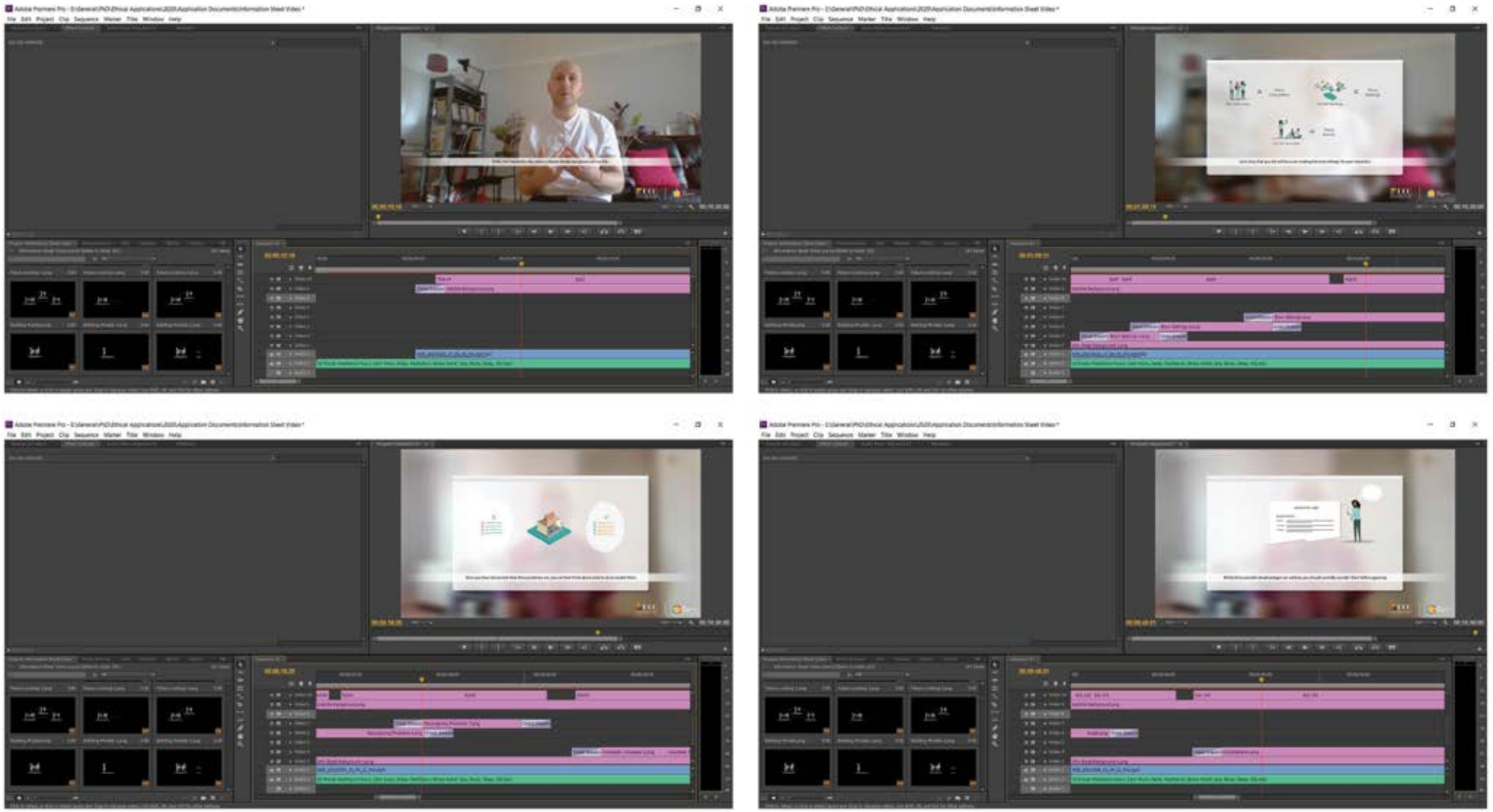


Fig D4. Screenshots of Information Sheet Video provided to Prospective Participants (for Illustrative Purposes Only)

University College Cork
National University of Ireland, Cork

DATA PROTECTION NOTICE FOR PARTICIPANTS

Study Name: Remote data collection for the design of a Community Hall with members of Pusat Kegiatan Perempuan Community Centre, Bali.

Site: Remote investigation undertaken with members of Pusat Kegiatan Perempuan (PKP) Community Centre, Banjar Selasih, Bali, Indonesia.

Owner: Alastair Brook

Date: 24/06/2020

Email: alastair.brook.design@gmail.com / 118225218@umail.ucc.ie

Phone Number: +353 (0) 896117057 / +44 (0) 7976291711

Key Points

The study will focus on your daily lives and not on your cultural, religious, or social beliefs. As such, no special category data will be sought from you, such as ethnic origin, political opinions, or religious and philosophical beliefs, and no special category data will be recorded or published.

You will be asked to sign a Consent Form at the beginning of the study, which will ask you to confirm your eligibility and agreement to participate. The data collection process focuses on 8 individual design activities. At the end of each activity, you will be asked to provide additional consent for the information you created to be stored and processed by the researcher. This is an opportunity for you to control what information you share with the researcher, and is a process designed specifically to provide you more flexibility and power in this research study. All of the data created within the study is owned by you and will only become research data if you choose to provide consent at the end of each activity. This consent will be collected using a Google Form. Any data that you agree to share must be sent privately to the researcher through a specified platform, and the researcher will then upload your data to a Google Drive Folder that is specific to you. You will be provided with a web link to access your own information online, and you will be able to update, erase, or disagree to your data being processed up to 1 month after the study ends, make use of your own data for other purposes, and can lodge complaints with the Data Protection Commission if deemed appropriate. More information is provided in this document.

During the 8 design activities, your data will not be immediately anonymised. You will still have access to this data up to 1 month after the end of the study. At the end of this 1 month period, your information will be removed from the Google Drive, anonymised by the researcher, and transferred to a secure server at University College Cork (referred to as UCC). Any identifiable data will be anonymised and coded within your data, and a key containing your identifiable information will be stored in a separate secure UCC Server, or deleted, to ensure anonymity. In keeping with the data protection principles, we will only store your data for a minimum of 10 years, at which point your data will be destroyed.

Your data will be used for the public interest of the Pusat Kegiatan Perempuan (PKP) Community, to inform the design and development of the community hall project with the aim of improving your community's quality of life.

Data that you share with the researcher may be included in any publication (such as PhD thesis, journal articles, conference presentations, etc.) related to the community and the design of the community hall project. Data within these publications will be anonymised. However, you can choose to be listed as a co-author (in your Consent Form) of any publications that include extracts of your data. This will include your name and a short biography of yourself. Being listed as a co-author will allow your voices to be heard in different corners of the world by individuals who can learn from your life experiences and your way of thinking. There is a risk that naming yourself as a co-author can link you to your anonymised data. All efforts will be made by the researcher to reduce this risk as much possible.

Who we are

At University College Cork, we treat your privacy seriously. Any personal data that you provide to the University will be treated with the highest standards of security and confidentiality, in accordance with Irish and European Data Protection legislation. This notice sets out details of the information that we collect, how we process it and who we share it with. It also explains your rights under data protection law in relation to our processing of your data.

Throughout this Notice, "we", "us" and "our" refers to the researcher, Alastair Brook, as a PhD student at the Cork Centre for Architectural Education, School of Engineering, University College Cork (referred to as UCC). For more information about us, please refer to our website: https://www.ucc.ie/en/architecture/

How we collect your personal data

We collect your data from you when you share your information with the researcher, alongside informed consent through an online Google Form. The study will focus on your daily lives and not on your cultural, religious, or social beliefs. As such, no special category data will be sought from you, such as ethnic origin, political opinions, or religious and philosophical beliefs, and no special category data will be recorded or published.

You will be asked to sign a Consent Form at the beginning of the study, which will ask you to confirm your eligibility and agreement to participate. The data collection process focuses on 8 individual design activities. At the end of each activity, you will be asked to provide additional consent for the information you created to be stored and processed by the researcher. This is an opportunity for you to control what information you share with the researcher, and is a process designed specifically to provide you more flexibility and power in this research study. All of the data created within the study is owned by you and will only become research data if you choose to provide consent at the end of each activity. This consent will be collected using a Google Form. Any data that you agree to share must be sent privately to the researcher through a specified platform, and the researcher will then upload your data to a Google Drive Folder that is specific to you. You will be provided with a web link to access your own information online, and you will be able to update, erase, or disagree to your data being processed up to 1 month after the study ends, make use of your own data for other purposes, and can lodge complaints with the Data Protection Commission if deemed appropriate.

Processed data including, but not limited to; transcribed data, digitised media, graphs or other data analysis diagrams, photographs, and hypotheses based on data analysis, may contribute to the researchers final PhD thesis, or other disseminations, at any point in time e.g. within journal articles, conference presentations, exhibitions etc. All privacy protocols will be adhered to in this eventuality. By providing consent for the researcher to store and process your data, you are also agreeing to these disseminations of your data. Data within these publications will be anonymised. However, you can choose to be listed as a co-author (in your Consent Form) of any publications that include extracts of your data. This will include your name and a short biography of yourself. Being listed as a co-author will allow your voices to be heard in different corners of the world by individuals who can learn from your life experiences and your way of thinking. There is a risk that naming yourself as a co-author can link you to your anonymised data. All efforts will be made by the researcher to reduce this risk as much possible.

The purpose and legal basis for collecting your data

Any personal data that you provide to us will be processed fairly and lawfully.

Your data will be used for the public interest of the Pusat Kegiatan Perempuan (PKP) Community, to inform the design and development of the community hall project with the aim of improving your community's quality of life. Your data will be used for the purposes of:

- Interpreting any emerging architectural patterns that you see in your community.
- Visually prototyping these patterns in a number of ways and to assess which patterns will best improve your community's quality of life.
- Judge if these patterns would improve your quality of life if implemented into the community hall design.
- Provide architects and construction workers with a brief to build a community hall designed by you from the above process.

The Data Protection Acts allows us to process your data because you have provided your explicit consent. You are entitled to withdraw your consent within 1 month after the study ends. If you do withdraw your consent, the researcher will no longer process your personal data and will securely delete all reference to your data.

How we analyse your personal data

Your personal data will be analysed only in the public interest of the PKP Community. The design of the community hall, with the intent to improve your native quality of life, is considered in the public interest of the PKP Community Centre. The researcher and the PKP Community Centre also consider your design agency and the inclusion of your personal voice in the design process, without censorship, to be in the public interest of the PKP Community Centre as it contributes to your empowerment and growth. As such, any publications (such as PhD thesis, journal articles, conference presentations, etc.) related to the community will make all efforts to publish your data without censorship. The only censorship that will occur will be in the interest of your anonymity.

Analysis of your data may include graphs, diagrams, photographs, and hypotheses. The final intent of the study is to present a brief for a community hall design created communally by you, that can be understood by architects and construction workers ready for construction. This may mean that architectural models and drawings will be produced as a result of analysing your data.

In accordance with EU GDPR Article 9, PKP Community Centre will provide appropriate safeguards for the collection of its member's personal data. As part of this safeguarding procedure, Komang Sariadi has cross-examined a Data Protection Impact Assessment conducted by the researcher and signed by the UCC Information Compliance Manager, both of whom have agreed to acceptable risk parameters of collecting, processing, and publishing your personal data.

We will follow the procedures set out by University College Cork, the Irish Data Protection Acts and the EU General Data Protection Regulations.

Details of third parties with whom we share personal data

Your raw data will not be shared with any third parties, such as the PKP Community Centre, Research Consultants, or Architectural Consultants, without it being a necessity for the public interest of the project, or without your explicit consent. This consent will be sought on a case-by-case basis to enable you to make an informed decision about who your data is shared with. The researcher may be required to share your data with research supervisors or other UCC staff if required, such as for audit. This type of data sharing is covered within your initial consent and will not require additional consent.

Your data will be temporarily stored on a cloud service provider that is not used for long term storage by UCC. Any data that you share with the researcher will be uploaded and temporarily stored on Google Drive servers in secure data centers and will remain encrypted to protect it from unlawful access. You will maintain the intellectual property rights to the data that you share, meaning that you will keep ownership of your data. Google will not use your data for commercial purposes, but may conduct automated scans and analysis of any data stored on their servers in order to improve the service provided to the owner- in this case, UCC. Google keep different types of data for different periods of time- from 30 days, 3 months, 18 months or indefinitely- but do allow users to permanently delete their data across many of their platforms. The researcher will ensure that all of your data that can be deleted, will be deleted at the end of the study.

For more information on Google Data Retention: https://policies.google.com/technologies/retention
For Google's full Data Protection Policy please visit: https://cloud.google.com/security/gdpr#tab2
For specific Google Drive FAQ's please visit: https://support.google.com/drive#topic=14940

No other third-party providers are intended to be used to collect or store your data. If, in the event that a third-party provider is needed to collect or store your data, it will be conducted on a UCC account and all data protection information will be shared with you prior to you giving consent to use any third party provider.

Cross-border data transfers

All data that you share with the researcher will be transferred into the European Economic Area (as the researcher and their institution, who will be storing and processing your data, are located within the European Union. There is no intent for your data to later be transferred outside of the European Economic Area. However, if for any reason this becomes necessarily, you will be informed and any data transferred outside of the European Economic Area will do so on the understanding that we reply on legally approved mechanisms to lawfully transfer data across borders, including the Standard Contractual Clauses approved by the European Commission.

How long we will keep your data

Once your data has been removed from the UCC Google Drive, it will be transferred to a secure UCC Server. Any identifiable data will be anonymised and coded within your data, and a key containing your identifiable information will be stored in a separate secure UCC Server to ensure anonymity until. In keeping with the data protection principles, we will only store your data for as long as is necessary. For the purposes described here we will store your data for a minimum of 10 years, at which point your data will be destroyed.

Your rights

You have various rights under data protection law, subject to certain exemptions, in connection with our processing of your personal data, including the right:

- To find out if we use your personal data, access your personal data and receive copies of your personal data;
- To have inaccurate/incomplete information corrected and updated;
- In certain circumstances, to have your details deleted from systems that we use to process your personal data or have the use of your personal data restricted in certain ways;
- To object to certain processing of your data by the researcher or UCC;
- To exercise your right to data portability where applicable (i.e. obtain a copy of your personal data in a commonly used electronic form);
- Where we have relied upon consent as a lawful basis for processing, to withdraw your consent to the processing at any time;
- To not be subject to solely automated decision.

Questions or Complaints

If you have any questions in relation to the study being conducted, please contact: **Alastair Brook, Cork Centre for Architectural Education, Douglas Street, Cork, T12 AD7R, Republic of Ireland E: alastair.brook.design@gmail.com / 118225218@umail.ucc.ie T: +353 896117057**

If you have any complaints in connection with our processing of your personal data, you can contact UCC's Information Compliance Manager: **Information Compliance Manager, Office of Corporate & Legal Affairs, University College Cork, Western Road, Cork E: foi@ucc.ie Tel: +353 21 4903949**

You also have the right to lodge a complaint with the Data Protection Commission if you are unhappy with our processing of your personal data. Details of how to lodge a complaint can be found on the Data Protection Commission's website (www.dataprotection.ie), or by telephoning 1890 252 231.

In continuing with the study, you understand and agree that your personal data may be used and processed for the purposes outlined above. By signing this Data Protection Notice, the researcher is agreeing that, to the best of their knowledge, the information provide above is true.

Signature

ALASTAIR BROOK	08 March 2021
Print Name	**Date**



Signature

University College Cork
National University of Ireland, Cork

DATA PROTECTION NOTICE FOR FACILITATORS/ TRANSLATORS/ TRANSCRIBERS

Study Name: Remote data collection for the design of a Community Hall with members of Pusat Kegiatan Perempuan Community Centre, Bali.

Site: Remote investigation undertaken with members of Pusat Kegiatan Perempuan (PKP) Community Centre, Banjar Selasih, Bali, Indonesia.

Owner: Alastair Brook

Date: 24/06/2020

Email: alastair.brook.design@gmail.com / 118225218@umail.ucc.ie

Phone Number: +353 (0) 896117057 / +44 (0) 7976291711

Key Points

The study will focus on the daily lives of PKP Community members, and not on their cultural, religious, or social beliefs. As such, no special category data will be sought from you, such as ethnic origin, political opinions, or religious and philosophical beliefs, and no special category data will be recorded or published.

You will be asked to sign a Consent Form at the beginning of the study, which will ask you to confirm your eligibility and agreement to participate as a facilitator/ translator/ transcriber. The data collection process focuses on 8 individual design activities. All of the data that you create in your role as a facilitator/ translator/ transcriber is *not* owned by you. This data is owned by the original data producer. This data will only become research data if the original owners choose to provide consent to share this information with the researcher at the end of each activity. This responsibility requires you to maintain the confidentiality of your community members and keep all of their information that you handle private and secure. This role requires you to agree to these terms and to not break the trust of your community. This consent will be collected using a Google Form. Any data that you create must be immediately given to the original content creator, who is then the sole owner of the data. You must then delete any data that you are still in possession of. More information is provided in this document.

Any data that you provide about yourself, such as in your consent forms, will be anonymised. In accordance with the data protection principles, we will only store your data for a minimum of 10 years, at which point your data will be destroyed.

Your data will be used for the public interest of the Pusat Kegiatan Perempuan (PKP) Community, to inform the design and development of the community hall project with the aim of improving your community's quality of life.

Data that you share with the researcher may be included in any publication (such as PhD thesis, journal articles, conference presentations, etc.) related to the community and the design of the community hall project. Data within these publications will be anonymised. However, you can choose to be listed as a co-author (in your Consent Form) of any publications that include extracts of your data. This will include your name and a short biography of yourself. Being listed as a co-author will allow your voices to be heard in different corners of the world by individuals who can learn from your life experiences and your way of thinking. There is a risk that naming yourself as a co-author can link you to your anonymised data. All efforts will be made by the researcher to reduce this risk as much possible.

Who we are

At University College Cork, we treat your privacy seriously. Any personal data that you provide to the University will be treated with the highest standards of security and confidentiality, in accordance with Irish and European Data Protection legislation. This notice sets out details of the information that we collect, how we process it and who we share it with. It also explains your rights under data protection law in relation to our processing of your data.

Throughout this Notice, “we”, “us” and “our” refers to the researcher, Alastair Brook, as a PhD student at the Cork Centre for Architectural Education, School of Engineering, University College Cork (referred to as UCC). For more information about us, please refer to our website: https://www.ucc.ie/en/architecture/

How we collect your personal data

We collect your data from you when you share a signed consent form, acknowledging your commitment and role as a facilitator/ translator/ transcriber, to the researcher. This will be uploaded to a UCC Google Drive folder, specific to your. You will be provided a link to this folder to view the consent form at any time. No special category data will be sought from you, such as ethnic origin, political opinions, or religious and philosophical beliefs, and no special category data will be recorded or published.

If you consent to your role as a facilitator/ translator/ transcriber, you may not participate in the activities related to this study. Instead, your role will be to accurately guide members of your community through these activities and/ or accurately and honestly document the information provided by your community members. This responsibility requires you to maintain the confidentiality of your community members and keep all of their information that you handle private and secure. This role requires you to agree to these terms and to not break the trust of your community. If any participants feel that you have breached the responsibilities of your role and have mishandled their information, they are entitled to lodge complaints with the Data Protection Commission, as well as with the researcher and UCC, if deemed appropriate.

All of the data that you create in your role as a facilitator/ translator/ transcriber is not owned by you. This data is owned by the original data producer. This data will only become research data if the original owners choose to provide consent to share this information with the researcher at the end of each activity. This consent will be collected using a Google Form. Any data that you create must be immediately given to the original data producer, who is then the sole owner of the data. You must then delete any data that you are still in possession of. Any data that you provide about yourself, such as in your consent forms, will be anonymised. In keeping with the data protection principles, we will only store your data for a minimum of 10 years, at which point your data will be destroyed. You have complete control of your data and can choose which data you share with the researcher, and will be able to update, erase, or disagree to your data being processed up to 1 month after the study ends, make use of your own data for other purposes, and can lodge complaints with the Data Protection Commission if deemed appropriate. Your data will be processed and used by us only in accordance with the purposes outlined in this notice.

Information that you handle including, but not limited to; participants’ identifiable data and translated/ transcribed data, may contribute to the researchers final PhD thesis, or other disseminations, at any point in time e.g. within journal articles, conference presentations, exhibitions etc. All privacy protocols will be adhered to in this eventuality. By proving consent for the researcher to store and process your data, you are also agreeing to these disseminations of your data. Data within these publications will be anonymised. However, you can choose to be listed as a co-author (in your Consent Form) of any publications that include extracts of your data. This will include your name and a short biography of yourself. Being listed as a co-author will allow your voices to be heard in different corners of the world by individuals who can learn from your life experiences and your way of thinking. There is a risk that naming yourself as a co-author can link you to your anonymised data. All efforts will be made by the researcher to reduce this risk as much possible.

The purpose and legal basis for collecting your data

Any personal data you provide to us will be processed fairly and lawfully.

Your data will be used for the public interest of the Pusat Kegiatan Perempuan (PKP) Community, to help inform the design and development of the community hall project with the aim of improving your community’s quality of life.

The Data Protection Acts allows us to process your data because you have provided your explicit consent. You are entitled to withdraw your consent within one month after the study ends. If you do withdraw your consent, the researcher will no longer process your personal data and will securely delete all reference to your data. If you choose to withdraw your consent at any point during the study, or up to one month after the study ends, you will no longer hold the role of facilitator/ translator/ transcriber. However, you will retain your responsibilities to keep all participant information that you have handled private, secure, and confidential. Even if you decide to no longer hold your role, participants are still entitled to lodge complaints with the Data Protection Commission, if they feel that you have subsequently mishandled their information.

How we analyse your personal data

Your personal data will be analysed only in the public interest of the PKP Community. The design of the community hall, with the intent to improve your native quality of life, is considered in the public interest of the PKP Community Centre. Your responsibility as a facilitator/ translator/ transcriber is to accurately document the personal voices of your community in the design process. As such, any publications (such as PhD thesis, journal articles, conference presentations, etc.) related to the information you handle may include you as a co-author. This will be limited to the information you provide in your consent form.

In accordance with EU GDPR Article 9, PKP Community Centre will provide appropriate safeguards for the collection of its member's personal data. As part of this safeguarding procedure, Komang Sariadi has cross-examined a Data Protection Impact Assessment conducted by the researcher and signed by the UCC Information Compliance Manager, both of whom have agreed to acceptable risk parameters of collecting, processing, and publishing your personal data.

We will follow the procedures set out by University College Cork, the Irish Data Protection Acts and the EU General Data Protection Regulations.

Details of third parties with whom we share personal data

Your raw data will not be shared with any third parties, such as the PKP Community Centre, Research Consultants, or Architectural Consultants, without it being a necessity for the public interest of the project, or without your explicit consent. This consent will be sought on a case-by-case basis to enable you to make an informed decision about who your data is shared with. The researcher may be required to share your data with research supervisors or other UCC staff if required, such as for audit. This type of data sharing is covered within your initial consent and will not require additional consent.

Your data will be temporarily stored on a cloud service provider that is not used for long term storage by UCC. Any data that you share with the researcher will be uploaded and temporarily stored on Google Drive servers in secure data centers and will remain encrypted to protect it from unlawful access. You will maintain the intellectual property rights to the data that you share, meaning that you will keep ownership of your data. Google will not use your data for commercial purposes, but may conduct automated scans and analysis of any data stored on their servers in order to improve the service provided to the owner- in this case, UCC. Google keep different types of data for different periods of time- from 30 days, 3 months, 18 months or indefinitely- but do allow users to permanently delete their data across many of their platforms. The researcher will ensure that all of your data that can be deleted, will be deleted at the end of the study.

For more information on Google Data Retention: https://policies.google.com/technologies/retention
For Google's full Data Protection Policy please visit: https://cloud.google.com/security/gdpr#tab2
For specific Google Drive FAQ's please visit: https://support.google.com/drive#topic=14940

No other third-party providers are intended to be used to collect or store your data. If, in the event that a third-party provider is needed to collect or store your data, it will be conducted on a UCC account and all data protection information will be shared with you prior to you giving consent to use any third party provider.

Cross-border data transfers

All data that you share with the researcher will be transferred into the European Economic Area (as the researcher and their institution, who will be storing and processing your data, are located within the European Union. There is no intent for your data to later be transferred outside of the European Economic Area. However, if for any reason this becomes necessarily, you will be informed and any data transferred outside of the European Economic Area will do so on the understanding that we reply on legally approved mechanisms to lawfully transfer data across borders, including the Standard Contractual Clauses approved by the European Commission.

How long we will keep your data

Once your data has been removed from the UCC Google Drive, it will be transferred to a secure UCC Server. Any identifiable data will be anonymised and coded within your data, and a key containing your identifiable information will be stored in a separate secure UCC Server to ensure anonymity until. In keeping with the data protection principles, we will only store your data for as long as is necessary. For the purposes described here we will store your data for a minimum of 10 years, at which point your data will be destroyed.

Your rights

You have various rights under data protection law, subject to certain exemptions, in connection with our processing of your personal data, including the right:

- To find out if we use your personal data, access your personal data and receive copies of your personal data;
- To have inaccurate/incomplete information corrected and updated;
- In certain circumstances, to have your details deleted from systems that we use to process your personal data or have the use of your personal data restricted in certain ways;
- To object to certain processing of your data by the researcher or UCC;
- To exercise your right to data portability where applicable (i.e. obtain a copy of your personal data in a commonly used electronic form);
- Where we have relied upon consent as a lawful basis for processing, to withdraw your consent to the processing at any time;
- To not be subject to solely automated decision.

Questions or Complaints

If you have any questions in relation to the study being conducted, please contact: **Alastair Brook, Cork Centre for Architectural Education, Douglas Street, Cork, T12 AD7R, Republic of Ireland E: alastair.brook.design@gmail.com / 118225218@umail.ucc.ie T: +353 896117057**

If you have any complaints in connection with our processing of your personal data, you can contact UCC's Information Compliance Manager: **Information Compliance Manager, Office of Corporate & Legal Affairs, University College Cork, Western Road, Cork E: foi@ucc.ie Tel: +353 21 4903949**

You also have the right to lodge a complaint with the Data Protection Commission if you are unhappy with our processing of your personal data. Details of how to lodge a complaint can be found on the Data Protection Commission's website (www.dataprotection.ie), or by telephoning 1890 252 231.

In continuing with the study, you understand and agree that your personal data may be used and processed for the purposes outlined above. By singing this Data Protection Notice, the researcher is agreeing that, to the best of their knowledge, the information provide above is true.

Signature

ALASTAIR BROOK — 08 March 2021

Print Name — **Date**



Signature

University College Cork
National University of Ireland, Cork

INFORMATION SHEET

Key Points

Thank you for considering participating in this research project. The purpose of this document is to explain to you what the work is about and what your participation would involve, so as to enable you to make an informed choice.

This study is part of the PhD (Doctorate of Philosophy) of the researcher, Alastair Brook.

This study is fully funded by the researcher and no other third parties are providing funding for this study.

The purpose of this study is to create a brief that will describe the design of a new Community Hall for the PKP Community Centre. You will do this by taking part in 8 design activities over 3 or more weeks. These activities will last around 2 hours each, and will create a story about you, the people that you work with, the buildings that you work in, and the different activities that you do each day. By thinking about the people, buildings, and activities that you do every day, you will begin to notice things that do not work, things that cause problems, things that take more time than they should, things that are unsustainable, and many more possible problems. Once you have discovered what these problems are, you can then think about what to do to resolve them. These resolutions will begin to design your new Community Hall.

Participation in this study is voluntary- you do not have to take part in this study. Before the study begins, you will have 1 week to decide if you wish to participate or not.

All of the information that you provide within this study, and the outcomes of the 8 design activities that you take part in, are all owned by you. You can decide if, and how much, of this information that you wish to share with the researcher. You are under no obligation to share any information with the researcher. You are under no duress to participate. Once you have shared information with the researcher, you can request to access, edit, delete, or obtain your information up to one month after the completion of the study. A specific date will be provided once the study ends.

Data that you share with the researcher may be included in any publication (such as PhD thesis, journal articles, conference presentations, etc.) related to the community and the design of the community hall project. Data within these publication will be anonymised, but you will given the opportunity to be listed as co-authors of any publications including extracts of your data. This will include your name and a short biography of yourself. Being listed as a co-author will allow your voices to be heard in different corners of the world by individuals who can learn from your life experiences and your way of thinking. There is a risk that naming yourself as a co-author can link you to your anonymised data. All efforts will be made by the researcher to reduce this risk as much possible.

Once information has been shared with the researcher, he will analyse your information and create his own story of you, the people that you work with, the buildings that you work within, and the different activities that you do each day with these people and in these buildings. The researcher will also create his own Community Hall design based on the designs that you create.

The activities that you will participate in focus on your present daily life, and your visions of your future daily life. They will focus on identifying problems in the buildings and activities that you do every day, and are intended to empower you to create positive change for a better future. However, there may be certain disadvantages and risks if you take part in these activities.

1. These activities may inadvertently bring back memories of past traumas that you have experienced related to your current life at the PKP Community Centre, such as stigma, which may be distressing to you or those around you.
2. Because the information that you share with the researcher could be widely seen by many different people, there is the possibility that the information you share may be seen by people who wish to cause you distress, such as individuals from your past or individuals who disagree with your opinions, beliefs, or your involvement with the PKP Community Centre. This may occur despite anonymisation of your data.

Whilst these possible disadvantages are unlikely, you should carefully consider them before agreeing to take part in this study, before deciding what information to share with the research, or before allowing the researcher to publish information that will identify you.

Please find a list of supportive services below, in case you feel distress at any point during or after the research study:

Doktor Sri Wahyuni **(Psychiatrist): +62 851-0081-4010**
Kadek Wahyuni Andhityawati (Yuni) YPK **(Physiotherapist): +62 818-0554-5366**
Doktor Desak Suksmawati AIRIN **(Dental): +62 812-4609-038**
Doktor Ayu Sukma Agung Sp. OG **(Gynaecologist): +62 812-3631-2132**

Introduction

Thank you for considering participating in this research project. The purpose of this booklet is to explain to you what the work is about and what your participation would involve, so that you can make an informed choice in whether to participate or not.

You must be over 18 years of age and able to provide consent of your own free will.

The purpose of this study is to share and analyse stories of your daily lives, imagine ways to improve your quality of life, and co-design a community hall that could help to make these ideas a reality. If you choose to participate, you will be asked to take part in 8 design activities, which will be facilitated by Komang Sariadi and a member of the research team. These activities will include storytelling, diary keeping, informal discussions, and communal activities using every-day objects (which you may bring with you, and/or will be provided on the day). You will be asked to:

- Share stories of your life, including your daily activities.
- Consider ways to improve your daily life by changing the spaces that you live in- including buildings, objects, tasks, people, and relationships between them.
- Discuss various spaces with other community members.
- Create a physical representation of these communal spaces using every-day objects.

Some activities will be audio or video recorded, whilst other activities will be photographed. All of this data belongs to you and will not become research data until you share it with the researcher. You will be asked to provide consent each time you share information through a Google Form, to allow the researcher to use and process your data for the purpose of informing the design of a community hall. **Please read the Data Protection Notice for more information.**

World Health Organisation (WHO) guidelines for SARS-CoV-2 (COVID-19)

Whilst you are participating in the design activities outlined in this information pack, you will be asked to keep to the World Health Organisation (WHO) guidelines for the SARS-CoV-2 (COVID-19) pandemic. This means:

- Practicing social distancing (being at least 2 metres apart from any other individual) when communicating with other study participants, facilitators, translators, or transcribers.
- Always wearing masks or face coverings that securely cover your mouth and nose, especially when interacting with other study participants, facilitators, translators, or transcribers indoors.
- Washing hands regularly using soap for 20 seconds, or using hand sanitiser, following the WHO approved method of handwashing.
- When using objects or tools that may be passed from person to person, you must wear protective latex gloves and/or clean the objects thoroughly using soap and warm water before they can be handled by other participants. If objects cannot be cleaned, they must be left untouched in a separate, closed, container for a minimum of 7 days to allow for all surfaces to decontaminate.

You will be prompted with advice on which of these guidelines to follow for each activity.

For more information on WHO advice: https://who.int/emergencies/diseases/novel-coronavirus-2019/advice-for-public

What are these activities and how will they help?

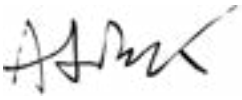
These eight activities have been carefully designed using Indigenous Research, Indigenous Design Futures, Desire Based Research, and the 'Designing Your Life' activities developed by Bill Burnett and Dave Evans, to make you think about the different environments that you work and live within and how to improve them. Each activity will be conducted by a trained facilitator, Komang Sariadi, alongside a member of the research team.

These activities are designing to make you think about how your environments- people, objects, and places- have an impact on your general happiness and work/ life views. By understanding which environments compliment or clash with your work and life views, you can begin to design better environments for your future. **You will be provided with detailed instructions and templates at the start of the study.**

If you agree to take part in this study, please sign the consent form overleaf.

Thank you for participating in these eight data collection activities to co-design a community hall.

Yours, gratefully,



University College Cork
National University of Ireland, Cork

PARTICIPANT CONSENT FORM

This is a one-off consent form that you must sign at the beginning of the research study, which will confirm your eligibility and agreement to participate.

I …… agree to participate in Alastair Brook's research study, which has been explained to me in writing.

I understand that I can access, edit, or erase my data up until one month from the end of the study (a specific date will be provided to me).

I understand that I do not have to share all of the data that I create in the 8 design activities and can choose to share only parts of the data or none of the data with the researcher.

I give permission for any data that I do share with the researcher to be stored and processed in the ways that has been explained to me. I understand that I can exit the study and retract my consent to collect, store, and process my data at any time up to one month from the end of the study. I understand that my data will then be deleted.

I give permission for a translator and/ or transcriber to handle my data on the condition that they sign a consent form agreeing to keep my information private, secure, and confidential. I also agree to keep the information of other participants private, secure, and confidential.

I understand the option to be listed as co-author in any publications of my data, as described to me in the accompanying videos and documents.

Please tick the relevant box:

I wish to be listed as a co-author in any publications of my data ☐
I do not wish to be listed as a co-author in any publications of my data ☐

I understand that I am required to share my personal stories during this study. I understand that I have been asked if I have shared my personal stories publicly. This is to assess my vulnerability. By ticking the box below, I certify that I am not vulnerable and am willing to take part in this study, even if I have not previously shared my stories publicly.

By ticking this box, I agree that I am not vulnerable (as explained to me by Alastair Brook) and can fully participate in this study. ☐

By signing below, I confirm that I understand and agree to all of the points above, that I am participating voluntarily, and that I am over the age of 18 years old:

Signed: …… Date: ……

PRINT NAME: ……

The main data collection process will focus on 8 individual design activities. At the end of each activity, you will be asked to sign an online consent form using Google Forms. These Google Forms will ask you to confirm that you understand the purpose of the study, how your data will be used as explained in the Data Protection Notice, and to give your permission for the data that you share with the researcher to be stored and processed in the methods explained to you.

University College Cork
National University of Ireland, Cork

TRANSLATOR AND TRANSCRIBER CONSENT FORM

Because this study is being conducted remotely, a translator and/or transcriber will be needed to help the researcher implement the 8 planned design activities. If you are reading this, you have volunteered to be translator or transcriber. In order to fulfil this role, you must read and agree to the following responsibilities.

I …… agree to be a translator/ transcriber (please delete as appropriate) in Alastair Brook's research study, which has been explained to me in writing.

I am participating voluntarily, and by signing this form confirm that I am over the age of 18 years old.

I understand that my relationship with the study participants may make me perceive and interpret information differently than was meant by the participant when translating or transcribing their data. I understand that this is a greater risk during live translations or transcription. I agree to do my best to correctly perceive and interpret the information of other participants when translating or transcribing their data.

I understand that this role puts me in a position of trust, in which I will be handling the personal information and data of participants. This position of trust is not taken lightly, and I understand that I am responsible for keeping all information of other participants private, secure, and confidential.

I understand that all translations or transcriptions that I make are not my property but are the property of the person who shared this information (the data producer/ owner). I agree to give this person all translations or transcripts of their information immediately after the activity has ended.

I understand that only the study participant can share their data with the researcher or other participants.

I agree not to share participant data with anyone, unless I think that participants are in physical or mental distress. If this happens, then I will only contact the researcher (Alastair Brook) and the PKP Community Centre Founder (Komang Sariadi). It will then be their responsibility to contact the participant who you believe is in physical or mental distress.

I understand the risks associated handling the personal data of study participants, and agree to be complete transparent to minimise these risks.

By signing below, I confirm that I understand and agree to all of the points above:

Signed: …… Date: ……

PRINT NAME: ……

University College Cork
National University of Ireland, Cork

FACILITATOR CONSENT FORM

Because this study is being conducted remotely, a facilitator will be needed to help the researcher implement the 8 planned design activities. This role will be fulfilled by you, Komang Sariadi. In order to fulfil this role, you must read and agree to the following responsibilities.

I, Komang Sariadi, agree to be a facilitator in Alastair Brook's research study, which has been explained to me in writing.

I am participating voluntarily, and by signing this form confirm that I am over the age of 18 years old.

I understand that my role includes facilitating the 8 design activities with the researcher and coordinating with translators/ transcribers who are handling participants' data. I understand that both my personal relationship with the study participants and my role as the leader of the PKP Community Centre may make me perceive and interpret information differently than was meant by the participant or by the translators/ transcribers. I agree to do my best to correctly perceive and interpret the information of the participants whilst facilitating the 8 design activities.

I understand that this role puts me in a position of trust, in which I will be handling the personal information and data of participants. This position of trust is not taken lightly, and I understand that I am responsible for keeping all information of other participants private, secure, and confidential.

I understand that all translations or transcriptions that I may handle are not my property, or the property of the translators or transcribers, but are the property of the person who shared this information (data producers/ owners). I agree to give this person all translations or transcripts of their information immediately after the activity has ended.

I understand that I may be required to help participants share their data with the researcher, but that only the study participant can share their data with the researcher or other participants

I agree not to share participant data with anyone, unless I think that participants are in physical or mental distress. If this happens, then it will then be my responsibility to inform the researcher (Alastair Brook) and to discuss what action needs to be taken with the researcher and the participant who may be in physical or mental distress.

I understand the risks associated with handling the personal data of study participants, and agree to be complete transparent in my role to minimise these risks.

By signing below, I confirm that I understand and agree to all of the points above, and confirm that I understand and will abide by the rules of UCC's ethical approval which has been provided and explained to me by the researcher:

Signed: …… Date: ……..

PRINT NAME: ……

Appendix E

Workshop Activity Sheets

WORKSHOP 1: Worksheet A Female Archetype Template



1. Follow the instructions provided. Use the objects around you, pencils, pens, paints, or other artistic materials to express the feelings, emotions, or personality traits of your character. Prompts have also been provided on Page 2.
2. Name your archetype: _____

UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh
SREC Social Research Ethics Committee Project Log 2020-176

WORKSHOP 1: Worksheet B Male Archetype Template

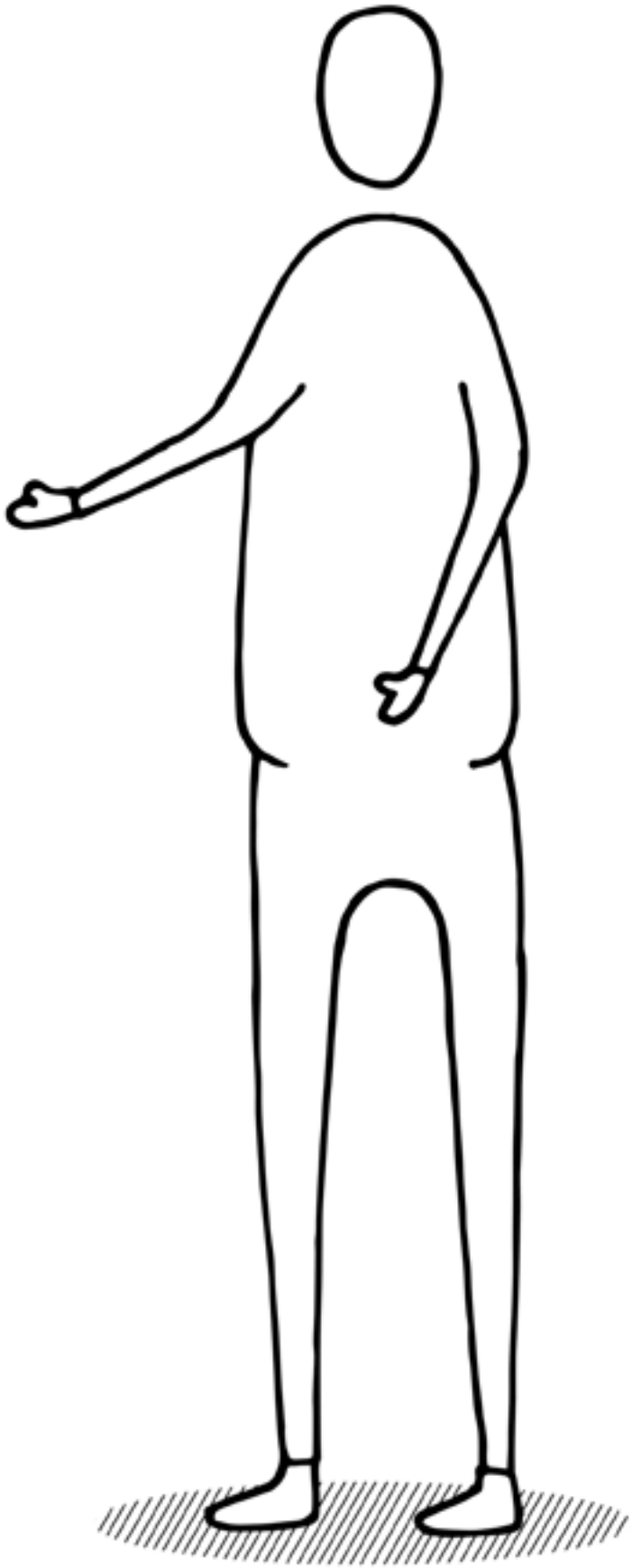


1. Follow the instructions provided. Use the objects around you, pencils, pens, paints, or other artistic materials to express the feelings, emotions, or personality traits of your character. Prompts have also been provided on Page 2.
2. Name your archetype: _____

UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh
SREC Social Research Ethics Committee Project Log 2020-176

WORKSHOP 1: Worksheet C Non-Binary Archetype Template

Detail Non-Binary Identity (if you wish): _____

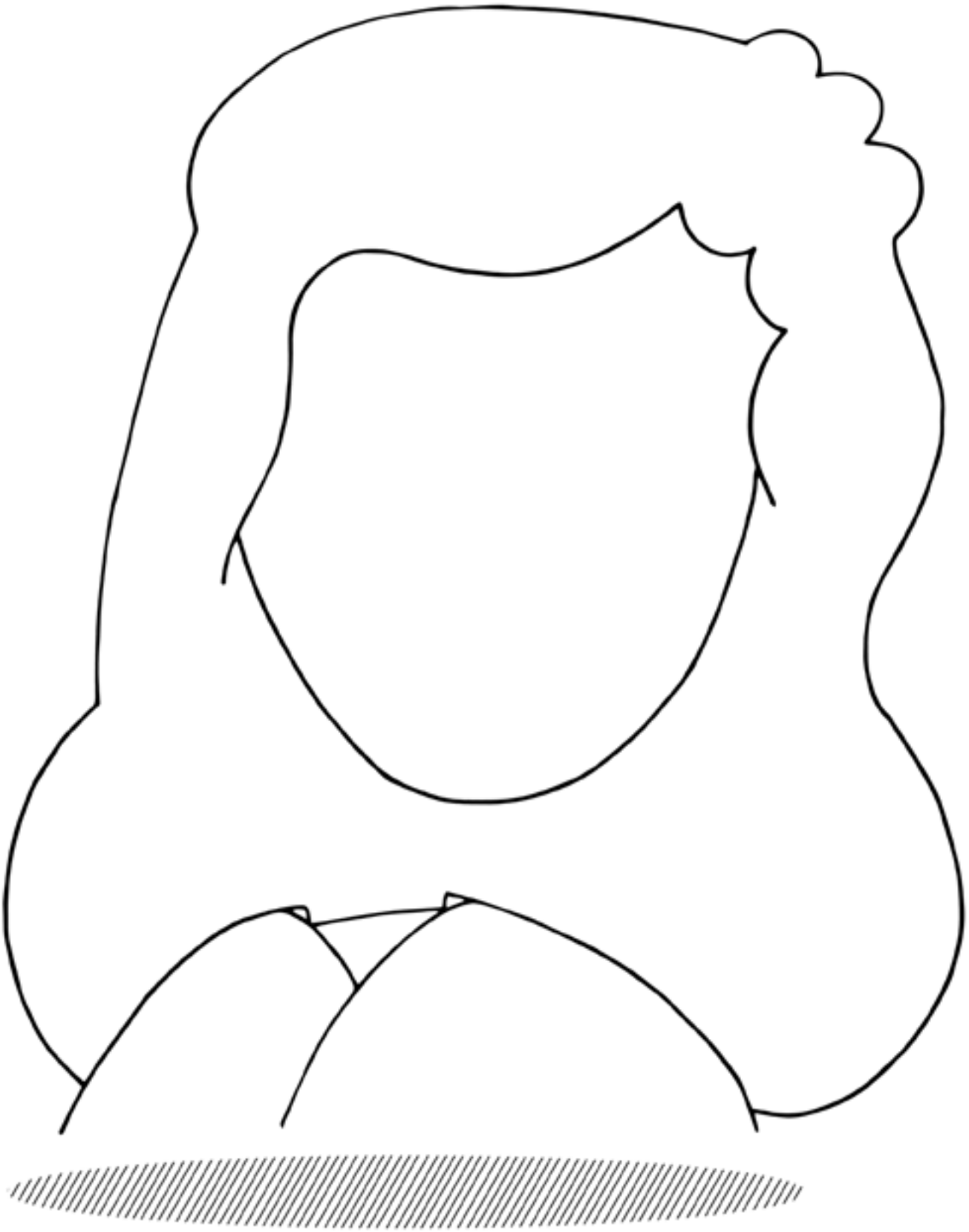


1. Follow the instructions provided. Use the objects around you, pencils, pens, paints, or other artistic materials to express the feelings, emotions, or personality traits of your character. Prompts have also been provided on Page 2.
2. Name your archetype: _____

UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

SREC Social Research Ethics Committee Project Log 2020-176

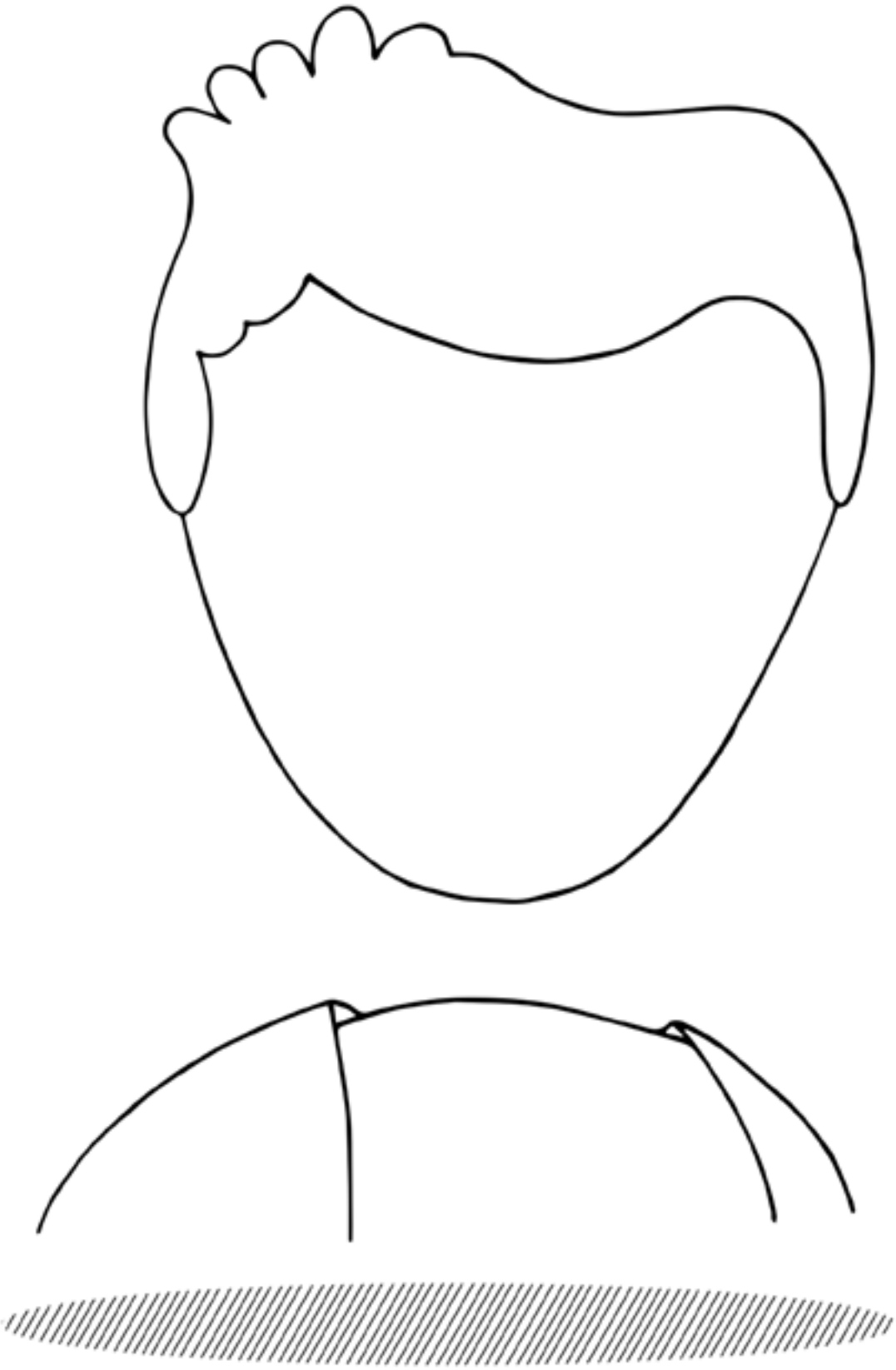
WORKSHOP 1: Worksheet D Female Portrait Template



1. Using the instructions provided to create a portrait of yourself. Use colours, materials, and objects that hold special meaning to you. Feel free to represent yourself in any way that you wish.

UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh
SREC Social Research Ethics Committee Project Log 2020-176

WORKSHOP 1: Worksheet E Male Portrait Template

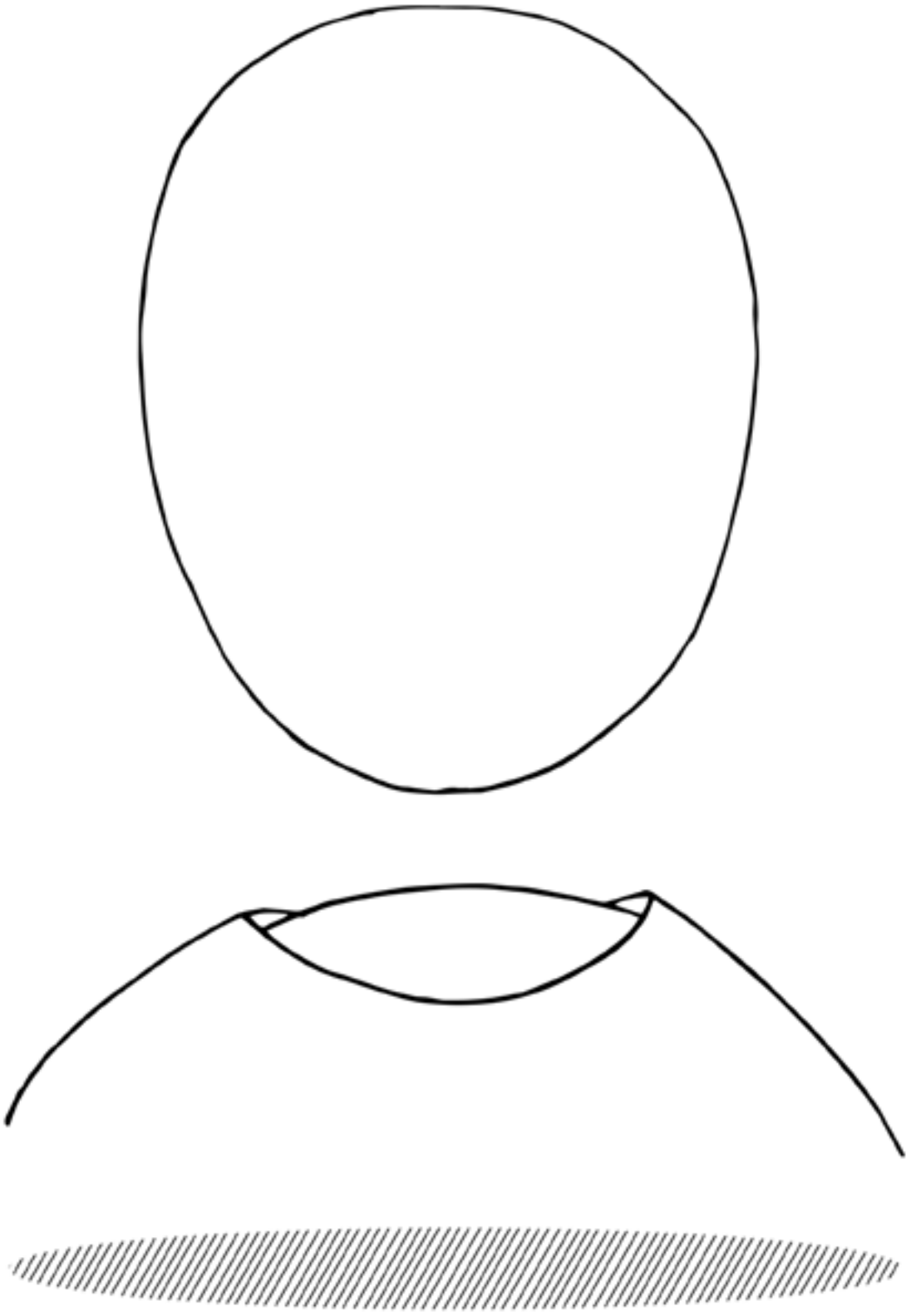


1. Using the instructions provided to create a portrait of yourself. Use colours, materials, and objects that hold special meaning to you. Feel free to represent yourself in any way that you wish.

UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh
SREC Social Research Ethics Committee Project Log 2020-176

WORKSHOP 1: Worksheet F Non-Binary Portrait Template

Detail Non-Binary Identity (if you wish): _____



1. Using the instructions provided to create a portrait of yourself. Use colours, materials, and objects that hold special meaning to you. Feel free to represent yourself in any way that you wish.

UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh

SREC Social Research Ethics Committee Project Log 2020-176

WORKSHOP 1: Worksheet Back Like/ Dislike Table and Prompts

Likes	Dislikes

Prompts:

Please remember that your archetype gender identity is not based on your own identity, but reflects how you associate an action, behaviour, or feeling with gender identities in your community. This is unique to you and your community, so we cannot provide you with any examples of masculine, feminine, or non-binary archetypes. However, we have provided prompts to make you consider how archetypes are viewed in your own community.

- Do you feel any pressure to hide your true self from the people around you? What are you hiding?
- Do you ever feel that you do not deserve your accomplishments? Why?
- Do you feel that your differences are celebrated and included within your community?
- Do you think that you behave in the way that your society wants you to?
- Do you feel unaccepted by society?
- Do you think that you act like the men (husbands, boyfriends, brothers, fathers) or women (wives, girlfriends, sisters, mothers) in your community?
- What actions, behaviours, or feelings do you have that go against the traditional gender roles of your culture?
- Are you a guiding influence in your community?
- Are your actions guided by logic (your mind) or your spirit (your heart)?
- Do you feel that you prefer to be thinking or to be active?
- Do you ever feel self-defeated and negative thoughts?
- Do you feel that you must repress certain ideas and feelings such as envy, greed, prejudice, or aggression?
- Do you feel that you must hide your weaknesses, desires, or shortcomings from other people? Why?
- Are there any powerful, positive, or life-altering ideas that you hide due to pain, cultural disapproval, or negative experiences?
- Do you feel creative (creating new opportunities in your life) or destructive (tearing down old ideas in your life)?
- Do you use an emotional shield to protect yourself from the negative comments of other people?

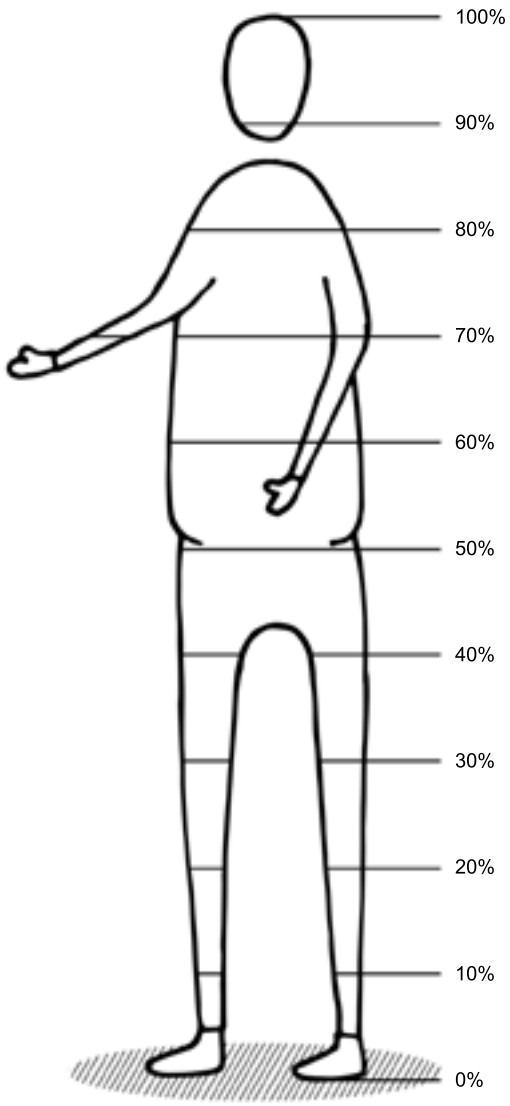
3. Use the instructions provided to fill out the 'like/ dislike' table above. List the actions, behaviours, emotions or feelings that you like and dislike for your archetype.

UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh
SREC Social Research Ethics Committee Project Log 2020-176

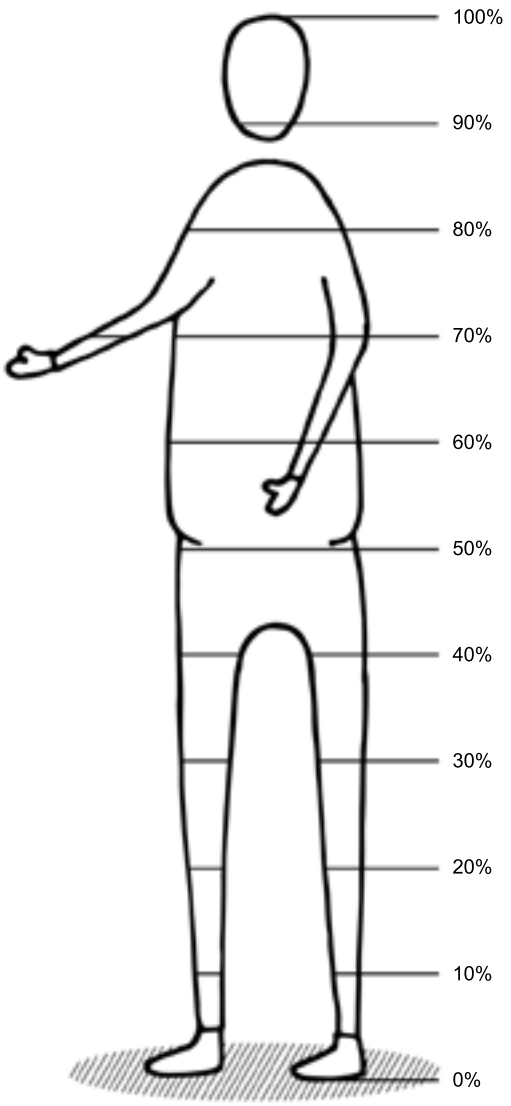
EVENT

Please provide a short description of the event or activity that you are measuring your energy and engagement levels for:

ENERGY



ENGAGEMENT



WORKSHOP 2: Worksheet A Energy/ Engagement Template

1. Using the instructions and guidance provided, approximately measure the size of your selected building and draw the outer walls (including doors and windows) using the grid above. If you can, also try and draw the inner walls.
2. Using the small objects from Activity 2, follow the instructions provided to represent different spaces inside your architectural model.

UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh
SREC Social Research Ethics Committee Project Log 2020-176

WORKSHOP 2: Worksheet A Prompts

Energy:

- Do you feel motivated by an event or activity?
- Once an event or activity ends, do you feel drained or full of life?
- Is your mind and/or body engaged in an event or activity?
- Do you feel joyful or miserable when completing an event or activity?
- Does an event or activity take a long time to complete?
- Are you faced with too many responsibilities during an event or activity?
- Do you interact with people who make you feel happier and more active?

Engagement:

- Do you feel focused when completing an event or activity?
- Do these events or activities fit with your values and priorities in life?
- Do you feel that these events or activities benefit you and/or your community?
- Do you feel completely involved in an activity or is something/ someone stopping you taking part?
- Does the event or activity feel like work or play? Do you feel satisfied once it is completed?
- Do you feel bored during/ at the end of an event or activity?
- Do you feel that you are 'in the flow' of an event or activity (feeling euphoric or "in the zone")?
- Are you paying attention to everything that you are doing in an event or activity?

General:

- At the end of an event or activity, do you think "that sucked", or "that was great?"
- At the end of an event or activity, do you want to change something or are you happy with how it went?

UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh
SREC Social Research Ethics Committee Project Log 2020-176

WORKSHOP 2: Worksheet B Compass Template

List 1: Pleasant Experiences

List things that give you **pleasant** experiences.	How can you keep having these pleasant experiences in the future? List your ideas below for each pleasant experience you have listed.
1.	
2.	
3.	
4.	
5.	



List 2: Unpleasant Experiences

List things that give you **unpleasant** experiences.	How can you stop having these unpleasant experiences in the future? What would you change in the future to stop having these unpleasant experiences? List your ideas below for each unpleasant experience you have listed.
1.	
2.	
3.	
4.	
5.	

UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh
SREC Social Research Ethics Committee Project Log 2020-176



Pleasant Experiences

List each experience here.	What obstacles must you overcome to keep your pleasant experience?	What achievements do you need to keep your pleasant experience?	What actions do you need to take to keep your pleasant experience?	Do you think you can keep this pleasant experience?
1.				Yes / No / Maybe, if...
2.				Yes / No / Maybe, if...
3.				Yes / No / Maybe, if...
4.				Yes / No / Maybe, if...
5.				Yes / No / Maybe, if...

UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh
SREC Social Research Ethics Committee Project Log 2020-176



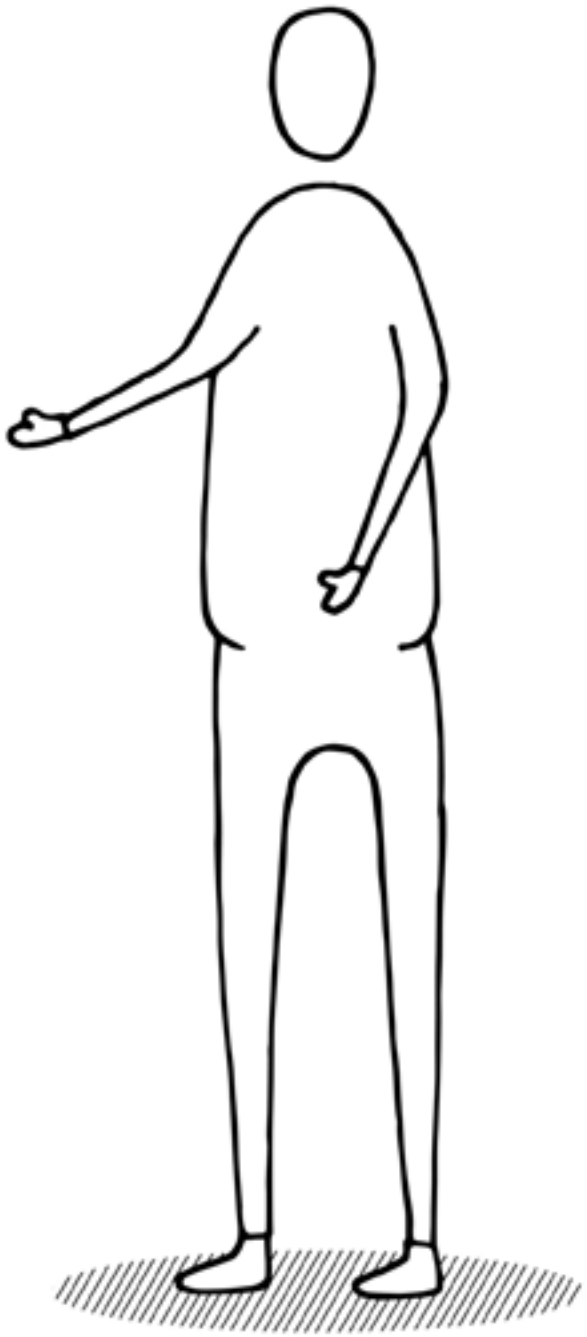
Unpleasant Experiences

List each experience here.	What obstacles must you overcome to change your unpleasant experience?	What achievements do you need to change your unpleasant experience?	What actions do you need to take to change your unpleasant experience?	Do you think you can change this unpleasant experience?
1.				Yes / No / Maybe, if...
2.				Yes / No / Maybe, if...
3.				Yes / No / Maybe, if...
4.				Yes / No / Maybe, if...
5.				Yes / No / Maybe, if...

UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh
SREC Social Research Ethics Committee Project Log 2020-176

WORKSHOP 3: Worksheet A Roles Template

Name of role: _____



List of role qualities:

-
-
-
-
-
-
-
-
-
-

UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh
SREC Social Research Ethics Committee Project Log 2020-176

WORKSHOP 4: Worksheet A LAF & CPI Prompts

Answer the questions below. **You should record your answers in some way. This could be by writing them down, audio recording them, or video recording yourself.**

Look:

- Look more at the buildings or spaces that you have drawn and described. Look at its shape. Look at the objects inside it. Look at the materials that it is made from. What do you see? What is the shape of the building or space? What materials is it made from? What objects does it have in it?

Ask:

- Ask deeper questions about the things that you see. For example:
    - Does the shape of the building or space make it easier or harder for you to use? Why- are things the right or wrong height, size for your gender, age, or ability?
    - Do you think the shape of the building or space makes it easier or harder to use for people who are different from you (different genders, different ages, different abilities, or people who are pregnant/ have children)?
    - Do the objects in the building or space make it easier or harder for you to use? Why- are these things right or wrong for your religion, wages, caste, political view, or identity (sexual or gender orientation)? Examples: There are tools in the space that you could not afford to buy yourself, does this affect you or not? There is a painting of a political leader who strongly dislikes certain castes, does this affect you or not? There is a shrine for a religion that does not accept homosexuality, does this affect you or not?
    - Do you think the objects in the building or space make it easier or harder to use for people who are different from you (different religion, wages, caste, political view, or identity [sexual or gender orientation])?
    - Do you think that the materials of the building or space make it easier or harder to use? Why- are they safe for you/ others? Do they break? Are they sustainable? Are they attractive to you/ others?

Feel:

- How do you feel about the buildings or spaces that you have drawn and described? Do you feel happy/ sad? Stressed/ relaxed? Excited/ tired? Safe/ unsafe? Able/ unable? accepted/ unaccepted? Yourself/ not yourself? Why do you feel these ways? Make links between what you see in your building or space, and how it makes you feel.

Copy/ Paste/ Improvise:

- Could you change the building's shape or size? Could you change the building's location? Could you change the materials it is made from? Could you change the objects it has inside? Could you change the activities that people use it for?

To scale representation of 50th percentile (average) human size.



1m 2m 3m 4m 5m 6m 7m 8m 9m 10m 11m 12m

1m
2m
3m
4m
5m
6m
7m
8m

WORKSHOP 4: Worksheet B Architectural Model Template

1. Using the instructions and guiding information, approximately measure the size of your selected building. Draw this building in plan (from above) and in elevation (from the side) using 2 Templates.
2. Using the small objects that you have selected to represent activities, follow the instructions provided to represent different spaces inside your architectural model.

UCC
University College Cork, Ireland
Coláiste na hOllscoile Corcaigh
SREC Social Research Ethics Committee Project Log 2020-176

Appendix F

The Architectural Charge for the PKP ‘Bale Tong Tong’ Community Centre

THE ARCHITECTURAL CHARGE

for the PKP 'Bale Tong Tong' Community Centre Project

An 'architectural charge' is a document that describes a building's responsibilities to it's inhabitants in creative and imaginative ways. It is then the architect's task to ensure that the final building meets these responsibilities by working closely with it's inhabitants throughout all stages of an architectural project: from design brief, to initial ideas, concept development, construction, and post-occupancy.

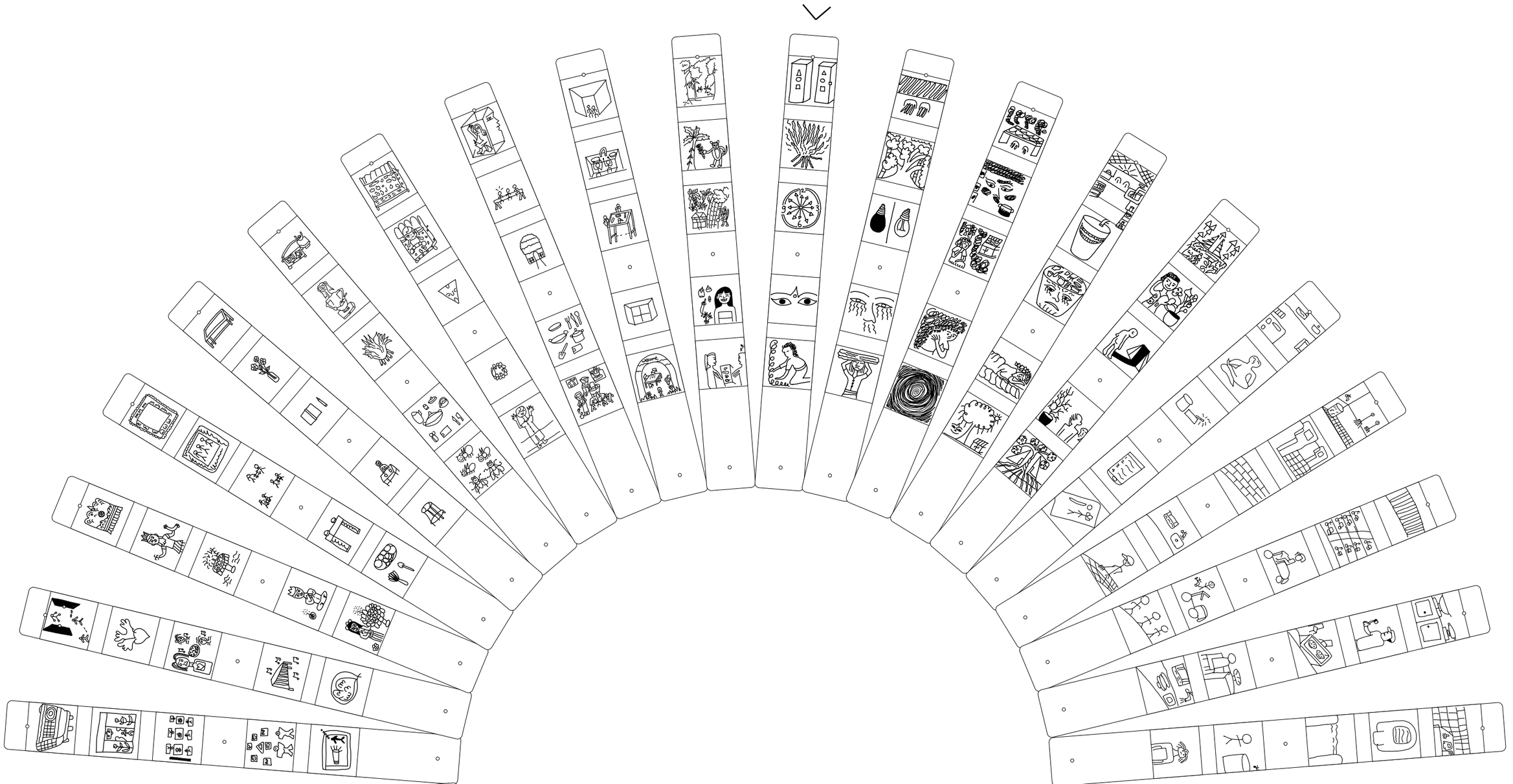
The architectural charge for the PKP 'Bale Tong Tong' Community Centre has been co-created by the PKP community and an architectural researcher, Alastair Brook, to imaginatively explore:

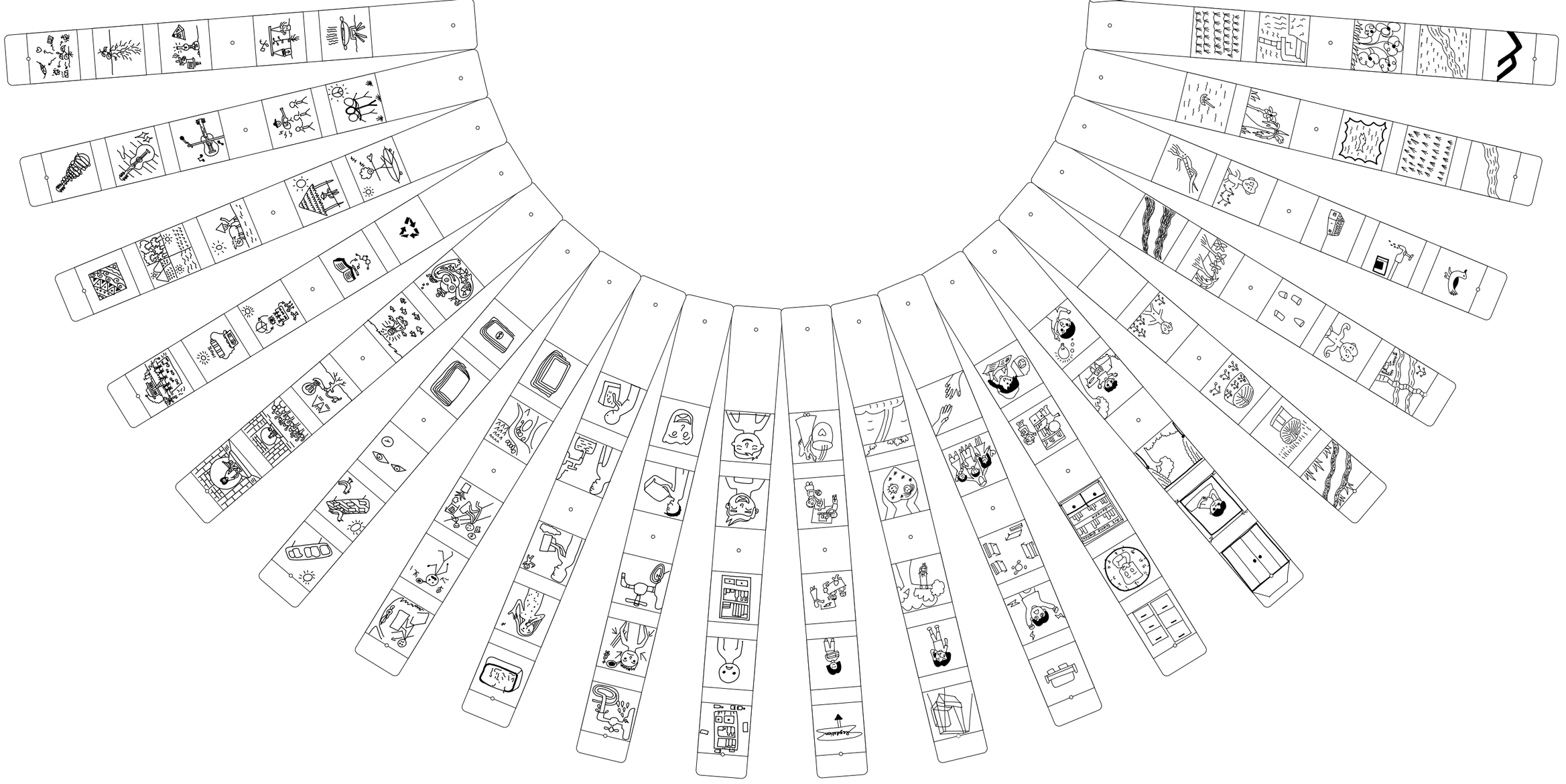
- The PKP community's experiences and expectations of architecture.
- The tensions that exist between the PKP community's needs and the architectural spaces they currently use.
- Ways to creatively transform these tensions through speculative design.

This document presents these explorations as an anthology of 40 short stories, grouped into 8 collections of 5 stories each, which have been collectively imagined by 21 members of the PKP community and visualised by 9 authors. Each story depicts a settings, events, and a character. Each collection of 5 stories describes the author's experiences of a building used by the PKP community.

These 40 stories are depicted as a circular 'lontar' manuscript- a traditional form of communicating architectural knowledge on dried palm leaves. Each of the 40 'lontar' leaves below depicts a singular story, composed of 5 visual frames that can be read moving from the outer edge, inwards. Multiple stories can be read together moving clockwise.

Alternatively, the reader can chose to inhabit these stories and read them in many ways- from the centre outwards, from the edge inwards, moving clockwise, anticlockwise, a pattern of all the above, or in a random and unorthodox manner. This creates a composite succession of frames that confronts the normative notions of architectural space and storytelling- creating space not necessarily in the order expected, but in a series of dramatic revelations that can announce a new spatial structure.





The following pages describe these 40 stories in detail, dividing them into 8 collections of 5 stories- each depicting one architectural space.

Each collection describes:

- The architectural space in which the stories are set and an overarching tension in that space.
- 5 fictional settings, events, and characters depicted in the stories.
- 5 short stories of transformation: that describe, in some way, the tensions experienced within the architectural spaces of the PKP Community Centre and, over the course of five visual frames, describe actions that can be taken towards a resolution of these tensions. Some stories are practical whilst others are more fictional.

Collectively, these stories describe the experiences, expectations, and anticipations of the PKP community based on their goals, values, and needs. These imaginative outline the responsibilities of any future buildings at the PKP Community Centre to the PKP community's needs of self-determinism, architectural autonomy, and transmission of their unique micro-culture to future generations.

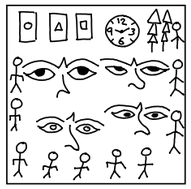
1. THE KITCHEN

A site of Frontiers and Boundaries

In The Kitchen, tourists are invited to participate in making *tlompokan* (ceremonial cooked rice) and other regional dishes, and are taught the importance of ceremonial offerings. Tourists bring their own meaning to these events, understanding their part in sustaining the Centre through active participation. But tourists are also denied access to the hidden meanings of these events, such as the domestication and capitalist oppression of the community. *Tlompakan* making and catering services are essential for the survival of the Centre, requiring the community to work 24 hour shifts to continue production and sustain the community. Unhealthy capitalist production is required to sustain the healthy spiritual care provided by the Centre.

Settings

A



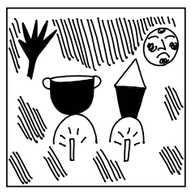
The Ovens are a symbol of sustainment for the community. They help to provide an income that can be shared to the community in a variety of resources, including donations of food, tools, or clothing, and funding local initiatives. But The Ovens are also dangerous. They require 24 hour care to stop them burning.

B



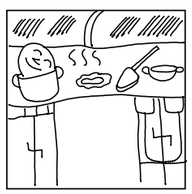
The Wood Fire is a symbol of rebellion. Even though it is used for the most basic of tasks such as cooking the pigs food or providing water to bathe, it is an essential requirement in The Kitchen. A key concept in architecture is that the wood fire defines a territory, or a boundary. Using The Wood Fire currently defines a territory of domestication.

C



Wood Ash caused by The Wood Fire is seen as something impure, dirtying the cooking pots and causing a mess. This seems to be one of the main reasons for The Wood Fire not being used often.

D



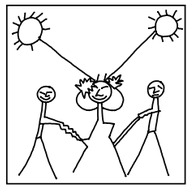
The Sink Basin is located next to The Wood Fire, so that the dirtiness from the Wood Ash (and other food related mess) can be cleaned directly from the cooking utensils. The Sink Basin is a place where the kitchen utensils can be both closed and open; a place of rest in between their duties to the community.

E

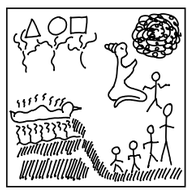


The Medicinal Garden is defined by its collection of healing plants. Butterflies in the garden are a sign that the plants are healthy and fresh. Butterflies also represent a freedom that comes from being self-sustaining- where all of the resources needed for the community come from within the community.

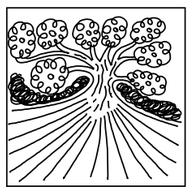
Events



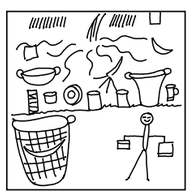
Domestication: architecturally, the Kitchen, is a site of domestication where women or other marginalised groups are forced to work for the sustainment of patriarchal and capitalist systems, Their work keeps them alive by providing just enough income to support themselves, but does not provide any opportunities to be empowered.



Circularity: The burning of wood represents the natural circularity of life & death, and is a reminder that the community must maintain a harmonious relationship with the natural and spiritual worlds, with their Land and their ancestors.



Pure in the Impure: Ash contains a lot of nutrients and minerals that are beneficial for plants and trees once mixed into the soil. There is purity within wood Ash that can return to nature.



Filled to Excess: The Sink Basin is sometimes empty, with nothing to wash clean. Other times, it can be full to excess- overflowing with cooking utensils and organic waste such as Wood Ash and food scraps. The Sink Basin is burdened with this organic waste, often seen as 'dirty', so that the rest of The Kitchen can remain clean and pure.



Indigestion: The community has Indigestion. Indigestion is caused by a problem digesting food. Here, the Indigestion is metaphorical; the community struggle to digest Capitalism and Domestication as part of their daily lives, making them sick. The Medicinal Garden provides a possible cure through self-sustainment.

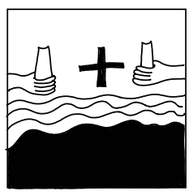
Characters



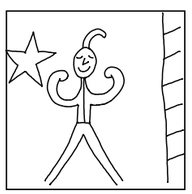
The Masquerader and Self-Saboteur wear many masks: the masks of capitalism ('hard work' and 'time is money' ideals triggered by growing issues of debt and land ownership), spirituality (an 'offering' to the community), and comedy (used to energise the community). Hiding capitalism behind spirituality and comedy only harms themselves.



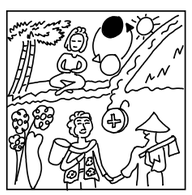
The Reductionist battles to create new meanings and definitions for female community members and other marginalised groups. This includes women taking on roles traditionally occupied by men, empowering them and giving them opportunities to renew their relationship with each other, with Land, and with their ancestors.



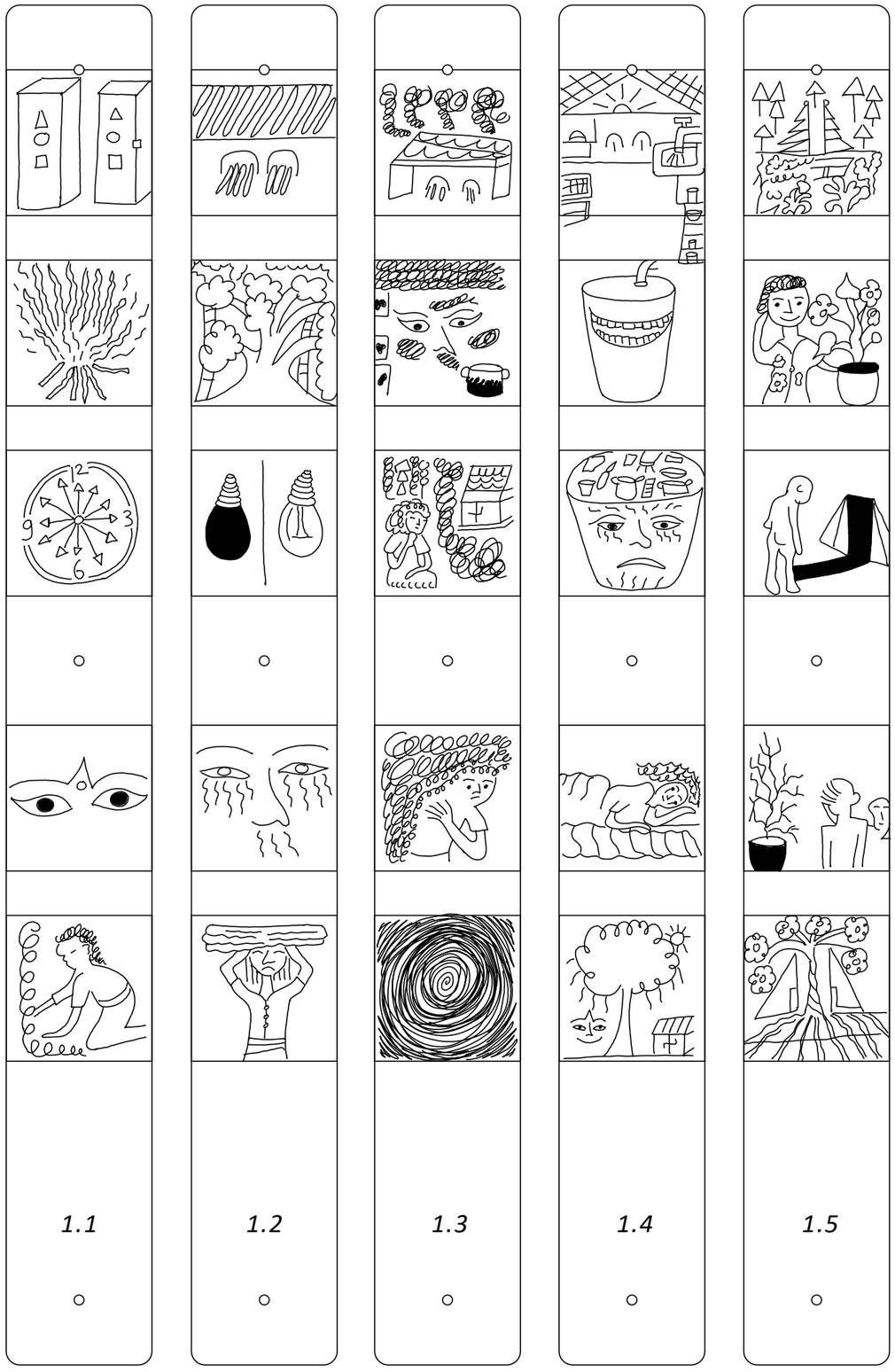
The Choreographer guides the flow of positive energy (like nutrients and minerals) through the community and into the Land. The Choreographer is seen as a dancer in the *agem* stance; a stationary position full of energy, from which they are ready to unfurl and explode into movements that contain the possibility of disrupting long established patterns.



The Bearer carries the excess emotions and feelings of the community, so that other community members can feel free from the weight of worry and sadness. Much like The Sink Basin, they bear the weight of other people's 'impurities' so that they can continue to keep working hard and sustain the community.



The Revenant/ Returner wants to return to nature. They wrap themselves in nature, both metaphorically in their floral clothes and literally as they tend to The Medicinal Garden. The Revenant is worried that the community's reliance on tourism and believes that a renewed focus on nature will provide self-sustainment.



1.1 The Oven is very important. We use it every time to make *tlompokan*.

Fire is very important for the oven because the oven needs to have the fire always on but the fire can burn everything.

Watch the clock. The timer has a function to remember every 1 hour to open the oven to check/and rotate the rice shape.

The need to focus. Eyes have a function, always standing by and focusing on checking the rice shapes. Until the eyes get tired or hurt from the fire smoke. If eyes close it is dangerous because the fire is on.

My low energy is not good for the oven. We need to have a strong energy with the oven, because it needs a long time. It makes us tired. The solution has to be smart and manage the time during the work.

1.2 Firewood is stored above the open wood fire (*kayu bakar*). The store must always be full because we have traditionally used wood for a long time and sometimes cook using it.

We always plant trees because we need firewood everyday to fill the wood store.

The wood fire is different than the stove, it has to be watched all the time because it can be on and off. Once it is on we need to keep an eye and make sure it does not turn off, because when it is off and the flames have gone it takes longer to get the fire again.

Firewood makes me cry from the smoke.

So collecting the wood fire takes a lot of energy, it is hard work. It is also not good for the posture, my body still small and short from carrying all the weight of the wood- like the energy, it is small.

1.3 The fire causes too much ash and smoke and is annoying.

When there is too much smoke and ash, we have to deal with the ‘natural makeup”. Normally we use white powder but now it is using black powder on my eye and nose, my cheeks. All the kitchen equipment turning to black.

I sit and I see the ash and I think, everything turn black and how to find a solution.

When I think about a solution...

One thought is to separate the wood fire from others to not make everything turn black.

1.4 Because everything is close to the wood fire and everything turn back, we need extra time and extra energy to clean everything as quick as possible.

The sink is happy because everything is clean and they are empty.

The sink is upset because they are full of dirty things.

She thinks when she goes to sleep and when she wakes up there is a good solution to take.

The solution is to make sure everyone is aware and taking action to clean the sink with a smile.

1.5 The temple is always surrounded by trees and plants. So many leaves fall around and needs cleaning.

Everyone has to be taking care and be aware of everything, especially the environment.

We cannot stop and must keep perseverance.

We cannot pretend that we are blind...

Because everything will return to the nature and be connected.

2. THE SHELTER

A site of Imagined Spaces

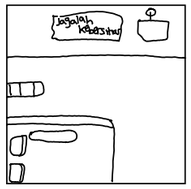
Imagined Spaces are a way for people to describe their perception and experience of space. They are simultaneously truthful depictions of someone's experiences and fictional representations of reality, able to describe different ways of existing and experiencing the world. The Shelter, as a space for safeguarding and empowering women, provides opportunities for its inhabitants to share their current experience of reality- including domestication and oppression- and imagine alternative realities for their future. The Shelter is represented as a space of play between real and imagined worlds; where inhabitants can "copy/ paste/ improvise" their realities.

Settings

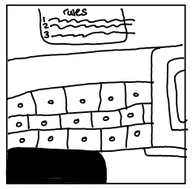
Events

Characters

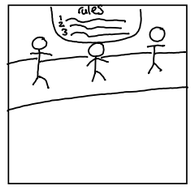
A



The Bed is not only used for sleeping- it is a place to socialise (both platonic and romantic), a space for quite reflection, or sometimes a place for play. The Bed can also be confining, a place of sickness and depression that makes its inhabitants feel trapped.

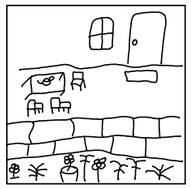


Play: The ancient Hindu word for play, '*Lila*', is a much deeper concept than the English idea of play. *Lila* describes all reality as the outcome of creative play; the creation, destruction, and re-creation of everything in existence. It is a destination that moves from chaos to order in a process of self-discovery.

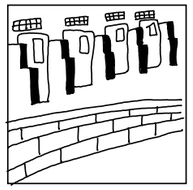


The Child is playing. They are creating their own new world, but are unsure of the rules to play within. Should they copy the same social, cultural, and political rules of the real world? Should they change those rules slightly? Or can they create entirely new rules; making a new society, a new culture, and a new form of politics?

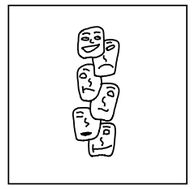
B



The Terrace is used as a social space to meet with friends; food and drink can be prepared and consumed there, music and song can be played there, and often people will get together to smoke. The amount of sensory stimuli can sometimes cause inhabitants to feel confined and overwhelmed by sights, sounds, smells, and tastes.

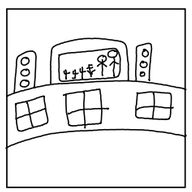


Copy & Paste: The Terraces at The Shelter are all copy/ paste, exactly the same as each other. This means that they follow the same architectural rules, dictating how the space can be used for social, cultural, or personal events. Many of the activities that happen in The Terraces are copy & paste.

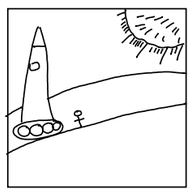


The Chameleon copies the emotions and actions of the people around them so that they are accepted. They do not want to break any social rules or risk being rejected by other people. Their desire to be accepted is more powerful than their desire to be independent and change the rules around them.

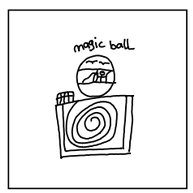
C



The TV is an object that does not exist in The Shelter rooms. It represents an escape into many fictional worlds and imagine alternative realities that are not possible for the inhabitants to achieve currently.

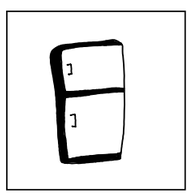


Bringing the Unseen into the Seen: The TV brings something unseen, or absent from the inhabitants lives, into the observable world. It allows inhabitants to imagine ways to change the real world based on what they do not have.



The Clairvoyant sees with their 'third eye', which signifies the subconscious mind of dreams and imagination, and is associated with seeing the world beyond the physical or observable. The visions that The Clairvoyant sees can be interpreted in many different ways, and may not mean what they first think they mean.

D



The Fridge is a desired item for The Shelter's kitchen. It stops leftover foods, fruits, oils, milk or other produce from spoiling. It prolongs the life of fresh, pure ingredients, and stems from the value of not wasting anything.



Prolonging Purity also prolongs the natural harmony between purity and impurity, good and bad, life and death. If purity is prolonged, then impurity will build up like water behind a dam. Eventually, impurity will overwhelm purity and become the dominant force.

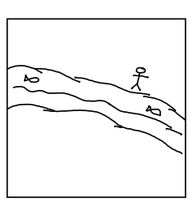


Princess Ayu/ The Mother represents beauty and harmony. She is dressed in *salut poleng* and protects the balance between purity and impurity. The also protects the community from the impurity of the real world. These two sides are in tension, as she cannot protect the community from impurity if she must also keep purity and impurity in harmony.

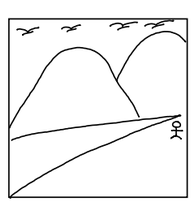
E



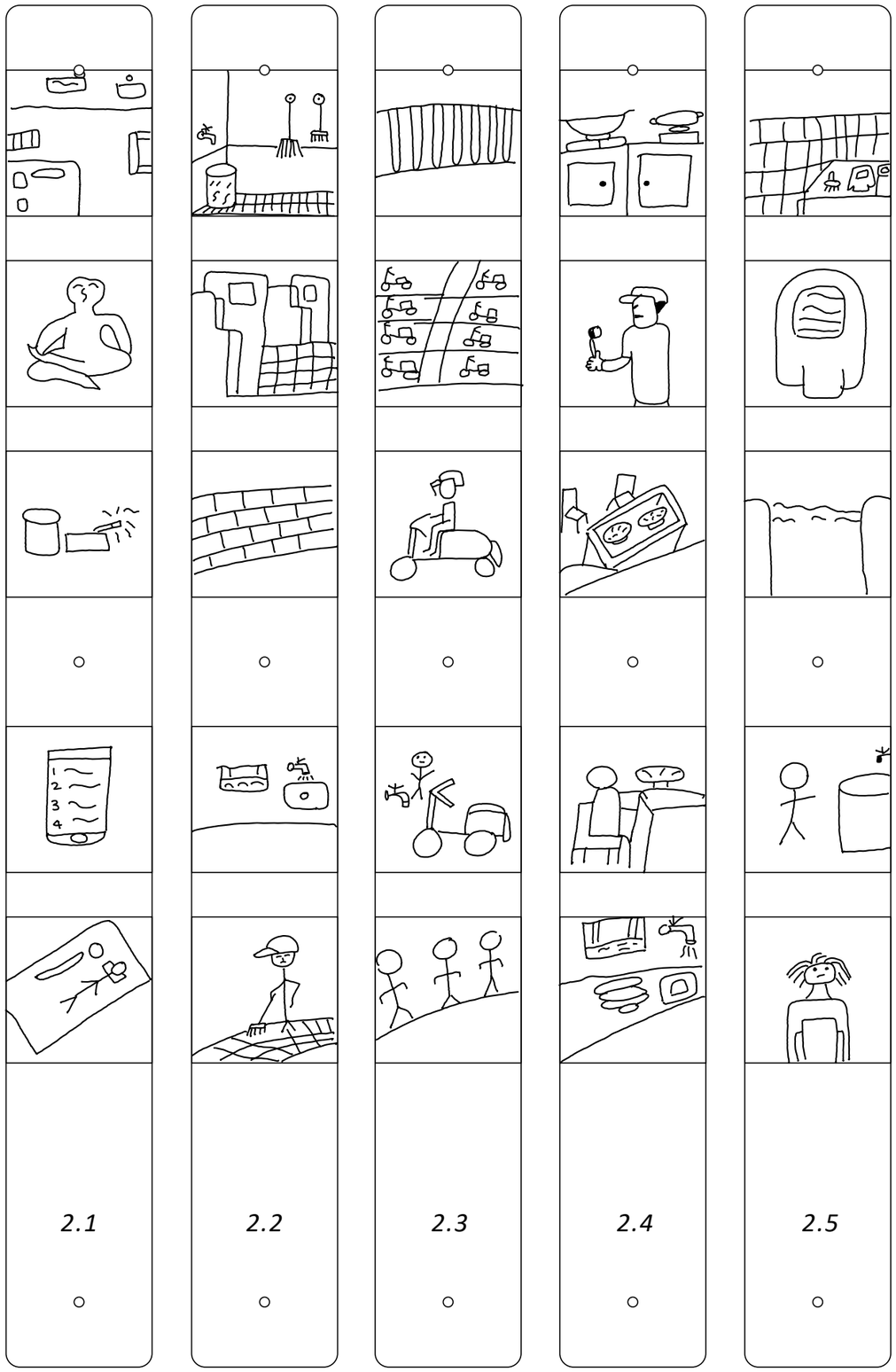
The Toilet transforms impurity into purity by flushing away human waste that is seen as dirty. The Toilet is described through the cleansing properties of water, that is used to purify and clean away the impurities of human waste.



Downstream: The water from The Toilet flows downstream, taking its impurities with it towards the sea- mirroring the *kaja-kelod* orientation of Balinese spirituality in which the pure water from Mount. Agung becomes dirty as it descends towards the sea.



The Pilgrim is burdened by the impurities of others, such as the violence and insults against women, that they carry on their journey to the sea. Their pilgrimage from the mountain to the sea mirrors the descent into the realm of *Shiva*, a place of death. Here, The Pilgrim is cleansed of the impurities they carry by *Vishnu*, who is one and the same with *Shiva*.



2.1 This is a messy room that makes me stressed.

After cleaning the room I continue to do meditation to relieve stress.

If meditation doesn't work, I continue drinking coffee and smoking.

As well, I use my phone to play games temporarily.

Being on the phone too long makes me feel sleepy and I go straight to sleep in a comfortable bed after I clean.

2.2 There are many cleaning equipments on the terrace.

Because there are many cleaning equipment available around the shelter, it engages me to clean my room.

I sweep the floor.

I clean the kitchen sink and equipment...

To get some peace in my mind.

2.3 This is the gate of the shelter.

At the parking area, there are tidy lines to keep the vehicles of the shelter members tidy.

I take the bike everyday with happy feeling when I go out.

Mostly in the late afternoon, I wash the bike to get a good feeling when driving it.

After everything is done I feel bored so I go out and play to release the bored feeling.

2.4 This is the kitchen.

We cook together.

We divide tasks one to another through the shelter members.

We eat together.

Then we clean together- we cannot forget to clean.

2.5 This is the bathroom...

For toileting.

This is the sink tap...

The function of the bathroom is not only for the toilet but also for showering and bathing.

I am clean and feel less stressed after finishing bathroom activities.

3. THE GARDEN

A site of Extraction

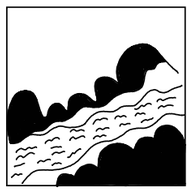
Extraction within architecture looks at the physical and psychological aspects of forcibly taking something from the natural environment. It questions the idea that well-being “here” is only possible at the expense of causing damage “elsewhere”. The Garden extracts water from the grounds surface and the river, storing it in water tanks. It also extracts materials from other places to build concrete paths, stopping the natural cycle of groundwater run off and causing erosion of the soil from floodwater. The trees, which provide natural water storage and protection from erosion, are at risk of being damaged. The Garden was seen as a site for thoughtful action- guiding the community and visitors towards more self-sustaining relationship with nature.

Settings

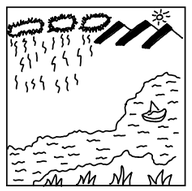
Events

Characters

A



The River sustains The Garden throughout its entire life cycle. Firstly, its water flows to the sea. It then becomes rain, before falling back to earth. Throughout this cycle, the water from The River sustains many different ecosystems that are all connected on one another.

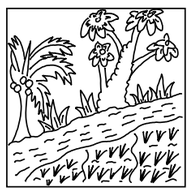


Upstream: The River does not only flow downstream. Once it reaches the sea, it flows back upstream through rain in the clouds and aquifers in the ground- renewing its energy and nutrients before beginning its journey downstream again.



The Sustainer (‘Bu Yeni’; Bhumi, Mother Earth) is the gardener, giving their energy to keep the garden healthy, fresh, and mature. Much like water, their energy fuels the cultivation of a healthy garden- leaving them drained. The once immature garden blossoms with maturity from The Sustainer, before returning to death; following the spiritual cycle of life.

B



The Trees are a vital part of The Garden- both being sustained by and maintaining the flow of water through nature.

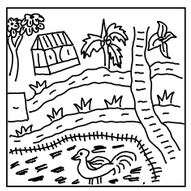


Protection: The branches of The Trees offer protection to The Garden from wild animals. The trunks of The Trees maintain The Garden by storing water. The roots of The Trees stop soil erosion. Each part of The Tree offers protection to the Land.

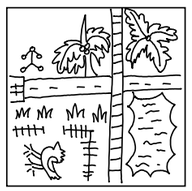


The Protector (the Tree Spirits) maintains and preserves the garden from wild animals and other threats. The Protector also wishes to preserve sacred ancestral values and relationships with Land.

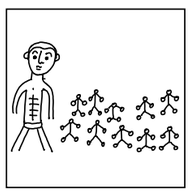
C



The Entry (The Bridge) to The Garden is currently a small gate, allowing access from The Kitchen. This gate keeps domesticated animals within The Garden, whilst also controlling the flow of visitors into The Garden. The Bridge is not yet built, but will offer access to The Garden from other villages on the opposite side of the small valley.

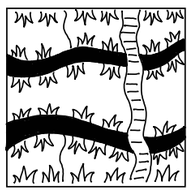


Controlling Entry/ Exit: Both the existing gate and the future bridge will need to control the entry of visitors into The Garden and the exit of animals from The Garden.

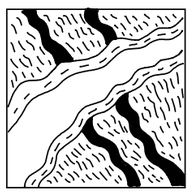


The Overseer has general oversight and control over all others, including community members and visitors. This control stems from their desire to keep the community clean, tidy, and protected. The Overseer likes things to be done in particular ways, making change difficult.

D



The Pathways are naturally made from compressed soil, creating a permeable surface for water to flow through. Over time, new layers of nutrient and mineral rich soil emerge. Half of The Pathways are now layered with concrete, guiding groundwater away from The Garden and causing unnatural soil erosion.



Movement between Two Places: The Pathway represents a movement between two places. Water can either soak down through the layers of soil, or flow on top of the concrete.

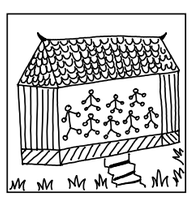


The Guide directs the flow of the community towards ideas of cleanliness, purity, and completeness. These ideas are like The Pathways; they may support the growth of the community, or they may slowly erode harmonious ways of community life. The Guide must decide which Pathways to take in order to sustain the community and the Centre.

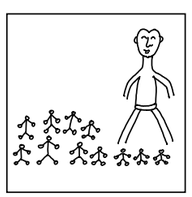
E



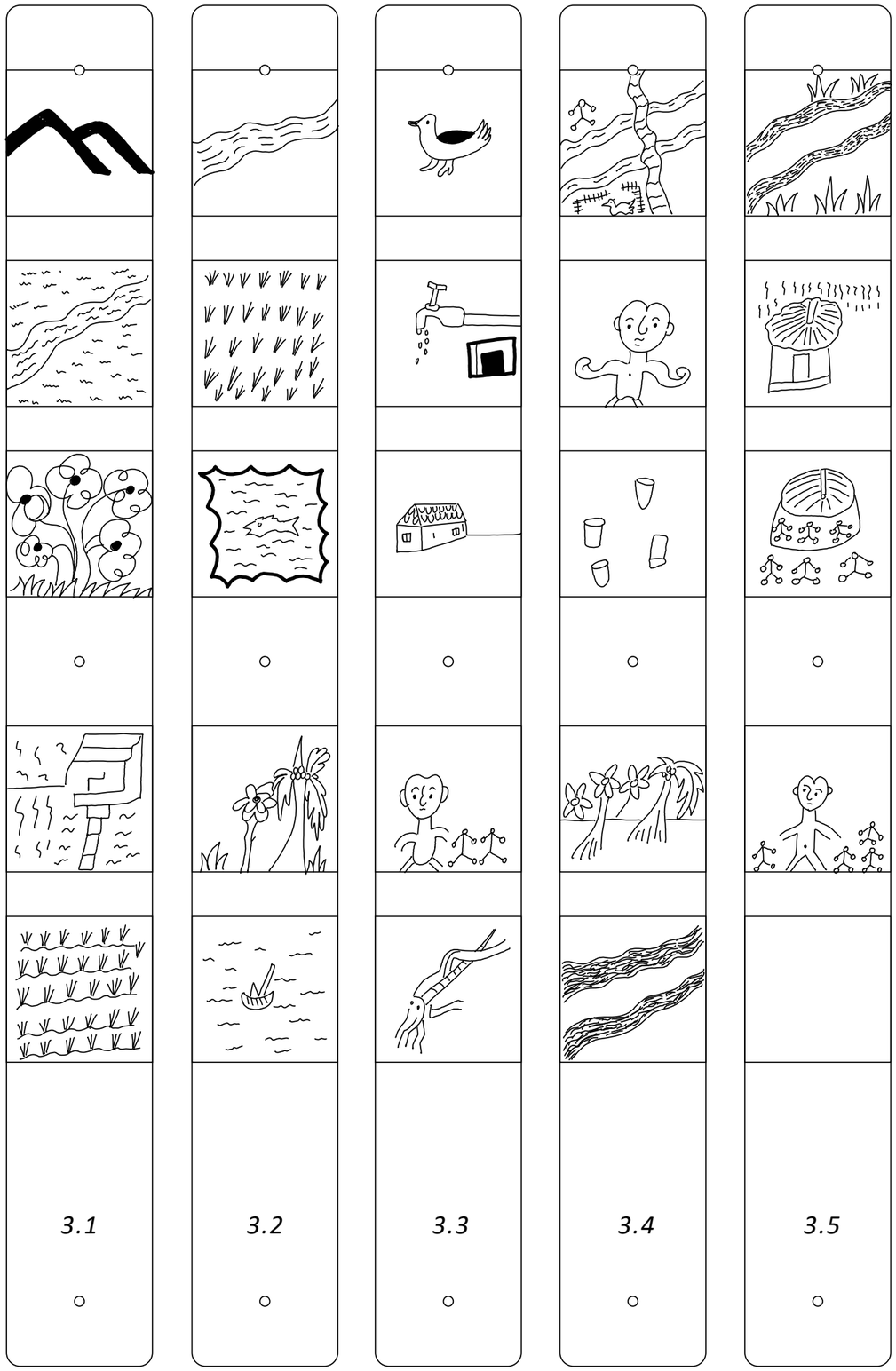
The Bale Bengong, or ‘thinking house’, is a space for the community to come together, to rest, and be protected from the weather.



Expanding Thoughtful Practices: The Bale Bengong becomes a place for the whole community to think together about the future of the Centre. This allows the community to share ideas and plan actions- expanding their thoughtful practices.



The Thinkers are the community as a whole. The Thinkers can make democratic decisions about the future of the Centre by sharing their knowledge and taking decisive action together.



3.1 For the garden we always start with the water, and the water source is coming from the mountain.

So the water is being used for garden purposes.

So to protect the erosion, a dam (or other form of water barrier such as a reservoir or water tank) has to be built to collect water from the rain and the river.

During the dry season it used to water the plants and rice.

3.2 Water flowing down and ended up in the ocean.

Through fields...

Ponds...

Forests...

To the sea.

3.3 The water from the stream is also being used to take care for the daily needs of livestock and other animals like ducks.

And also water is used for the needs of the house as well. The water tank helps to flow water around the garden through pipes to prevent erosion.

The pathway in the garden comes from and leads to the Warung Pondok.

The path has been used for the tour guide to lead the way through the garden...

Where there are issues of mosquitos and diseases.

3.4 The bridge connects one area to another and gives people access to the Centre.

So everyone needs to be taking care of the space...

To not throw rubbish...

And keep away the mosquitos which cause disease...

Everyone need to work together to not cause any harm in the garden, not cause any erosion by not cutting trees in the garden.

3.5 Flourishing garden pathways.

Bale Bengong to protect everyone from rain, which is like another river when the trees are cut and the rain causes erosion.

It can be used for gathering for people to discuss about things.

We have the responsibility to share with everyone how important it is to take care of the garden and nature.

4. THE SCHOOL

A site of Social Contracts

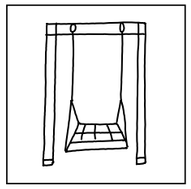
A Social Contract is an unwritten, unspoken contract of moral and ethical rules between a group of people, allowing them to live in harmony together. Architecture forms a part of the Social Contract, and should serve the needs of society by upholding its morals. However, architecture is not democratic- not everyone has access to architectural knowledge or tools. The School is a space that created its own Social Contract between teacher and students. The teacher has access to specific knowledge and tools, and is trusted to serve the needs and morals of the community by teaching that knowledge to their students. This begins a process of democratisation, where students and teacher both understand the same knowledge and have access to the same tools to change their built environment.

Settings

Events

Characters

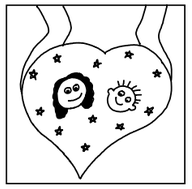
A



The Swings are a space of Social Contracts made between teacher and students. Once the students finish their work, they are allowed to play on The Swings. The teacher must trust that the students are keeping to the rules because the The Swings can be dangerous. The children trust that the teacher has their best interests at heart.



Self-Direction: The Swings represent the Self-Direction of the students. They are given the freedom to decide when they have finished their work and how they will care for themselves and each other when playing on The Swings.



The Guardian wishes to protect women and children from violence and suffering. But, to achieve this, The Guardian must also make space for women and children to learn and make their own choices. The Guardian is a builder, a creator of space, where women and children can feel protected whilst also learning Self-Direction.

B



The Bookcase contains many books for the students of The School. The Bookcase is segmented into different layers of books; from simple storytelling books, to books in colour, to more complex books about different subjects. There is an order to the books that the students can use, based on their age and ability.

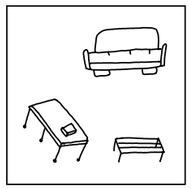


Observation vs Immersion: The Bookcase provides 'a window to the world', curated by the teacher. The students can observe the world through these books, but what they see is a version of the world curated by the teacher. The students must trust that the teacher is curating a truthful window to the world.



The Gatekeeper is both an author and an educator. As an author, they control what knowledge to write. As a teacher, they control what knowledge to share. The knowledge controlled by The Gatekeeper creates a window through which to view the world. Even though this is done with love, The Gatekeeper censors inadvertently certain knowledges in their teachings.

C



The Desks and The Sofa. The Desks at The School can be used individually, as larger group desks, or be taken away to provide a large open space for activities. Students with 'special needs' are sometimes placed at their own table close to The Sofa, because they have different learning and language abilities.

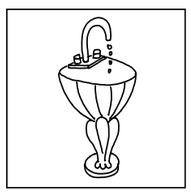


Pulling Back the Curtain: Recently, 'special needs' students have joined the normal class for 'active learning', which is described as a 'window without a curtain' because there is nothing separating the children (such as spatial barriers that divide traditional classrooms between different ages and abilities of students).

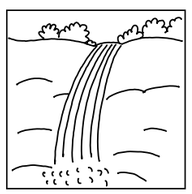


The Liberator aims to improve learning for the community by removing all barriers between different age groups and abilities, and focus on teaching through doing. The Liberator must engage with The Gatekeeper to decide what knowledge will be shared through 'active learning', so that the community can engage in self-directed learning.

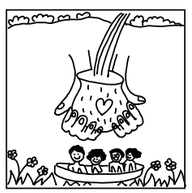
D



The Sinks are used often by all the teachers and students to keep clean in The School.

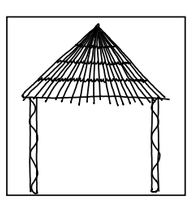


Flowing Water: The Sinks flow with running water from their tap and into their drains, rarely filling up. Even though they often remain empty, The Sinks constantly give natural water to The School to help keep everything hygienic.

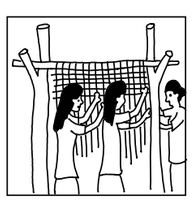


The Empty Vessel, or *Cintra* (Love), is always giving the love of God to the community by teaching and leading, but never stops to accept some love for themselves. The Empty Vessel needs to take time for self-healing and self-filling- to fill themselves with love, new ideas, and new knowledge. Only then can they continue to teach and lead the community.

E



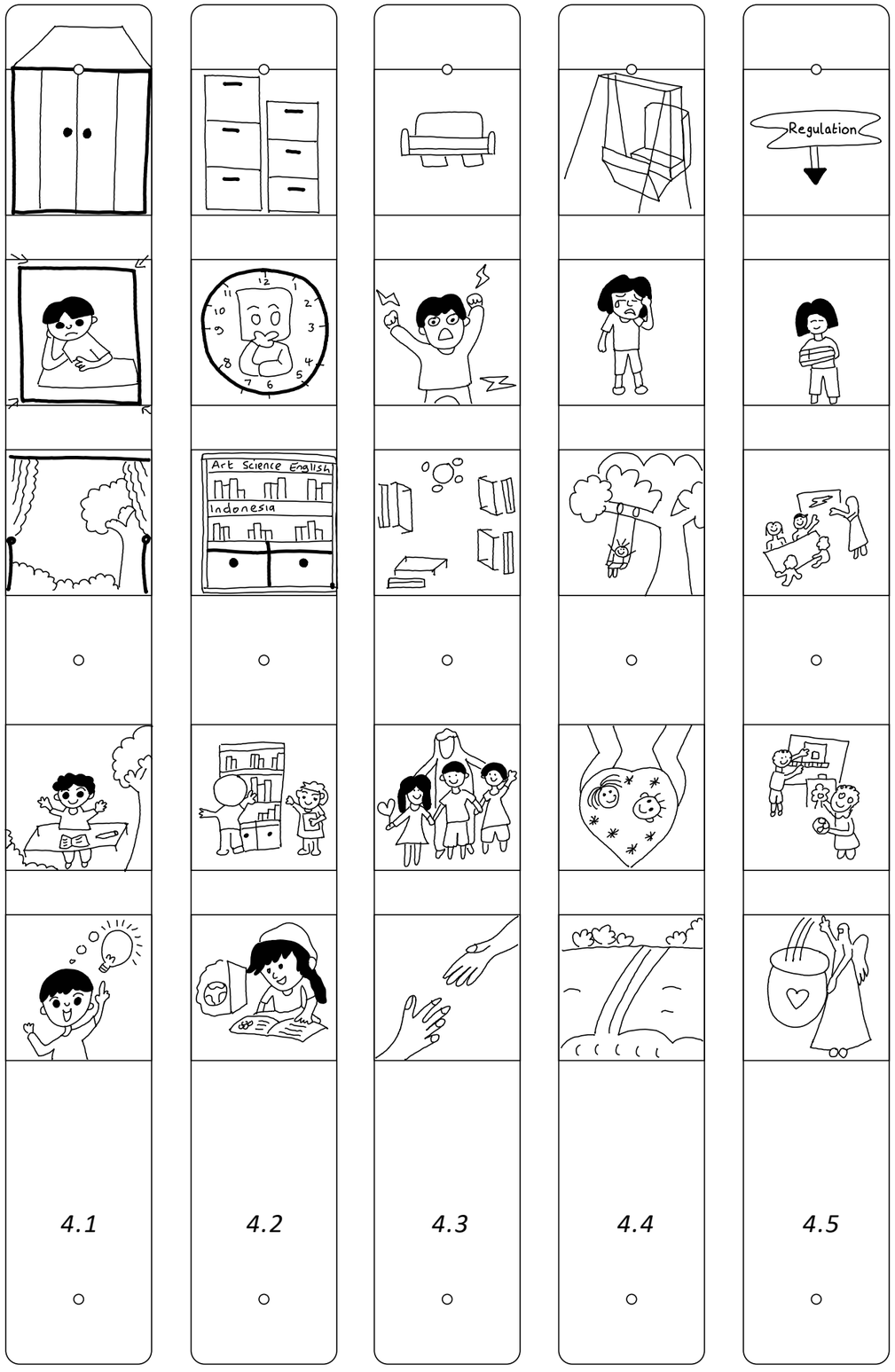
The Roof is currently made from corrugated metal, but the teacher wants a new *rumbia* roof made from woven palm leaves.



Weaving: One method of creating a *rumbia* roof is to weave palm leaves in a type of 'thatch-work'. This represents the weaving together of community members into a strong society with its own Social Contract. This also represents the weaving together of traditional and modern ideas and practices, that can benefit the community.



The Messenger comes from the unseen *niskala* realm, and is able to tell the community their destiny in the observable *sekala* world. This destiny is related to the roles of the community at the Centre; to learn, to teach, and to lead.



4.1 This is the open classroom. After the closed class makes the students feel depressed and stressed For that, I want a teaching building that is happy and harmonious with nature, so that the comfort of learning is interwoven. In addition, the children can express themselves to get unlimited ideas.

At the current classroom, the space with the corrugated roof is so loud and easy to distract the children.

In the future, change the roof and it will open up the world.

It will be a comfortable space that will help children have inspiration...

And do great things.

4.2 This is the bookcase.

Because it is a closed book case, drawers get in the way and it takes more time before children will reach for books, making children get too lazy to move and find something.

In the future, I wish it could be more open like in the library, with names of each theme. But it still needs to close with transparent glass or something.

It will engage children to read books or find something if they can see things categorised and tidy.

In the end, children realise that reading is important. By having happy feelings, by having bookshelf, it will engage the children to start changing habits. Those who didn't used to read will, and will open themselves to the world.

4.3 The sofa used to be a divider between 'special needs' children and regular children.

The 'special needs' children feel more stressed and restrained by the divider, and can feel resentment.

By moving the divider it gives harmony amongst the students with special needs and without.

By putting them together it engages the 'regular children' to learn how to not divide human beings apart.

It also engage the empathy amongst the local children. The aim is to educate a sense of concern for others in the form of different friends.

4.4 The iron swing has so many holes.

One child stuck her legs between the railing through a hole, it is not safe for the children.

In the future I'd like to have a swing using natural resources, hanging between two trees or something like that. Play trains the balance of the sensory system, especially in children.

With the eco friendly swings and schoolyard, it will create happy feelings amongst the children and they will share love.

Love will be flowing like the water.

4.5 By having one way regulation...

Children have so much tension because it is often carried out compulsorily, also under pressure.

And teachers discussing how to make regulations that are loaded in two directions.

By having good rules or regulation it will help children feel happy and the learning process will be flowing for the entire space and the energy amongst the children.

The children raise their awareness to work together without any differences. To put aside their differences between 'regular' and 'special children' to implement it, work together as it grows by itself, flowing with the love that god has blessed.

5. THE PAPER RECYCLING SPACE

A site of Lo-TEK Resurgence

Lo-TEK stands for 'Local Technologies and Traditional Ecological Knowledges' that have been practiced and handed down for generations through songs, origin stories, and everyday life. A resurgence in Lo-TEK traditions allows these multi-generational practices to be applied in modern settings. This space applies the traditional concepts of *lontar* leaf manuscripts to a contemporary setting. *Lontar* leaves are made by preparing, drying, and treating palm leaves in ceremonial events using specific mixtures of local ingredients, before being engraved and coloured using tools with spiritual significances. The production of paper requires intimate knowledge of these processes in a messy ritual between the craftsperson, their tools, and water that reflects their own identity.

Settings

Events

Characters

A



The Shelves are often messy with bits of paper and bottles ready to be recycled.

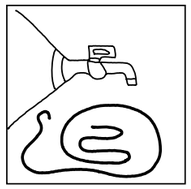


Method in the Madness: Even though The Shelves are messy, everything has its place. Those who work in The Paper Recycling Space like the messiness and have found Method in the Madness by bringing a sense of order to the chaos.

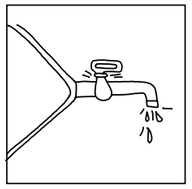


The Recluse isolates themselves away from others; actively seeking out quiet and tranquil places to avoid crowded areas. They seek out tranquillity so that they can focus on themselves, trying to bring a sense of order to a feeling of bad *karma phala*. Their isolation helps them to balance this with their good *karma phala* and feel harmonious.

B



The Tap (and The Rope) is an important part of The "Paper Space", as it is used to clean the bottles ready for recycling and is a vital ingredient for filtering and preparing the paper for recycling. The Tap is broken and always needs The Rope to help tighten it to stop water leaking.

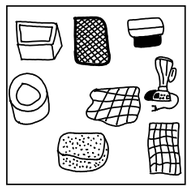


Leaking Water: The Tap leaks if The Rope is not tight enough. The Rope represents restrictions of bad *karma*. Water from The Tap represents the flowing freedom of good *karma* in life. The Rope will always try to restrict The Tap, but The Tap will always keep leaking water; good karma will always find a way through.

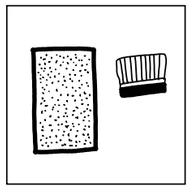


Chandra & Surya: Chandra is the moon god. The full moon represents Chandra's blessing through light. The new moon, on the other hand, is celebrated by praying to Surya, the sun god, to guide the community through the darkness. Together, Chandra and Surya represent the cycle between light and darkness inherent in humanity.

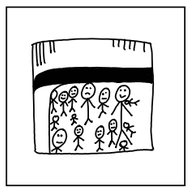
C



The Paper Processing Tools blend old paper with water to create a paper pulp, before being filtered and compressed into a thin sheet of paper that is left to dry.

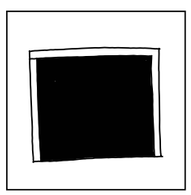


Compression is a key part of paper making, as it helps to squeeze any remaining water from the paper pulp, pushing lots of individual pieces of paper together to create one solid sheet. The new paper contains all of the good and bad qualities of the old paper in a neutral origin state, where both good and bad are contained together.

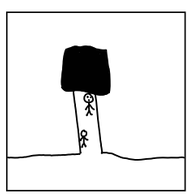


The Crowd is compressed together, merging into one singular person with distorted limbs and many voices all speaking at once. The Crowd must learn to work together, to use all of their limbs and all of their voices in unity and harmony. The negative aspects of The Crowd must also become their positive aspects; harmonised movements and speaking as one.

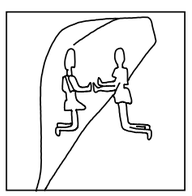
D



The Open Wall of The Paper Recycling Space represents an escape from a sometimes crowded workplace.

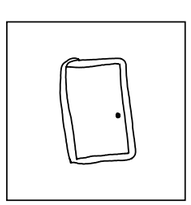


Inside to Outside: The Open Wall acts like a doorway, allowing workers to move from a darker enclosed space into the natural light of The Garden.

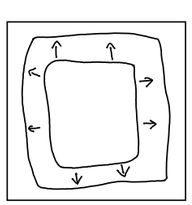


The Introspector reflects on the 'dark triad' (self importance, exploitation, and cynicism) and 'light triad' (treating others as ends unto themselves, valuing their worth, and believing in goodness) within themselves, comparing these two sides to the new moon and full moon.

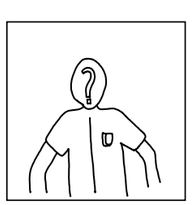
E



The Outdoors surround The Paper Recycling Space. Nature contrasts the man-made materials used in paper production and recycling, and offer an escape for the workers when the space becomes overwhelming.



Expanding in Size and Scale: Moving from the inside to the outdoors expands the Size and Scale of possibilities for the workers. Nature is full of new opportunities- such as natural paper dyes, alternative paper materials, textures to imprint onto the paper, or new Lo-TEK ways to create paper like materials such as *Lontar* leaves.



The Seeker moves away from the accepted way of doing things in search of more adventurous and challenging activities. They want to push boundaries, expand their horizons, and learn new skills that will benefit themselves and their community.



5.1 This is a messy shelf in the recycled paper space.

When I see it it makes me stay still (stressed and shocked).

After a while I start to tidy up.

When it looks tidy then I am happy…

and my mind is full (content).

5.2 This is the tap with holes.

There is a lot of pressure from everywhere because of the leaking water- both physically on the tap and pressure from others on me.

I fix the holes.

I feel good when I am doing this...

Because, when the work is done, there are not many burdens.

5.3 This is the paper 'porridge' after being blended. It needs to be left for a long time but it attracts a lot of mosquitoes into the box.

Then it becomes smelly.

And I have to throw it away.

Once it is clean…

I always end up with a smile.

5.4 This is me in the outside space.

Many leaves have fallen down outside, it is humid, and there are lots of mosquitos from the rubbish.

I move inside to make the paper.

This changes the tension from outside, and when the inside is clean already then it feels like when water is flowing.

Because I am focused, it turns into nice work and nice paper.

5.5 Having the drying rack in a low space means the roosters and chickens disturb the process.

It is moved to a higher location, like the roof, so that it can dry faster from the sun undisturbed.

I can watch the paper drying anytime easily.

When the paper is finished and the quality is good…

Then we get good money.

6. THE STUDIOS (BATIK & SCREEN PRINTING)

A site of Care (Listening with the Three Ears)

"Listening with our three ears" is an Indigenous practice that means to hear with our two ears and heart as a process of trust and relationship building that hears the truth and wisdom within Indigenous cultural realities. Our two ears hear experiences from the perspective of the human mind, and our heart hears experiences from the perspective of human relationships with our ecologies. The Studios are a space for creative connection and spirituality. The Studios take inspiration from the historical origins of *Batik* in Japan and its traditional use across Java and Bali. The creativity in these processes is said to plant a seed of knowledge, awareness, and wisdom, so that Indigenous people can renew a balanced and sustained relationship with nature.

Settings

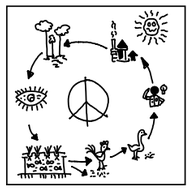
Events

Characters

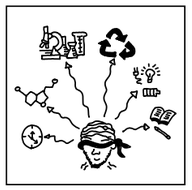
A



The Aquaponics are a self-enclosed ecosystem for growing food, herbs, or other culinary ingredients. This Aquaponics system is similar to the *sawah tambak* Rice-Fish Aquaculture of Java, where fish and rice are grown together in a symbiotic (mutually beneficial) ecosystem.

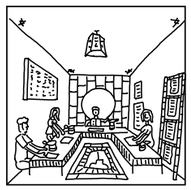


Creation from Destruction: The *sawah tambak* are not permanent, but are created temporally based on climatic conditions that fluctuate between flooding and drought. They are created using simple hand tools over the space of a few weeks. The silt rich waters can sustain large ecosystems for up to a year.

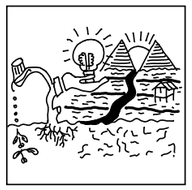


The Alchemist creates or transforms things through seemingly magical, scientific processes. The Alchemist is the creator (and destroyer) of worlds, creating new universes of endless possibilities by growing new plants and creating new animals. The Alchemist uses a variety of tools to transform all energy into something new, creating no waste from destruction.

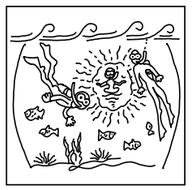
B



The Japanese Divider is used to temporarily separate the two sides of The Studio; 1) the front-of-house, where visitors can see the products created at The Studio (including *Batik*), and 2) the workspace, where the artists create Batik products and the visitors can take part in *Batik* workshops.



Seeing Behind the Divider: Japan is one of the original Asian countries to adopt wax-resist dying of fabrics. By removing The Japanese Divider, visitors can see the literal origins of *Batik* and understand the process of creating *Batik* in modern ways and explore new and creative ways of practicing *Batik* in the future.

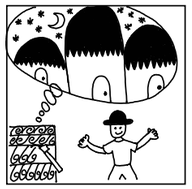


The Aquanaut is 'tidal', going with the flow. They dislike rigidity and rules, preferring to dive deep into creativity and imagination. The Aquanaut likes to meditate deeply about life and encourages the community to look beyond the surface level of their experiences. In these deep thoughtful explorations,

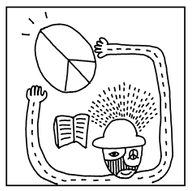
C



The *Batik* Tools (*tjanting*) are used to apply hot wax to fabric for dying. The wax covers areas of the fabric that will not be dyed, which allows layers of colour to be built up over time. *Batik* usually starts with lighter colours and gradually builds up to stronger, darker, and more vibrant colours. Undercoats of dye can alter the final colour.

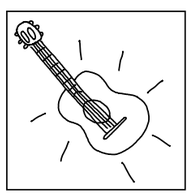


Revealing Meaning: *Batik* is often used as a method of visual and metaphorical storytelling. Each time hot wax is added to the fabric, it covers up parts of the overall artwork. Only once the hot wax is fully removed can the whole story of the *Batik* be seen. The wax hides the full meaning of the artwork's story until it is finally removed.



The Omnipresent pours their imagination into pictures, and pours their feelings into music. In this way, they are simultaneously present in the abstract world of their emotions and in the physical world of art and music. The Omnipresent is always honest and authentic, with a strong dislike of acting or faking.

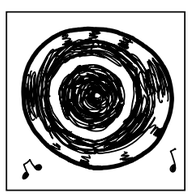
D



The Guitar/ Ukulele is used as a tool for communication; music is seen to transcend all cultures and language barriers, bringing people together to share emotions and feelings.

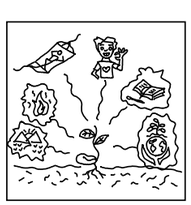


Communicating Actions: Music is not only used as a way to communicate emotion and feelings, but is also used to communicate actions. Music is seen to translate abstract thoughts and bring them into the physical world, so that actions can be taken to preserve positive feelings and change negative ones.



The Omnilinguist can communicate with plants and animals through their artwork and music. Much like nature, The Omnilinguist takes slow, deliberate actions that have positive impacts over the long term. They are patient and take the time to connect with nature on a deeper, spiritual level, communicating with the Land.

E



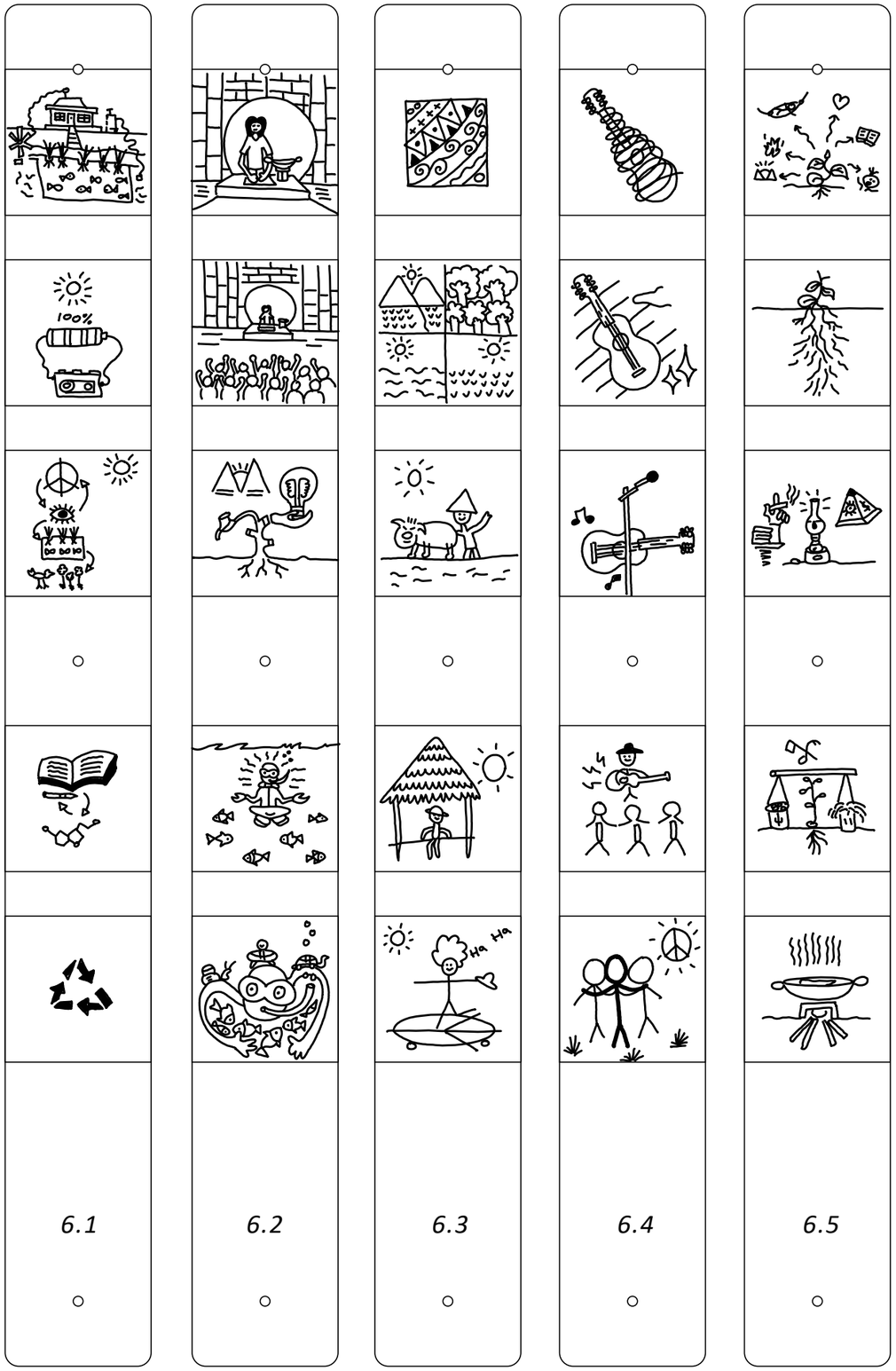
The Seed is a metaphorical representation of planting beauty, strength, comfort, rejuvenation, knowledge, and a grounded connection with nature into the minds of visitors and other community members.



Rest as Resistance: The Seed must rest in the darkness in order to grow. Rest is Resistance from patriarchal, capitalist, grind culture- where the minds and bodies of marginalised communities are forced to work beyond their means for the benefit of others. Taking time to connect to roots and ground themselves is a way to resist oppression.



The Child of the Earth grows plants and harvests them to be used in cooking, soap making, and dye making. They must take care and maintain the ecosystem well by not breaking the chain of life- which includes sustainable production and harvest. Patient, sustained actions will grow a bountiful harvest to sustain the community for longer.



6.1 Aquaponic affects the mood. So we can use this water turbine to flowing the energy relating to our mood. Cycles of Tri Hita Karana with human, nature, and universe.

This is a radio cassette, the human being recorder, connected to a full battery. It represent the challenge of the connection between the Tri Hita Karana- the cassette tape is quite complicated to fix it when it breaks and is difficult to take care of. The main energy is coming from the sun, helping to maintain the aquaponic system including giving us life energy.

To be able to create harmony we need peace of mind. The eye symbolises the vision and focus to keep the ecosystem working well amongst the Tri Hita Karana. With the support of energy we are able to keep it balanced.

With knowledge we are able to learn about everything to make it balance and maintain positive human energy.

The end ecosystem will be the recycle symbol, where everything is back again to us; “From Us to Us” through Tri Hita Karana.

6.2 The *batik* activity represents a person when they have many challenges. They can use art therapy to express their feelings and create their own energy...

Helping them to attract more people to come and join.

This is the tool for the *batik*, representing the root or see of the beginning of the journey to do the *batik*. This engages someone to create new ideas, to be able to keep the Tri Hita Karana for the human being.

This diving activity represents how someone is able to develop the idea, like a bright idea to be able to dive into their true self. They can engage more when they go beyond their awareness, their conscious, and see everything in their life deeper.

The diver will be able when they go beyond, dive deeper into themselves. Then they will be able to embrace all the challenges- the fish symbolise the chaos happening in life.

6.3 This is the pattern of the *batik*. It represents human life with all the different patterns in one piece of fabric- because it is important to remind everyone about the ecosystem and all the differences.

We need energy, water, food, and to follow the Tri Hita Karana.

It helps people to maintain the synergy of the Tri Hita Karana through the *batik*- not forgetting the history of their life.

It is able to help people to go back again in their mind, in their history of the human journey. Both personal and their ancestors.

Once they realise this, they will appreciate their work when doing their *batik*- there is a story in the *batik*. There is a history for decades, for centuries that created our life. It helps people remember the Tri Hita Karana and the ancestral history of it.

6.4 The ukelele drawn with a spiral around to represent when someone is in a cage. There is too much tension there, and it cannot be free.

The ukelele is free to explore the world as well as itself.

Once freedom is given it will create a beautiful melody.

This positive melody creates a positive vibration and acts like a magnet to attract more people to harmonise together...

Harmonise their circumstances through feelings and expression dedicated to the music, because music is a universal language.

6.5 The last story is about gods creation. Before humans and animals were created, it was the plants- the seed of the beautiful nature. This seed is growing because of the energy of the sun, of the mountain water, the fire, to create something beautiful, the peace, and by love and knowledge of the creator.

And this moves to the root, the key point of this story. Creator grounded the root- the more grounded, the stronger they are to deal with…

Capitalism and other challenges in the microcosm. When this root is in the transition of growing there is a stage where the root has a break; and it is resilient, grounded as strong as possible. There is a moment where we need to be resilient.

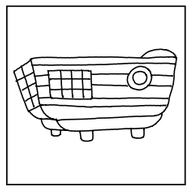
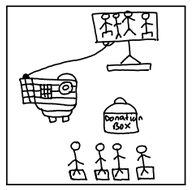
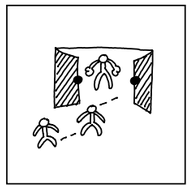
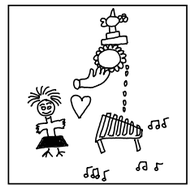
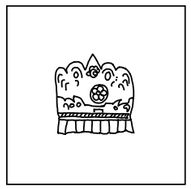
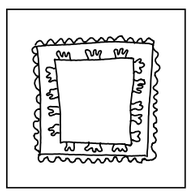
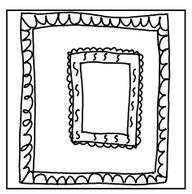
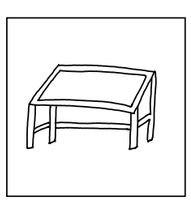
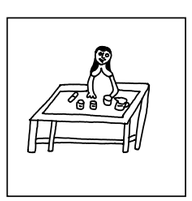
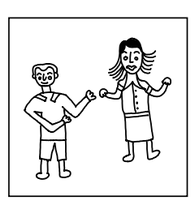
When this process passes, it will be able to grow beautifully and we are able to use the agricultural tools to plant the beautiful seeds and grow food for microcosmos.

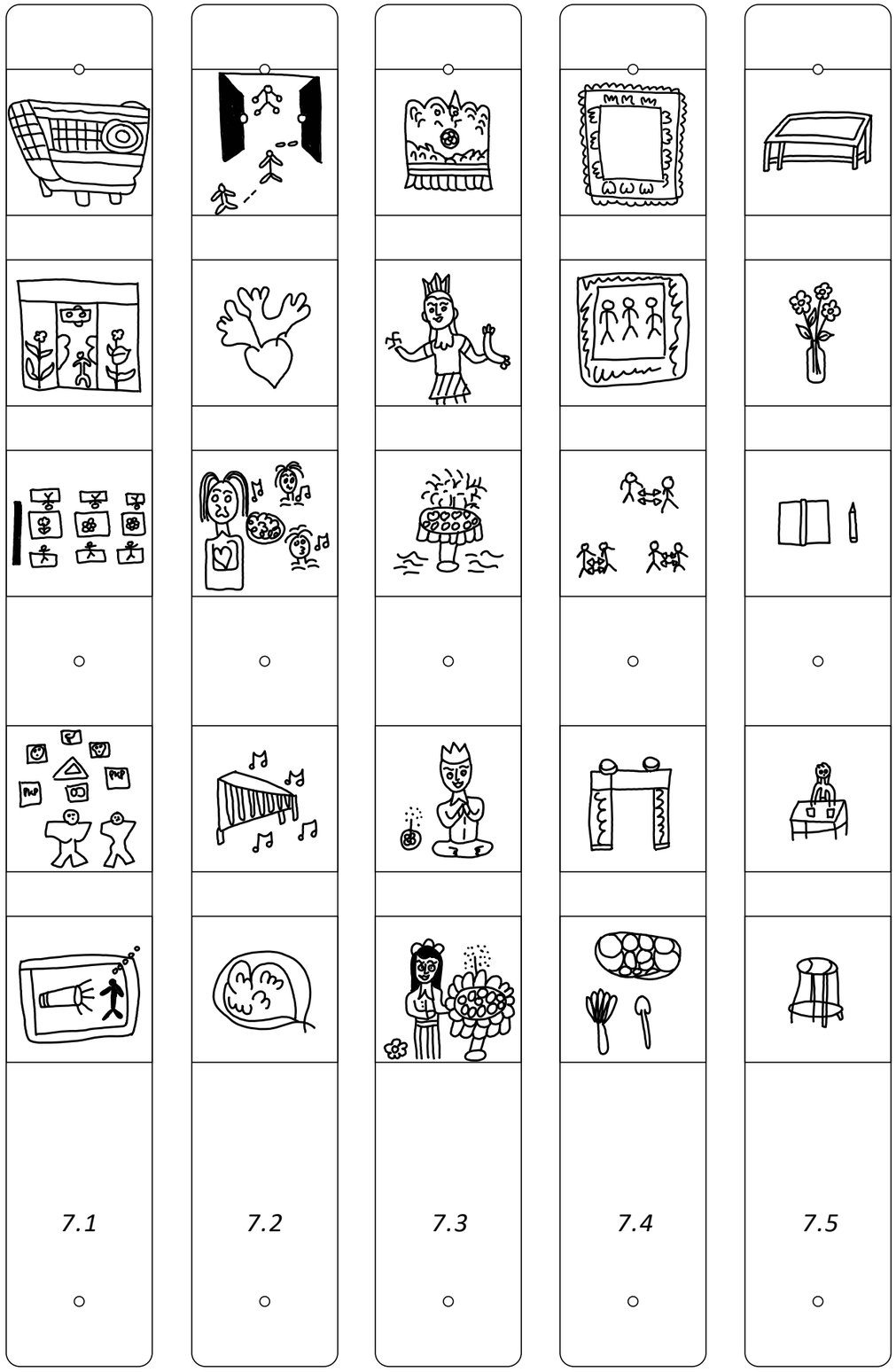
And again it will come back to ourselves through energy being returned to the sky and to the earth.

7. THE SHOP/ PRODUCTION SITES

A site of Phenomenal Transparency

"Phenomenal" Transparency describes a transparency that allows you to see two different spatial locations at the same time; where one space fluidly merges with another through continuous activity. Transparency in architecture can also mean intertwined, overlapping and simultaneous, and is connected to continuous movement. The Shop is simultaneously The Production Site, especially within the soap production space, connected through representations of reflection and projection. This is emphasised architecturally by Loggia (a room that has one or more open sides) and a Facade (a specifically closed wall facing a street or open area, sometimes used to hide other architectural elements).

	Settings		*Events*		*Characters*	
A		**The Projector** is used to share information about the Centre to visitors. This information is curated to show a certain image of the Centre and the local community to visitors, for the specific purposes of supporting the Centre through donations and funding opportunities.		**Projecting a Version of Ourselves:** Whilst nothing shared by the community in their presentations is untrue, it is a projection of what the community thinks visitors want to know in order to donate.		**Gadis Bali**, or Bali Girl, is a projection of the ideal Balinese woman to visitors or the rest of the community. But, behind this projection are many deeper layers to Gadis Bali, including representations of bravery and a desire for self-agency (independence) from concepts of the ideal woman.
B		**The Doorway** is represented as a place that three types of people pass through; 1) people who just want to know what is happening; 2) people who are eager to engage, learn new things, and take action; and 3) people who are just followers.		**Accepting Imperfection:** As these three types of people enter The Production Site, their love expands outwards into the space. There is an acceptance of imperfections from everybody present as they share love between each other.		**The Maitrist** is worried about making mistakes and being rejected by others. Much like in Balinese music and dance, community members invent new rhythms of work in response to the movements of others, finding a perfect imperfection. By accepting their imperfections, The Maitrist also cares for the wellbeing of all creation.
C		**The Shrine**, seen in the North-East corner of most buildings and rooms, is a place to give offerings to the Gods and to Ancestral Deities/ Spirits.		**Watching and Managing:** The shrine is also represented as a place from which the workers can watch and manage the production of products (like soap) whilst bringing a bright energy to The Production Site. It is almost as if the Gods/ Ancestral Deities are watching over the space in return for the offerings given to them at The Shrine.		**The Offeror** treats their work as both an offering to the Gods/ Ancestral Deities and to the community. Their work includes giving experiences, knowledge, motivation, and donations to those in need around them. They feel that they are an imposter in their role, so their offerings to the community bring them a sense of belonging and worth.
D		**The Mirror** is an important object in both The Shop and The Production Site. In The Shop, it is used for customers to view themselves outwardly. In The Production Site, The Mirror is more metaphorically used for visitors to view themselves inwardly- considering the knowledge they have learnt and how it affects their worldview.		**Reflecting Different Realities:** These Mirrors reflect different realities at the same time by allowing viewers to see their outward appearance and their inward reflection simultaneously. This reflects two different realities, as what is shown on the outside does not always match what is felt on the inside.		**The Intuit** reflects on themselves, both inwardly and outwardly. Inwardly, The Intuit is 'empty', as they struggle to understand their own emotions. Outwardly, The Intuit is 'full', reflecting a bright personality to other people. These reflections are made on heuristics- a system based on intuition or an instinctual understanding- that is often unreliable.
E		**The Table** is also an important object in both The Shop and The Production Site. In both locations it is used as a place for communication and sharing ideas.		**Independence:** In The Shop, the table represents being brave and taking steps to be independent, whilst in The Production Site the table is a place where ideas are shared and actions are taken towards self-sufficiency and independence.		**The Rebel** fights against the accepted definition of a Balinese woman, who is often subservient to the male lineage of their family. They want to gain independence from this multi-generational process by sharing their experiences of oppression with others and becoming an active member of a rebellious community that works towards female self-sufficiency.



7.1 This projector is being used in every presentation to communicate different things through written communication to people. And this projector is placed in the soap production and welcoming space.

The building is like the projector. We have transparent glass in the doors and windows so we can see outside and inside. People can look outside and see nimals and plants. If someone is coming from the outside, they can see the PKP community logo.

People entering the welcoming space sit on the benches. On the tables are books, writings, computers, many things on the table including flowers, that represent our work. This is also a gathering space when the PKP team sharing things through discussion.

These are pictures, certificates, and principles hanging on the wall remind visitors about self awareness, self consciousness, about our work and how they can support. This also symbolises soap- when soap is cut there are different shapes. This is a reminder for everyone that nothing is perfect.

By seeing or using the projector, it is the same as someone seeing themselves. They can see inside of this box where they can see the frame of their life and start thinking about everything, start absorbing the reflection of themselves.

7.2 This is the doorway of the space. Those people coming to the space are not always eager to learn something, but sometimes people have no idea what they are coming for. But they follow their friends, just being followers. But also there are some people who just want to observe first. The person who is eager to learn something has no hesitation or doubt to enter the doorway.

This is reflected through these imperfect hands. But, in the end, if we look deeper, they are all connected and guided by the universe. They are not coming with bad intention so they can share and love together to make something beautiful.

A few different creatures singing together, whether they like it or not, they have a full heart to share something and create something beautiful here. They create offerings of the love, offerings of themselves…

To create this melody together amongst them. At the same time they are projecting what is happening in their life...

To start having an open mindset. This is a brain at the beginning of opening up, that is why it is not fully formed. It is like a heart, not fully formed love, but coming from love.

7.3 A shrine is a symbol of our gratitude to the gods and goddess. Every space has to have a shrine.

This symbolise the goddess Dewi Kunti giving her blessings to us after we give the offerings at the shrine.

So these offerings are the symbol of our gratitude and also, before we start to do things and after we finish doing our daily activities.

To be able to keep things balanced during the day, we pray every day. This is someone praying with flowers and incense.

It doesn't matter if we spend a lot of money of offerings because we feel happy when we are able to share our gratitude and our love, to offer our offerings to the god and goddess. In return, they give us fruits that we share with the community.

7.4 The mirror shows the reflection of ourselves, and the mirror never lies. We will always be reflected by the mirror truthfully.

The different curve on the frame represent human beings; with different shapes, different intentions, relating to imperfection. The different shape of the art around the mirror…

Is the same as how human being are connected to one another. They share with each other, they accept the difference amongst others.

The mirror is missing one piece. Why? Because we are all coming together to create a space that is open to everyone to accept their differences and, create something beautiful. These two hooks also represent how the imperfections won't be bothering anyone if we have a strong support for each other.

7.5 The table is multifunctional for doing different things.

Flowers and vases are put on the table to remind everyone how beautiful our life is.

The table is being used to write something, by having the right tools and the right space, it will create something beautiful, tidy, and avoiding mess.

Besides writing, we use the table to make soap.

This chair represents the tightness, the pressure, of standing for a long time, then you can sit on the chair. Bima (second son of Dewi Kunti) represents the strength of the table and chair.

8. THE WARUNG

A site of Corner Problems

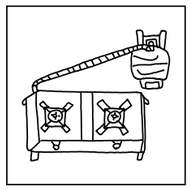
The ‘Corner Problem’ is an architectural idea that deals with the importance of interior (inside) and exterior (outside) corners on our experience of space; with inside corners often unifying space, and outside corners often dividing space along its edge. questions how the mathematical elements of a building, i.e. walls along the X and Y axis, are made in real life. The ‘problem’ then becomes more of a question; “how can two or more planes meet in a way that improves our experience of space, whilst still still being structurally strong and visually appealing?”. The *Warung* is defined by the corner problem. The building contains multiple interior and exterior corners based on the meeting of structural elements, creating overcrowding and suppression of its inhabitants.

Settings

Events

Characters

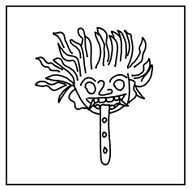
A



The Stove is where many *Ibus* can come to cook during the work day, creating a very restricted space inside the small *Warung*. This Stove is mostly used to cook for the community members who may be working at the Centre, but can sometimes be used to help prepare food for large groups of guests.

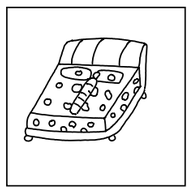


Changing Territories: The Stove in the *Warung* creates its own changing territories as the light, heat, and smell from cooking will travel different distances. The isolation of the *Warung* mirrors patriarchal domestication, whilst the expansion of its territories represents a matristic connection to other people, in other places through food.

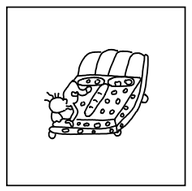


The Luminary attempts to illuminate themselves and others through their work. They feel trapped within the patriarchal values within an isolated and private setting), whilst trying to reach the light of matristic communal care. The orientation of these two locations is not opposite, but adjacent, producing complex relationships between the two.

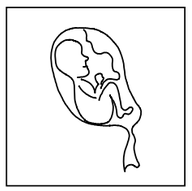
B



The Cot was sometimes placed in The *Warung* for a baby or other young children to stay when the *Ibus* were working in The Garden.

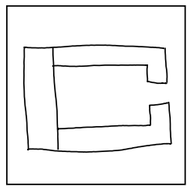


Exploring the Unknown: The Cot was very dangerous and required someone to constantly keep watch over the baby or young children in The *Warung*, as they were constantly exploring the unknown and at risk from mosquitoes, snakes, and other risks.

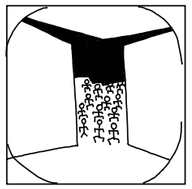


The Baby is being protected by the *Kanda Pat* (the four siblings of folklore based on blood, amniotic fluid, umbilical cord and placenta) whilst their many mothers are working. As The Baby grows, they expand outwards through all four zones; Banaspati (personal sanctuary), Anggapati (human relations), Mrajapati (social zone), and Banaspati Raja (the unknown).

C



The Corners: The *Warung* is defined by multiple corners, both interior and exterior, that confine the space and suppress those who work within it.



Unity over Division: The new *Warung* is envisioned as a round building with no clearly defined corners that support support open space and unity, as well as a deeper connection to other people- especially those who are different from the community and could be seen as a threat.



The Newcomers are visitors from the unknown. Nothing is known about them, they are completely ‘other’.

D



The Entrances: The *Warung* only has one proper doorway, leading into the confined kitchen space. But there are other Entrances, including an outdoor washing area and a window with a fold down shutter that acts as a table for preparing food, presenting food, and socialising.

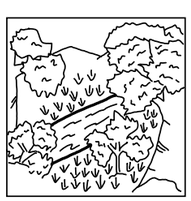


Permeable Entries: The different entries to The *Warung* suggest that it is permeable- that people can move in and out freely. This idea is seen in future depictions of The *Warung* as a series of round buildings that are open to nature and can be approached and entered from many different angles- making it accessible to anyone.

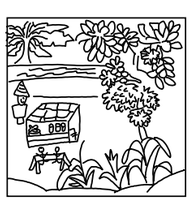


The Mediator tries to build relationships with others for the betterment of the community. Sometimes these relationships risk further capitalism or domestication, but other types of relationships offer the potential for new ideas, new cultures, and new ways of living to be shared and experienced, inspiring new ways for the community to grow.

E



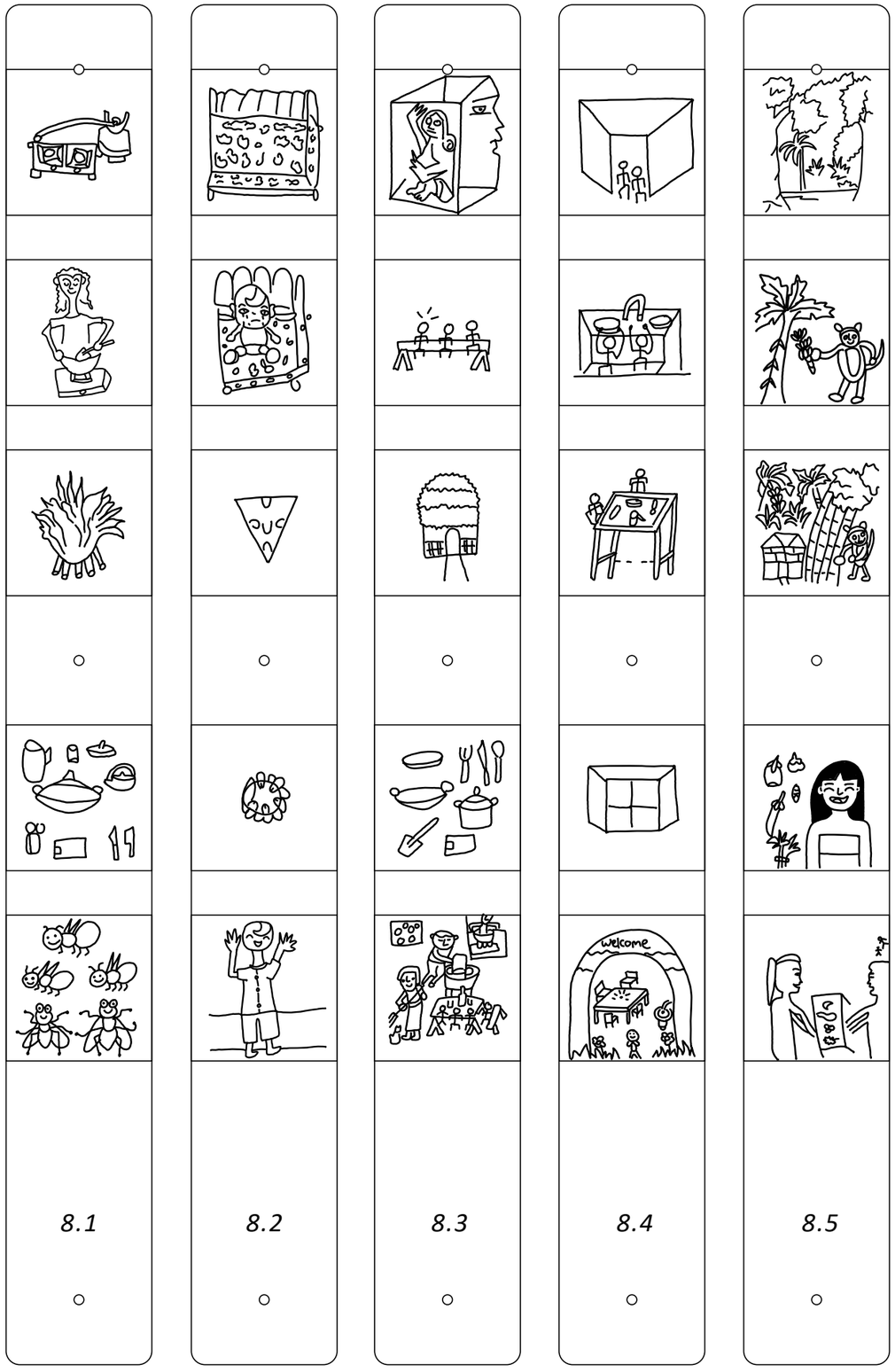
The Jungle/ Market: The *Warung* is surrounded by The Jungle and is fed by it. Fresh ingredients from The Garden and The Jungle are an important part of the food cooked here for the workers or visitors. In future visions of The *Warung*, both fresh and pre-cooked food would be sold at a Market.



Harmonious Relationships: For The *Warung* to succeed, there must be Harmonious Relationships with Land and with Others. For a Market to succeed, this also means resolving the tensions between Land and the systems of capitalism and domestication in The *Warung* and The Kitchen.



The Villagers are the collective voice of Bali and represent *tat twam asi*: “I’m you, you’re me, we are one”. It takes many people to provide a safe, healthy, environment to facilitate change and for ideas to grow and flourish.



8.1 This is the gas stove (kompor). The stove is one of the main sources of energy, or the most important energy.

It has the function to cook.

It give sphysical and life energy through fire.

Positive energy can be created if it is supported by other equipments…

And to prevent any disease from flies.

8.2 This is the baby's cot.

The baby is crying when the mamma leaves to work.

And the baby needs protection, physically from a mosquito net and spiritually by a triangular offering (similar to mosquito net shape) called *sesajen* that balances the energy and is made from coconut leaf with rice inside, ginger, onion, salt, and ash.

This has to be supported as well with toys and play…

To make the baby happy.

8.3 Inside the *warung pondok* there are tight space, giving a narrow enclosed feeling and tension. It feels like someone is in a box.

To make the brain fresh and relaxed, we are sitting outside instead, to see the greenery and the fresh air.

Leaving all the messiness inside.

After having refreshment outside, I have the idea to have a better place; a round space that is bigger and makes it easier to clean.

When outside and thinking about the messy parts, brainstorming, I start to think about having a better space. But before that, I start cleaning. The current small and messy space needs to be held responsible by the people in the *warung pondok*.

8.4 It is a small space...

Meaning that the sink is outside...

And also the tables.

Because everything is outside, it cannot be protected from rain. Especially with narrow air circulation inside, and we not able to wash equipment in the sink outside.

This gives me the idea to create the bigger round space.

8.5 In the outside area of the *warung*, there are many vegetables and fruits.

But the biggest challenge is that they get eaten by monkeys.

To make it a win-win solution, we build a fence and net around the fruit area so the monkey's are still free.

Once the monkey stay in their area, I am happy because I can grow the vegetables and fruits...

And generate income from selling the garden products.

Appendix G

The Draft Design Brief for the PKP ‘Bale Tong Tong’ Community Centre

Ringkasan Pusat Komunitas PKP Baru (Tong-Tong)

Ditulis oleh komunitas PKP

Siapa kita?

Pusat Komunitas PKP adalah tempat yang aman bagi perempuan yang kurang mampu, anak-anak, dan orang-orang yang membutuhkan, yang memiliki pengalaman hidup yang sulit. Kami mengumpulkan orang-orang dari berbagai latar belakang bersama-sama melalui usaha sosial dan kegiatan amal kami, untuk berbagi, mengajar, dan belajar dari satu sama lain.

Mengapa kita perlu membangun pusat komunitas baru?

Community Center PKP membutuhkan rumah permanen. Saat ini, semua bangunan kami disewa secara individual dan tersebar di area seluas 85km^2. Kami sering harus pindah lokasi dan merasa tidak nyaman dengan tuan tanah kami. Solusi kami adalah membeli tanah di mana kami dapat merelokasi program dan kegiatan usaha sosial kami. Kami belum membeli tanah ini. Kami ingin membangun sekitar 12 situs arsitektur baru (kantor, lobby, dapur, shelter, sekolah, ruang ibadah, pusat daur ulang kertas, ruang batik dan sablon, tempat menjahit dan produksi sabun, yoga shala, minimarket, dan taman). Hal ini akan memberikan kesempatan kepada masyarakat untuk memperoleh;

1. kerja bermakna dengan menemukan kebahagiaan di setiap ruang. Saat ini, ruang yang kami gunakan tidak dirancang untuk kebutuhan kami dan kami selalu khawatir bahwa kami perlu pindah lokasi.
2. berkelanjutan dengan memberikan kualitas hidup yang lebih baik melalui kesehatan, pendidikan, stabilitas ekonomi, dan pelestarian sosial/budaya
3. pertumbuhan dengan menciptakan lebih banyak lapangan pekerjaan bagi masyarakat.

New PKP Community Centre (*Tong-Tong*) Brief

Written by the PKP community

Who are we?

The PKP Community Centre is a safe haven for disadvantaged women, children, and people in need, who have had difficult life experiences. We gather people from different backgrounds together through our social enterprises and charitable activities, to share, teach and learn from each other.

Why do we need to build a new community centre?

The PKP Community Centre needs a permanent home. Right now, all of our buildings are rented individually and are spread across an area of 85km^2. We often need to move locations and feel discomfort with our landlords. Our solution is to buy land where we can relocate our social enterprise programs and activities. We have not bought this land yet. We want to build approximately 12 new architectural sites (office, lobby, kitchen, shelter, school, worship space, paper recycling centre, batik and screen printing space, sewing and soap production site, a yoga shala, a mini-market, and a garden). This will give the community opportunities to get;

1. meaningful work by finding happiness in each space. Right now, the spaces we use are not designed for our needs and we are always concerned that we will need to move locations.
2. sustainment by providing a better quality of life through health, educations, economic stability, and social/cultural preservation
3. growth by creating more jobs for the community.

Siapa yang kita sertakan dalam proses desain?

Kami mengikutsertakan anggota komunitas PKP dalam proses desain. Kami ingin berbagi pengalaman dengan seorang arsitek agar mereka dapat membantu kami merancang bangunan yang kami butuhkan. Kami telah berpartisipasi dalam kegiatan co-design untuk:

- Pikirkan tentang ketegangan yang kami alami di Pusat Komunitas kami saat ini.
- Pikirkan tentang perubahan apa yang ingin kita lakukan pada setiap bangunan untuk mengatasi ketegangan ini.
- Pikirkan tata letak keseluruhan bangunan ini untuk membuat Pusat Komunitas PKP baru.

Kami juga ingin belajar lebih banyak tentang arsitektur, terutama tentang bahan yang dapat kami gunakan dalam desain baru, sehingga kami dapat mandiri dan mempertahankan Pusat Komunitas kami di masa depan.

Community Center PKP yang baru akan digunakan oleh pemangku kepentingan lain yang tidak termasuk dalam proses desain, antara lain:

- Grup wisata (lokal dan internasional)
- Pejabat pemerintah
- LSM lain (lokal dan internasional)

Untuk mengakomodasi pemangku kepentingan ini, pertama-tama kami harus terdaftar sebagai badan amal di tanah baru dan mendaftar pajak. Kami juga ingin memberikan kenyamanan bagi pengunjung melalui; perhotelan, akses kursi roda, ruang ibadah untuk berbagai agama, dan informasi yang dapat diakses oleh orang-orang yang mengalami kesulitan melihat dan mendengar.

Who are we including in the design process?

We are including members of the PKP community in the design process. We want to share our experiences with an architect so that they can help us design the buildings that we need. We have already participated in co-design activities to:

- Think about the tensions we have experienced in our current Community Centre.
- Think about what changes we want to make to each individual building to solve these tensions.
- Think about the overall layout of these buildings to create a new PKP Community Centre.

We also want to learn more knowledge about architecture, especially about the materials that we can use in the new design, so that we can be self-sustainable and maintain our future Community Centre.

The new PKP Community Centre will be used by other stakeholders who are not included in the design process, including:

- Tour groups (local and international)
- Government officials
- Other NGOs (local and international)

To accommodate these stakeholders, we firstly need to be registered as a charity on new land and register for tax. We also want to provide comforts for visitors through; hospitality, wheelchair access, prayer space for different religions, and accessible information for people who have trouble seeing and hearing.

Apa yang kita inginkan dari Community Center PKP yang baru?

Pertama, kami perlu membeli tanah dan mendapatkan sertifikat kepemilikan yang sah untuk melindungi hak-hak kami. Lahan harus sekitar 1 hektar, datar dan mudah ditata untuk pembangunan gedung dan pertanian. Tanah harus memiliki akses yang mudah ke bahan alami yang dapat digunakan untuk membangun, termasuk bambu, kayu, tanah, dan batu. Tanah tersebut harus berisi berbagai pohon alami seperti daun pisang dan buah-buahan campuran, memiliki sungai/aliran/mata air atau sumber air alami lainnya, dan harus memiliki akses jalan. Luas tanah yang dapat dibangun harus cukup luas untuk 12 situs arsitektur baru dan memiliki ruang untuk perluasan. Kami memiliki banyak usaha sosial dan kegiatan untuk dijalankan di pusat. Setiap kegiatan harus memiliki ruang khusus dan sumber daya manusianya sendiri. Empat bangunan terpenting dalam Community Center PKP adalah:

1. Shelter, untuk melindungi orang yang membutuhkan.
2. Dapur. Komunitas kami tidak terbiasa merasakan perut kenyang. Dapur memberi makan masyarakat dan memberi mereka energi untuk aktivitas sehari-hari. Padahal kita tahu makanan itu berasal dari kebun, namun harus dimasak untuk mendapatkan hasil akhir berupa energi.
3. Taman. Memiliki alat dan pengetahuan untuk memelihara Pusat Komunitas itu penting. Kami ingin menanam banyak makanan di kebun kami untuk memberi makan masyarakat dan melanjutkan usaha sosial kami. Tapi kami juga ingin ada bengkel perawatan bambu untuk terus merawat bangunan. Namun hal ini harus didukung oleh sumber daya manusia dan pendanaan.
4. Ruang dan kantor yang ramah. Kami menyebutnya 'rumah putih' karena putih, tetapi juga karena semua keputusan dibuat untuk komunitas PKP. Dari situlah kita mulai menciptakan perubahan sosial bagi masyarakat.

What do we want from the new PKP Community Centre?

Firstly, we need to buy land and get a legal certification of ownership to protect our rights. The land should be around 1 hectare, flat and easy to landscape for building development and agriculture. The land must have easy access to natural materials that can be used to build with, including bamboo, wood, soil, and stone. The land must contain a variety of natural trees such as banana leaf and mixed fruits, have a river/ stream/ spring or other natural water source, and must have road access. The buildable area of land must be large enough for 12 new architectural sites and have room for expansion. We have many social enterprises and activities to run at the centre. Each activity must have its own dedicated space and human resources.

The four most important buildings in PKP Community Centre are:

1. The shelter, to protect people in need.
2. The kitchen. Our community is not used to feeling a full belly. The kitchen feeds the community and gives them energy for their daily activities. Even though we know the food is coming from the garden, it must be cooked to get the end result of energy.
3. The garden. Having the tools and knowledge to maintain the Community Centre is important. We want to grow many foods in our garden to feed the community and continue our social enterprises. But we also want to have a bamboo treatment workshop to continue maintaining the buildings. But this must be supported by human resources and funding.
4. The welcoming space and office. We call this the ‘white house’ because it is white, but also because it is where all the decisions are made for the PKP community. It is where we begin to create social change for the community.

Apakah ada hal penting lainnya yang perlu dipertimbangkan dalam proses desain kita?

Kami ingin menggunakan campuran bambu, tanah, bata terakota/tanah liat, kayu, dan batu lokal. Kami terbuka untuk menggunakan material modern, seperti baja dan beton, jika tidak ada alternatif alami yang memungkinkan untuk memenuhi kebutuhan kami. Lokasi harus mencakup kebutuhan dasar utama air, listrik, dan akses jalan. Kami akan membutuhkan area parkir khusus untuk tamu, pekerja magang, dan sukarelawan. Kami juga membutuhkan bengkel kendaraan PKP yang akan digunakan untuk mengantarkan pesanan catering atau produk lainnya.

Kami ingin melibatkan semua tradisi Indonesia, bukan hanya Bali, dan memberi ruang bagi lima agama besar; Hindu, Muslim, Budha, Yahudi, dan Kristen. Orientasi shalat harus ke barat atau menghadap Mekkah.

Kami juga ingin fokus mengikuti Uger-Uger yang meliputi Tri Angga, Tri Mandala, dan Asta Kosala Kosali. Konstruksi harus dimulai pada hari yang baik. Kami ingin pintu masuk tradisional termasuk perlindungan Aling-Aling. Dapur harus berada di dekat pintu masuk Community Center dan menghadap ke selatan, agar pengunjung dapat menetralisir energi negatif.

Are there any other important things to consider in our design process?

We want to use a mixture of bamboo, soil, terracotta/ clay bricks, wood, and local stone. We are open to using modern materials, like steel and concrete, if no natural alternative is possible to meet our needs. The site should include the main basic needs of water, electricity, and road access. We will need a dedicated parking area for guests, interns, and volunteers. We also need a garage for PKP vehicles that will be used to deliver catering orders or other products.

We want to be inclusive of all Indonesian traditions, not just Balinese, and provide space for the five major religions; Hindu, Muslim, Buddhist, Jewish, and Christian. The orientation of prayer must be to the west or facing Mecca.

We also want to focus on following the *Uger-Uger* that includes the *Tri Angga*, *Tri Mandala*, and *Asta Kosala Kosali*. The construction must begin on a good day. We would like a traditional entrance including *Aling-Aling* protection. The kitchen must be by the entrance to the Community Centre and face south, so that visitors can neutralise negative energy.

Pertimbangan umum dari Pengalaman kami:

- Saat ini jarak antar gedung PKP terlalu jauh- dapur terlalu jauh dari ruang makan, tempat produksi sabun dan jahit terlalu jauh dari toko.
- Peralatan yang kami gunakan sekarang sudah tua, termasuk pipa ledeng dan listrik, sehingga tekanan air kami sering buruk.
- Kami memiliki sistem pengelolaan limbah yang buruk dan ternak terlalu dekat dengan bangunan lain, sehingga tidak higienis. Kita perlu menciptakan sistem pengelolaan sampah yang lebih mandiri dan lebih menunjukkan kesadaran tentang sampah organik dan non-organik. Hewan harus dipisahkan dari bangunan lain.
- Sekolah digunakan untuk banyak kegiatan termasuk yoga dan makan. Kami membutuhkan ruang khusus untuk semua aktivitas.
- Kami ingin menyediakan lebih banyak ruang terbuka komunal bagi orang-orang yang tinggal di tempat penampungan.
- Saat ini, kami tidak memiliki pagar atau tembok yang aman di sekitar Pusat Komunitas. Kami memiliki pengalaman hal-hal yang dicuri. Kami membutuhkan lebih banyak keamanan di masa depan.

General considerations from our Experiences:

- At the moment, the PKP buildings are too far away from each other- the kitchen is too far from the dining area, the soap and sewing production sites are too far away from the shop.
- The equipment we use now is old, including the plumbing and electrics, so we often have bad water pressure.
- We have a bad waste management system and livestock are too close to the other buildings, making it unhygienic. We need to create a more self-sustaining waste management system and show more awareness about organic and non-organic waste. Animals need to be separated from the other buildings.
- The school is used for many activities including yoga and dining. We need dedicated spaces for all activities.
- We would like to provide more communal outdoor spaces for people staying at the shelter.
- At the moment, we do not have a secure fence or wall around the Community Centre. We have experiences things being stollen. We need more security in the future.

Bangunan apa yang kita butuhkan di Pusat Komunitas PKP yang baru?

1. **Dapur**

Bahan: Kayu dan Kantong Tanah
Gaya: Kombinasi gaya tradisional dan modern.
Ukuran: 10x20m (120m^2). Ruang harus dibagi menjadi empat area yang bergerak dari dapur pribadi dengan ruang maksimal 10 orang, ruang semi publik untuk kelas memasak maksimal 30 orang, ruang makan tamu dengan meja panjang tunggal, dan ruang makan umum yang cukup besar untuk minimal 100 orang. Dinding belakang harus berorientasi Selatan, dengan bangunan berorientasi Utara.
Pertimbangan lain: Membutuhkan lantai (ubin) yang mudah dibersihkan, ruang penyimpanan yang luas, akses ke kebun herbal kecil (tanaman obat), listrik cukup menyala, dan harus memiliki ventilasi untuk api kayu.

2. **Tempat berlindung**

Bahan: Campuran kayu (bambu) dan batu.
Gaya: Kombinasi gaya tradisional dan modern.
Ukuran: Shelter harus dua lantai. Lantai bawah akan menampung orang-orang yang membutuhkan dukungan dan perlindungan. Lantai paling atas menyediakan ruang untuk disewa, tempat pengunjung dapat menginap (turis, relawan, pekerja magang, dll.). Setiap lantai berisi 10 kamar dan setiap kamar harus berukuran minimal 5x4m (20m^2) dan termasuk kamar mandi (toilet dan shower), ruang jemur, dan dapur kecil (dengan lemari es).
Pertimbangan lain: Bangunan harus berbentuk U, menciptakan halaman dalam yang berisi kolam atau fitur air seperti 'villa' pribadi. Shelter harus mencakup tempat parkir untuk semua tamu. Juga harus ada ruang khusus dan sumber daya manusia untuk kamar / area bermain anak-anak di mana anak-anak dapat diawasi sementara orang tua mereka bekerja.

What buildings do we need at the new PKP Community Centre?

1. **Kitchen**

Material: Wood and Earth Bag
Style: A combination of traditional and modern style.
Size: 10x20m (120m^2).The space must be divided into four areas that move from a private kitchen with space for a maximum of 10 people, a semi-public space for the cooking classes of a maximum of 30 people, a guest dining area with a singular long table, and a public dining space large enough for 100 people minimum. The back wall must be orientated South, with the building orientated Northwards.
Other considerations: Needs an easy to clean floor (tiled), plenty of storage space, access to small herbal garden (medicine plants), electricity to be well lit, and must have ventilation for wood fire.

2. **Shelter**

Material: Mixture of wood (bamboo) and stone.
Style: A combination of traditional and modern style.
Size: The shelter must be two floors. The lower floor will house people who need support and protection. The top floor provides space for renting, where visitors can stay (tourists, volunteers, interns etc.). Each floor contains 10 rooms and each room must be minimum 5x4m (20m^2) and include a bathroom (toilet and shower), drying space, and a small kitchen (with fridge).
Other considerations: The building should be in a U shape, creating an internal courtyard that contains a pool or water feature like a private ‘villa’. The shelter should include parking space for all guests. There must also be dedicated space and human resources for a children’s room/ play area where the children can be watched whilst their parents work.

3. Taman

Bahan: Harus menyertakan jalur permeabel air alami (misalnya, batu bata terakota), pagar alami, penyimpanan air (tangki, bendungan, reservoir, penyimpanan bawah tanah atau opsi lain), pipa air, dan alat penyiram. Semua bangunan dibuat dengan kombinasi bata terakota, bambu, dan atap rumbia. Kolam renang yang terbuat dari batu alam.
Gaya: Kombinasi gaya tradisional dan modern.
Ukuran: Ruang penyimpanan/ perawatan bambu (6x9m atau 54m2), bale bengong (6x8m atau 48m2), kolam renang (8x7m atau 56m2), dan ruang untuk ternak (20x20m atau 400m2)
Pertimbangan lain: Kebun harus memiliki akses jalan.

4. Sekolah

Bahan: Bangunan kayu dengan atap rumbia
Gaya: Kombinasi gaya tradisional dan modern.
Ukuran: dengan ruang kelas dan laboratorium pembelajaran aktif yang dapat menampung 30 anak, termasuk anak berkebutuhan khusus.
Pertimbangan lain: Itu harus dikelilingi oleh alam untuk memungkinkan pembelajaran aktif dan melatih kesadaran sensorik anak-anak.

5. Ruang Daur Ulang Kertas

Bahan: Bata merah terakota dan kaca
Gaya: Modern
Ukuran: 8x12m (96m2) dengan kapasitas maksimal 20 orang.
Pertimbangan lain: Itu harus mencakup penyimpanan kayu untuk bahan dan peralatan daur ulang. Itu harus termasuk listrik dan air, wastafel panjang, pengatur suhu / kelembaban, dan bingkai untuk mengeringkan kertas.

3. Garden

Material: Must include natural water-permeable pathways (for example, terracotta bricks), natural fence, water storage (tanks, dams, reservoir, underground storage or other option), water pipes and sprinklers. All buildings to be made with a combination of terracotta bricks, bamboo, and rumbia roof. Pool made from natural stone.
Style: A combination of traditional and modern style.
Size: Storage space/ bamboo treatment (6x9m or 54m*2*), bale bengong (6x8m or 48m*2*), swimming pool (8x7m or 56m^2), and space for livestock (20x20m or 400m^2)
Other considerations: The garden must include road access.

4. School

Material: Wood building with a rumbia roof
Style: A combination of traditional and modern style.
Size: It must be 10x30m (300m^2), with a classroom and an active learning laboratory that can fit 30 children, including special needs children.
Other considerations: It must be surrounded by nature to allow for active learning and training the sensory awareness of children.

5. Paper Recycling Space

Material: Terracotta red brick and glass
Style: Modern
Size: 8x12m (96m^2) with a maximum capacity of 20 people.
Other considerations: It must include wooden storage for recycling materials and equipment. It must include electricity and water, a long sink, temperature/ humidity controls, and a frame to dry the paper.

6. Sanggar Batik dan Sablon

Bahan: Kayu, bambu, dan kaca
Gaya: Kombinasi Joglo tradisional dan gaya Bambu modern.
Ukuran: Ruang batik harus berukuran 12x8m (96m2) atau ruang yang cukup untuk maksimal 50 orang duduk untuk kelas membatik. Studio Sablon harus berukuran 12x12 (144m2) atau ruang yang cukup untuk maksimal 20 orang muat di samping semua peralatan.
Pertimbangan lain: Ruang Batik dan Studio menjadi dua bangunan terpisah, dihubungkan oleh kolam aquaponik buatan. Ruang Batik bergaya Joglo. Itu harus dibuat dari sebagian besar kayu dan membutuhkan listrik untuk musik (yaitu sound system). Studio harus dua lantai dan termasuk ruang pameran.

7. Produksi Sabun dan Tekstil

Bahan: Bata merah terakota, bambu, dan kantong tanah
Gaya: Kombinasi gaya tradisional dan modern.
Ukuran: Ruang produksi jahit adalah bangunan bundar berdiameter 10m untuk semua peralatan (termasuk meja potong berukuran 2x1,2m (2,4m2)) yang terbuat dari alas terakota dan bagian atas bambu. Ruang produksi sabun adalah bangunan bundar terpisah berdiameter 5m yang terbuat dari kantong tanah dengan estetika laboratorium.
Pertimbangan lain: Ruang menjahit harus mencakup ruang semi-privat untuk bertemu dengan klien. Ruang produksi sabun harus dipisahkan dari area jahit untuk kebersihan dan harus memiliki tempat penyimpanan dan bak cuci sendiri.

6. *Batik* and Screen Printing Studio

Material: Wood, bamboo, and glass
Style: A combination of traditional *Joglo* and modern bamboo style.
Size: *Batik* space must be 12x8m (96m^2) or enough space for maximum 50 people to be seated for batik classes. Screen Printing Studio must be 12x12 (144m^2) or enough space for maximum 20 people fit in alongside all the equipment.
Other considerations: *Batik* and Studio spaces to be two separate buildings, connected by a manmade aquaponics pond. The *Batik* space is in *Joglo* style. It must be made from mostly wood and requires electricity for music (i.e. sound system). The Studio must be two floors and include an exhibition space.

7. Soap and Textile Production

Material: Terracotta red brick, bamboo, and earth bag
Style: A combination of traditional and modern style.
Size: Sewing production space is a round building of 10m diameter for all the equipment (including a 2x1.2m (2.4m^2) cutting table) made from a terracotta base and bamboo top. Soap production space is a separate round building of 5m diameter made from earth bag with a laboratory aesthetic.
Other considerations: Sewing space must include a semi-private space to meet clients. The soap production space must be separated from the sewing area for hygiene and must have its own storage and sink.

8. Yoga Shala dan Aula

Bahan: Kayu
Gaya: Kombinasi gaya tradisional dan modern
Ukuran: Bangunan melingkar untuk menampung maksimal 200 orang
Pertimbangan lain: Ini adalah bangunan tiga lantai yang berisi ruang aula terbuka dan studio musik di lantai satu, studio yoga dan kafe di lantai dua, dan ruang terapi fisik dan konseling di lantai tiga untuk penyembuhan dan relaksasi.

9. Ruang Ibadah

Bahan: Kayu
Gaya: Kombinasi gaya tradisional dan modern
Ukuran: Bangunan melingkar sekitar 20m diameter
Pertimbangan lain: Bangunan ini harus mencakup 5 ruang ibadah untuk agama besar: Buddha, Kanghua, Islam, Hindu, dan Kristen. Ibadah Islam harus menghadap ke Barat dan ibadah Hindu harus menghadap ke Timur Laut.

10. Kantor

Bahan: Kayu, Terakota atau Kantong Tanah
Gaya: Kombinasi gaya tradisional dan modern
Ukuran: Bangunan melingkar dengan diameter sekitar 8m
Pertimbangan lain: Gedung ini harus dilengkapi dengan pengamanan kantor, ruang administrasi, loker untuk Tim PKP, dan Kulkul bambu (Tong Tong) untuk mengajak masyarakat PKP berkumpul dan mengkomunikasikan aturan PKP.

8. Yoga Shala and Aula

Material: Wood
Style: A combination of traditional and modern style
Size: Circular building to house up to 200 people maximum
Other considerations: This is a three floor building that contains an open aula space and music studio on the first floor, a yoga studio and café on the second floor, and physical therapy and counselling spaces on the third floor for healing and relaxing.

9. Worship Space

Material: Wood
Style: A combination of traditional and modern style
Size: Circular building around 20m diameter
Other considerations: This building must include 5 worship spaces for the major religions: Buddhist, Kanghua, Islam, Hindu, and Christian. Islamic worship should face West and Hindu worship should face North-East.

10. Office

Material: Wood, Terracotta or Earth Bag
Style: A combination of traditional and modern style
Size: Circular building around 8m diameter
Other considerations: This building must include secure offices, administration space, lockers for the PKP Team, and a bamboo Kulkul (Tong Tong) to call the PKP community together and communicate the PKP rules.

11. Lobi

Bahan: Kayu dan Tanah Tas
Gaya: Kombinasi gaya tradisional dan modern
Ukuran: Bangunan melingkar berdiameter sekitar 10m
Pertimbangan lain: Dibutuhkan ruang untuk kursi dan meja, display produk, peta pusat, papan informasi, ruang perpustakaan untuk berbagi buku, dan dinding galeri dengan kutipan inspirasional. Ruang kecelakaan dan gawat darurat terpisah harus ditempatkan di sini untuk perawatan dan akses mudah.

12. Mini-Market

Bahan: Kayu
Gaya: Kombinasi gaya tradisional dan modern
Ukuran: Bangunan melingkar berdiameter sekitar 10m
Pertimbangan lain: Bangunannya bergaya Joglo terbuka yang mirip dengan pasar malam tradisional Bali/Indonesia, dengan ruang terbuka di mana penjual dapat mendirikan warung makan mereka. Itu membutuhkan toilet, wastafel, dan colokan listrik di setiap pilar.

Berikut ini adalah rencana proyek dalam skala 1:400 (dicetak pada kertas A4). Kami membuat rencana ini dengan berbagi pengalaman dan pengetahuan dengan peneliti internasional dan arsitek lokal Indonesia. Kami membuat sendiri parang bambu untuk bangunan PKP masa depan dalam skala 1:100, memetakan bagaimana setiap bangunan akan digunakan di masa depan, dan bagaimana semua bangunan terhubung satu sama lain. Rencana proyek kami didasarkan pada tanah impian kami yang datar yang berisi berbagai pohon alami seperti daun pisang dan buah-buahan campuran, memiliki sungai, dan memiliki akses jalan.

11. Lobby

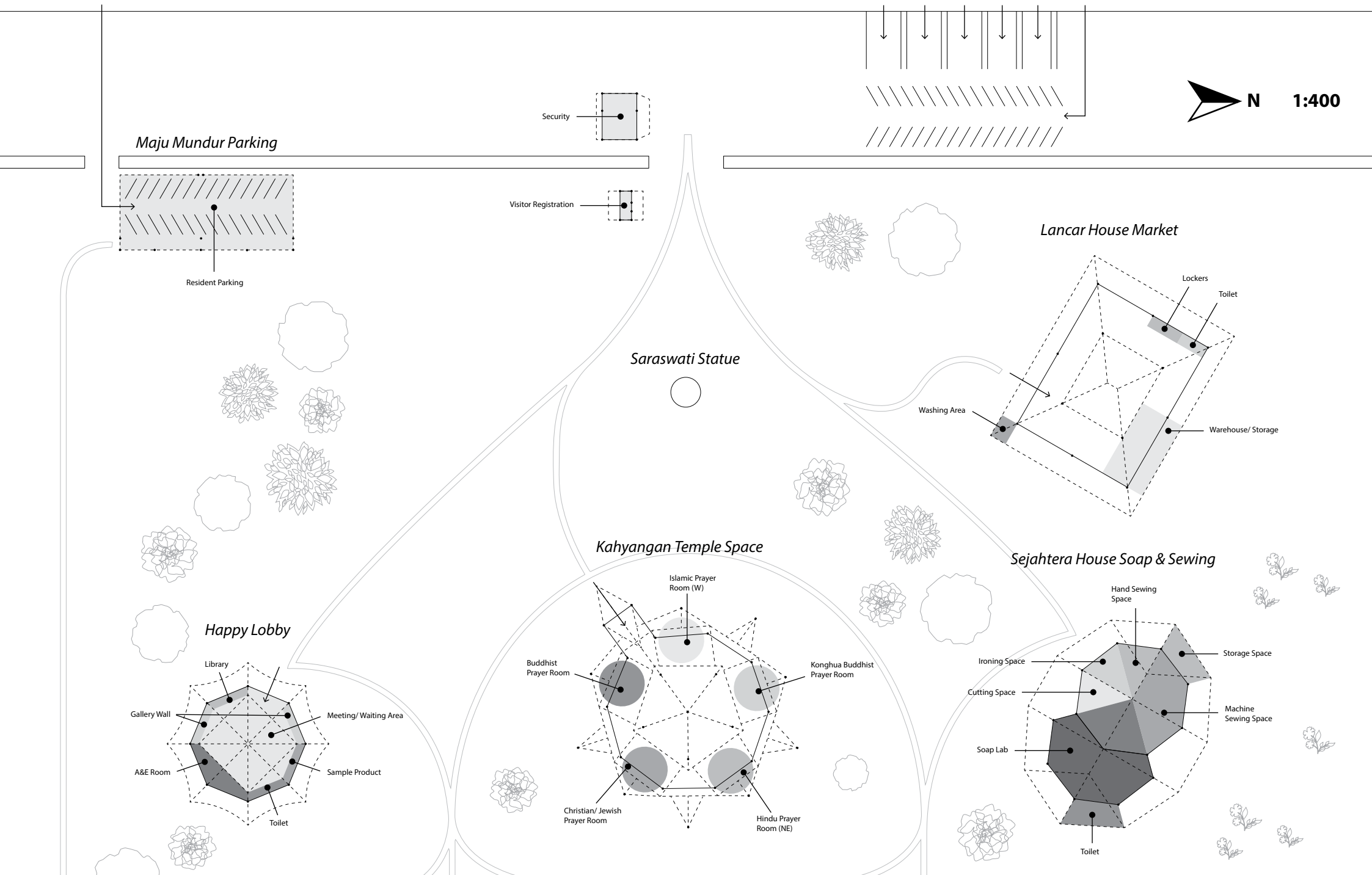
Material: Wood and Earth Bag
Style: A combination of traditional and modern style
Size: Circular building around 10m diameter
Other considerations: It requires space for chairs and tables, product displays, a map of the centre, information boards, a library space for book sharing, and a gallery wall with inspirational quotes. A separate accident and emergency room must be placed here for treatment and easy access.

12. Mini-Market

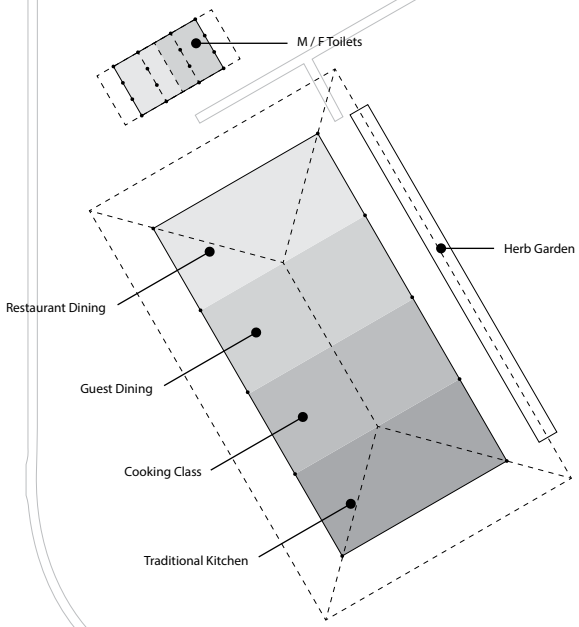
Material: Wood
Style: A combination of traditional and modern style
Size: Circular building around 10m diameter
Other considerations: The building is an open Joglo style similar to a traditional Balinese/ Indonesian night-market, with open space where vendors can pitch their food stalls. It requires toilets, sinks, and electric plugs in every pillar.

A project plan is provided below in 1:400 scale (printed on A4 paper). We have created this plan by sharing experiences and knowledge with an international researcher and local Indonesian architects. We made our own bamboo machetes of the future PKP buildings in 1:100 scale, mapped out how each building will be used in the future, and how all of the buildings connect to one another. Our project plan is based on our dream land that is flat that contains a variety of natural trees such as banana leaf and mixed fruits, has a river, and has road access.

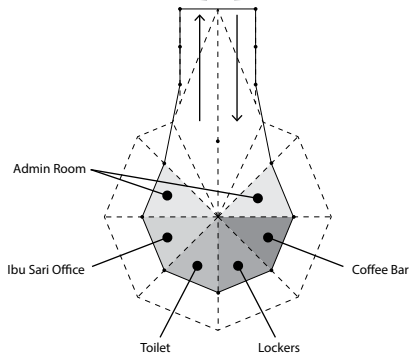
PKP Community Centre Project Plan



Mesari Kitchen

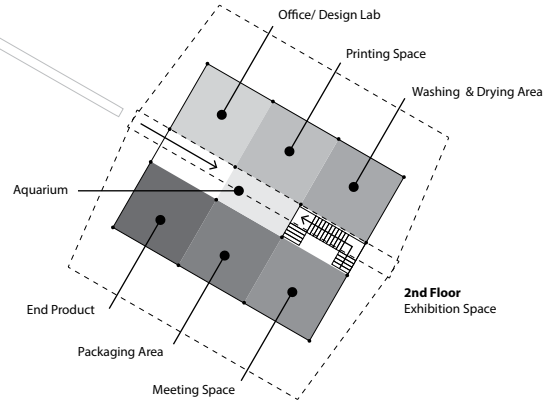


Mandala Office

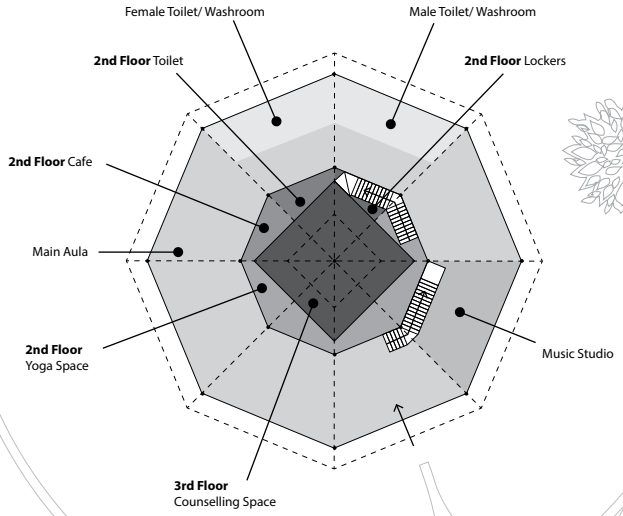


Plants

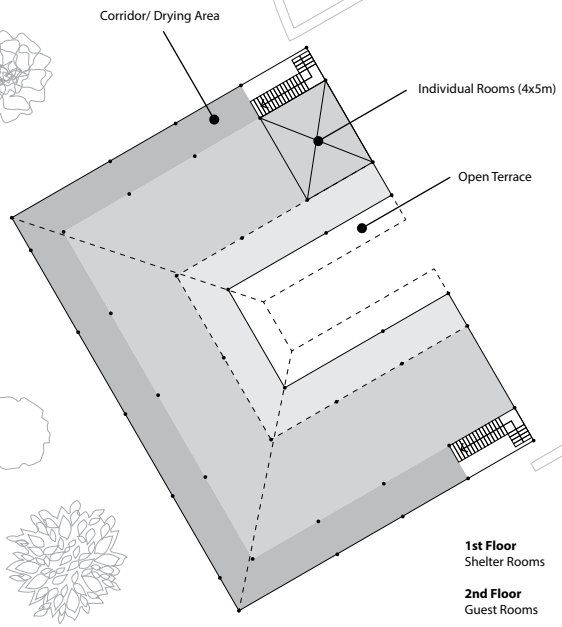
Narasa Screen Printing



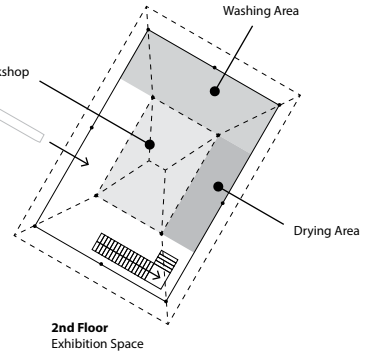
Yoga Shala-lala



Republik Shelter & Guesthouse

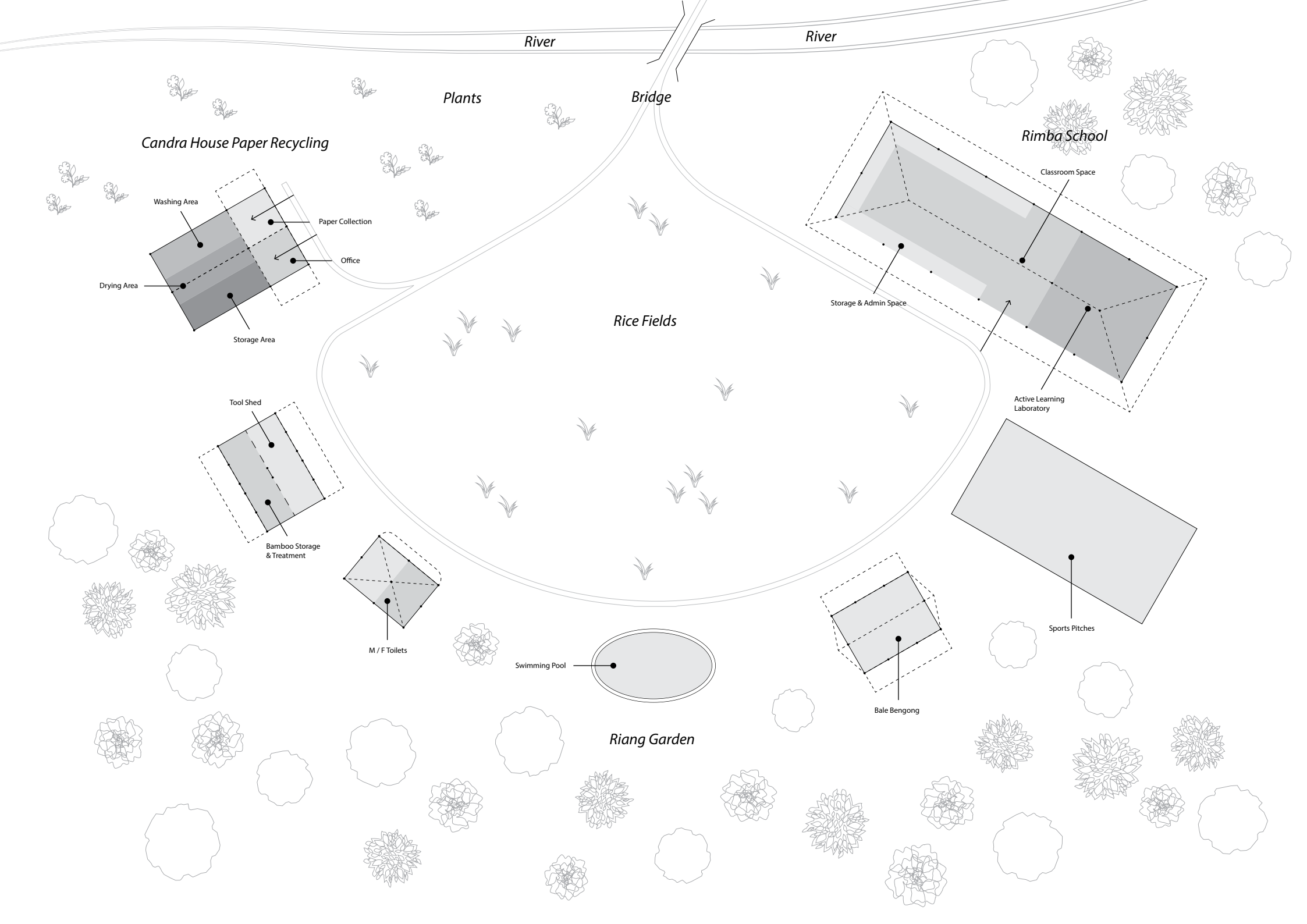


Kakang House Batik



Fish & Aquaponics

Rice Fields


River
River
Plants
Bridge
Candra House Paper Recycling
Washing Area
Paper Collection
Office
Drying Area
Storage Area
Rimba School
Classroom Space
Storage & Admin Space
Active Learning
Laboratory
Rice Fields
Tool Shed
Bamboo Storage
& Treatment
M / F Toilets
Swimming Pool
Sports Pitches
Bale Bengong
Riang Garden

Supplementary Information:

The following section is written in English (UK) by architectural researcher Alastair Brook, who co-produced this brief with the PKP community. Each building described in the brief has been 'inhabited' by the stories of transformation told by the PKP community (see the architectural charge). Each community member has described how they want each building to be used based on these stories. These descriptions suggest ways in which the future architecture of the PKP "Bale Tong Tong" Community Centre can be responsible to the PKP community, and provide a template for future design development that might better meet their needs. The PKP community's descriptions for the kitchen, shelter, garden, school, paper recycling space, studios (batik and screen printing), soap and sewing production spaces, yoga shala, and market have been summarised below. These are 'summary translations', which mean that they refer directly to what the community members have said out loud, with minor alterations made for coherency and contextual information. This means that some sections may refer to 'she', 'he', 'they' (or variations) that represent the community member speaking.

Mesari Kitchen

Masari Kitchen = Fortune (Kitchen of Fortune) As a verb, *Masari* means 'containing essence' very similar to the *mandala* concept.

Space zoned into 4 main areas.

1. Traditional kitchen with Kayu Bakar (wood fire) in the South West corner with a chimney.
2. Cooking class area with 4 modern fires, and students can also learn to make oil etc. using traditional wood fire.
3. Area for students/ guests to eat at a long table.
4. Restaurant seating for all guests with mixed seating.

Toilet is separate outside the building in Southwest corner.

The chimney is needed to help reduce the smoke and ash being deposited over people and equipment. The *Kayu Bakar* is in the South West corner, separated from the other stoves along the Southern boundary. All stoves must be placed in the South of a property because of God Brahma, god of fire. Ash from the firewood is needed for the land all around (returning the wood to the earth from the *Asta Kosala Kosali*); ash is collected and used to sustain the plant life (herbs, medicines, or vegetable/ fruits in the garden). She loves the wood fire; every day she must light the wood fire to feel happy (connecting to the priority of wood fire in the *Asta Kosala Kosali*)

During the initial 'Think with Things' models, tensions between organic and inorganic rubbish were expressed. Having a dedicated waste system and waste bins throughout each zone resolves this.

Sinks placed in each zone allows for efficient washing of equipment. Currently, one sink is too small to hold all the equipment and a second sink is too far away from the kitchen. Sinks are also to maintain staff and guest hygiene- washing hands and face.

Management (Storage and placement of equipment and furniture) creates bad circulation and use of space, so the zoning and storage systems allow for a better managed space with better use paths and human circulation through the space (harmonising microcosm and macrocosm).

One oven is placed in the traditional kitchen which is used mostly for drying leaves etc. to create herbal tea and medicines; shifting the focus from economic capitalism to matristic care and holistic wellbeing. It will occasionally be used to make *Tlompokan* (rice shapes). Intensive rice shape production was a symptom of the pandemic, where income was desperately needed and sponsors donated ovens to help. The team got caught in a cycle of requirement, where rice shape is ordered every day for daily ceremonial offerings, requiring them to constantly be working 24 hours a day to watch over the ovens and stop accidents. She still wants to make rice shapes occasionally to maintain her relationship with god.

The medicine/ herb garden is placed along the North/ North East boundary and is used every day for a variety of things; if staff cut their hand, guests have stomach problems, etc. there are many natural remedies for first aid. This knowledge is ancestral heritage, passed down from grandparents, connecting to past generations. The herbs are also used in offerings and ceremonies to the gods (pandan leaf, turmeric etc.)

Everything is represented as a cycle of reincarnation- everything that contains a spirit (including the building) creates a connection between god, nature, and humanity (the *Tri Hita Karana*) through the cycles of reincarnation.

Republik Shelter

Originally called the 'White House' pavilion, later renamed 'Republik Shelter'; the white house references the political aspect of the PKP Community Centre and reframes the power dynamic whereby marginalised individuals who have experienced trauma are empowered to lead their own life (and, sometimes, lead their community) away from systemic oppressions.

The first floor is for guests of the shelter and the second floor is for guests (local and international). Each room has its own terrace, laundry drying area, bed, toilet, and small kitchen, including a secluded communal courtyard with plants, a water feature, and a statue.

This creates a more prominent division between private and public spaces for the safety and wellbeing of shelter members. The Shelter itself is divided into 2 zones, with the expanded Community Centre creating a 3rd zone, where shelter members have 1) private space in their rooms with all the amenities they require, 2) a semi-public space where they can engage with other shelter members on their terrace, other local or international guests, and 3) a public space where they can engage with guests in the Kitchen space or with wider visitors across the different buildings and social enterprises at the Centre. This

provides some autonomy in the use of space and in the developmental growth of inhabitants by a) imagining an improved quality of life through individual reflection and targeted engagements with others, and b) working towards that improved quality of life through community integration.

All shelter members have their own dedicated parking area with a private pathway (secluded behind the kitchen and garden foliage) that leads to the shelter.

Riang Garden

Riang Garden- meaning nice or beautiful, (as well as happy or cheerful).

The main thing in the garden is the water tanks (located next to the river and one on the opposite side of the garden next to the storage/ workshop to collect rainwater. These are connected by pipes and taps across the garden. There is a swimming pool in the centre.

Electricity is also important.

One main building is the Bale Bengong close to the river. It provides shelter for everyone in the rainy season or a place to gather, think, and discuss in the dry season.

The garden also has two toilets complete with 'western' toilet, sinks, and electricity.

The garden also has storage facility and workshop (mostly for bamboo treatment and other building related materials; earth, clay, stone, etc.) within the same building, which will help to maintain and add to the land and buildings in a sustainable and local process. This will help to resolve tensions around damaged/ lost equipment, tensions surrounding the extraction of materials, and tensions around land erosion.

The garden contains many plants categorised into groups such as medicine plants, vegetables, flowers etc. There will also be rice fields connected to local *subak*.

There is also a space for all the livestock close to the storage/ workshop.

There are two water tanks, one from the spring water that is for drinking or washing stuff during garden activities. The second one is water from the stream, but if there is no stream then it will be from the well (from aquifers). A hydropower system will be used to create and store electricity from the flow of the stream.

Flat land (landscaping) means there is no need for big trees to stop erosion, but if the land has a slope then big trees will need to be planted surrounding the land to ensure minimal erosion.

Pathways will be permeable, possible from terracotta tiles to create a patterned grippable surface to allow excess water run-off. Gutters and drainage systems will eventually be installed alongside the path to direct and even store excess run-off to supply the rice fields (if droughts with the *subak*). This combines with the water tank at the storage/ workshop space that collects rainwater during the wet season.

Rimba School

Rimba school, or 'jungle school'.

Outside area with a garden that provides natural materials for active learning experiments; i.e. for natural models, chemical reactions etc. Outside area includes sensory stimulation area/ playground that includes a tree swing, seesaw, and an obstacle course.

The open class space is divided into 2 main zones separated by a half-wall divider that spans half of the building width. One zone is an active learning 'laboratory' for experiments etc, whilst the other is normal classroom space using whiteboards and books. Surrounding the outer boundaries of the classroom space is admin and storage, including teachers' desk, individual storage for each student, bookcase etc.

The active learning area has a centralised table and space to sit either on chairs or the floor surrounding it- creating a spatial orientation that suggests equality between all students and student/ teacher.

Two toilets outside where children can learn to divide themselves and respect each other in a self-led way; in most non-touristic areas, toilets are rarely gendered despite the strong cultural/ religious segregation of gender roles and slow acceptance of non-traditional genders or sexual orientations- so this provides opportunities for students to learn, understand, and respect each other's differing genders. Simultaneously, it defines binaries that may not be true to all.

The building's boundary is a low wall, with no further curtain or window. This allows children to engage with nature and learn how to not get distracted easily by external stimulus.

The building creates spatial zones without using many physical divisions, and without dividing special needs and 'regular' students.

Candra House Paper Recycling Space

Two entrances, one into an office and one into the main paper recycling space; containing storage, washing area, and have glass walls/ roof combined with terracotta bricks and air con to help maintain the correct temperature and humidity for drying the paper. The glass roof helps dry using natural solar heat, whilst solar panels will generate electricity for the air con. He must still keep an eye on the paper to make sure the process is not disrupted by changes in temperature or humidity.

He will avoid planting big trees around the space but keep small planting small foliage, so that it remains close to nature but is not shaded from the sun.

Narasa Screen Printing Studio & Kakang House Batik Studio

This Studio is split into 2 buildings: The 'Narasa Screen Printing Studio' (Narasa meaning 'narrative' or 'story') and the 'Kakang House Batik Studio' (Kakang meaning 'brother', evoking sentiments of family).

Both buildings are surrounded by aquaponic fish ponds (similar to the Sawah Tambak Rice-Fish Aquaculture of Java, where fish and rice are grown together in a mutually beneficial ecosystem).

Screen printing has a central entrance onto the first/ ground floor, which is subdivided into spaces based on the narrative of screen printing. Moving clockwise from the left of the entranceway we have; the first space is a design studio/ office, the second is the production area, the third is the washing/ drying area, the fourth is a small meeting space for internal team or guests, fifth space is the packaging area, and the sixth and final space is the display and storage of products. In the middle of the room is an aquaponics/ aquarium so that everyone can be immersed into the natural ecosystem of the screen printing space as well as feel like they are 'diving'- it is a metaphor for people to reflect and consider how to dive deeper into themselves. Upstairs there is a gallery or exhibition space, as well as an art space/ workshop space for visitors. It is a combination of glass and bamboo.

The Batik Studio is designed in Joglo style, a traditional Javanese construction that has a type of Mansard roof (that slopes in all four directions from a small ridge, with a break in the middle; the highest slope has the steepest angle). It has a sliding door entrance made of glass. There is a central workshop space directly below the steepest section of the roof. The classes help attendees explore themselves through the Batik designs, a form of art therapy that considers the Batik pattern as a reflection of the human life journey. There is a washing area to one side and a drying area towards the rear boundary. There is a small second floor/ rooftop with a mini-gallery for the Batik art and paintings, including a balcony looking out over the surrounding nature which includes plants used for natural dyes and with medicinal purposes (i.e. relaxing smells).

Sejahtera Soap and Sewing Production

First named 'Dewi Kunti'' building. Dewi Kunti is described by the participant as representing a strong mother in a mytho-historical epic (Mahabharata), who had 5 children and dealt with many challenges in her life. This also represents the person who has a strong power to be listened to by others. Dewi Kunti is also the archetype of female chastity because of a chastity curse put on her by her husband. She overcame the curse by reciting a mantra that would allow her to have children, but only male heirs. She is one of the "five maidens" whose names are said as a mantra to dispel sin. Later this was renamed Sejahtera, meaning 'safe' or 'prosperous'.

The building is ovular with 2 zoned spaces inside- One circular space with an adjoining semi-circular space with the same radius. The roof will include skylights to avoid any humidity.

The larger circular space is for sewing. It is open using bamboo construction. The circular design of the sewing space represents equality, because the sewing space will have a centralised table around which everyone can sit and work, talk, and see each other's work. Guests can also sit at this table and engage with the community members. It is like a mirror, so each person can see themselves in others, and the otherness in themselves. "If I see someone working there, how does it feel when I see this group in front of me?"

The smaller semi-circular space is for soap production- also called a 'mini laboratory'. This is enclosed for hygiene purposes. The lower half of the wall is constructed using earthbag (long bags, roughly 50cm diameter and many metres long- filled with compressed earth, and stacked on top of each other to produce walls in a method similar to coiling in pottery or more contemporary 3D printed buildings), which helps maintain temperature and humidity. The upper half of the walls will be constructed from glass panelling to represent transparency and equality.

The construction considers the 4Rs; rethink (what we produce and consume), reduce, recycle, and reuse.

The building is surrounded by plants and flowers than can be used within sewing or soap production (for dying, scents etc.) and to make the space smell nice all the time.

Yoga Shala-lala & Lancar House Market

The Warung is divided into two buildings- a yoga shala that includes an open aula meeting space and private counselling/ wellbeing spaces as well as a music studio, and a separate food market building that will act as a 'night market' and mini-mart.

The Yoga Shala is called 'Yoga Shala-la-la-la" because it contains the music studio as well. It is a large circular building, with three floors that each get smaller in diameter. The first floor houses the aula and music studio, the second floor as the yoga studio (and small cafe space), and the third floor is the counselling space.

Outside the entrance is an area to remove shoes. The first floor contains a large toilet space and washing areas. The aula can be used for large events and discussions, with a maximum capacity of 200 people.

The second floor is a yoga space which includes storage for equipment and an area with tables for guests who want food.

The third floor contains a counselling space with two small 'bedrooms' for holistic healing, postnatal rest, or general sleep. This space protects individuals from any shame or trauma as they explore their personal journeys, providing protection in a similar way to the physical and spiritual protection of children.

The Yoga Shala is surrounded by a garden (with a few larger trees to help with shade) and rice fields.

The Market, named 'Lancar House', 'Lancar' meaning fluent, smooth, or quick- like "quick food market" or equivalent to 'fast-food'.

It is a large open space in a Joglo style, with one and a half bounded by a full height, semi-open, wall. A 'night market' has semi-permanent and temporary food vendors who have various types of food trucks. The space must include electricity and plug sockets for vendors to hook up to, as well as having storage spaces, lockers, toilets, and washing areas for both vendors and guests. The original *warung pondok* is a small, intimate space that needed to be divided up between different people to stop everyone being on top of each other; but the new Market expands into a large public space with no real divisions- marking a change in territory and openness to 'otherness'.

The largest changes in both sites are to increase the size, have open walls/ semi-open walls and permeable, fluid space for large gatherings. In both spaces, the 'corner problem' as dealt with in different ways; the Yoga Shala is circular (or octagonal) where there are no hard corners, creating a space that feels open and welcoming rather than divisive; The Yoga Shala and the Market both have open space or semi-open space (limited walls) allows the space to feel uninterrupted with nature (despite the structural columns), and provides the inhabitants with 360 degree views.

Appendix H

Evaluation Questions and Focus Group

In order to assess if, and how, Architectural Storywork could support new critical perspectives of Balinese culture within the PKP community, I asked active participant's a set of 18 evaluation questions about their experiences of the entire process. The first two questions were answered individually by eight of the nine active participants, whilst the remaining questions were answered collectively by six of the nine active participants.

Q1. Do you think that the activities we have done together over the last year have given you the knowledge to:

- Understand your relationships with the PKP buildings better?
- Recognise any negative experiences or tensions you face in these buildings?
- Think about the changes you want to make to these buildings?
- Create an architectural brief for a new PKP Community Centre?

Q2. Do you think you could have created an architectural brief without doing these activities? If so, how would you have created it differently? Which way is better in your opinion? (Change to question: how would you make this brief differently? Or how would you change how to make this brief?)

Additional Question: What would you have done differently or changed about the activities (to make them better)?

Q3. What benefits, if any, have you gained from doing these activities?

Q4. Do you think that these activities included Balinese cultural principles (like the *Tri Hita Karana*) and the PKP community rules (like the 3 Es)?

Q5. Do you think that Balinese cultural principles or the PKP community rules have helped you to:

- Write about your experience of architecture as stories?
- Make positive changes to your experiences of architecture?

Q6. Do you think that Alastair has accurately connected your personal experiences to wider social, cultural, spiritual, or historical stories of Bali (cultural principles like *Tri Hita Karana*, references to gods and goddesses, ideas of Land and spirits etc.)? Why or why not?

Q7. What do you think that Alastair could have done differently to better connect your personal experiences to wider social, cultural, spiritual, or historical stories of Bali?

Q8. Do you think that the knowledge you have gained from these activities will help you to work with architects in the future? Why/ why not?

Q9. Having talked to architects, do you feel confident that they will work closely with you in the future to build your ideas? Why/ why not?

Q10. Do you think that the knowledge you have gained from these activities could help create social change in the community?

Q11. Do you think that Alastair has treated the information you shared with respect and reverence? Why or why not?

Q12. Do you think that Alastair has correctly understood the hidden meanings within your experiences?

Q13. Do you think Alastair accurately described the settings, events, and characters from your experiences?

Q14. Is there anything you think Alastair missed when describing these settings, events, and characters?

Q15. Do you agree or disagree with the way Alastair has described the settings, events, and characters? Why?

Q16. What would you change about the way these settings, events, and characters are described? Why?

Q17. Was there anything new you learnt from reading Alastair's description of settings, events, and characters? If so, what?

Q18. What do you think that Alastair could have done differently to understand your personal experiences better?

All answers are given through a Facilitator/ Translator unless marked with an asterisk, then answers are given in English by the participant. Transcripts of these answers can be found below.

Questions 1 and 2 were answered individually by 8 of the 9 participants who participated in the final workshops, in a group setting.

Q1: Do you think that the activities we have done together over the last year have given you the knowledge to:

- Understand your relationships with the PKP buildings better?
- Recognise any negative experiences or tensions you face in these buildings?
- Think about the changes you want to make to these buildings?
- Create an architectural brief for a new PKP Community Centre?

Q2: Do you think you could have created an architectural brief without doing these activities? If so, how would you have created it differently? Which way is better in your opinion? (Change to question: how would you make this brief differently? Or how would you change how to make this brief?)

Additional Question: What would you have done differently or changed about the activities (to make them better)?

P10	1.1.	Yes / it gives me / er / a new knowledge / erm / so I can see the building at the moment //
	1.2.	Which are the buildings are too small / and many roof leaking / as well as the animal area / still together with the other buildings / and its surrounding with many big trees //
AB	2.1.	And would you have noticed this before doing these activities or you only found this out through them?
P10	3.1.	No / she didn't notice / (everyone laughs because of the way P10 replies) //
	3.2.	She said no / she didn't notice before //
Short discussion on the format of the answers and if the participants should explain all their answers, because P10's answered the questions "all at once".		
AB	4.1.	Do you think the activities helped you create this architectural brief?
P10	5.1.	Yes and No //
P10*	6.1.	Yes / No / [the answer is Yes] //
I suggest that we combine Q 1 and 2 together for each participant as they relate to one another and could be voiced together.		
P10	7.1.	I didn't understand before //
AB	8.1.	And do you understand now?
P10	9.1.	Yeah / a little bit /
AB	10.1.	Do you think you could do it again?

P10	11.1.	She has a general frame[work] of doing / of creating the architecture //
IS	12.1.	There is no different answer [between P6 and P10].
P6	13.1.	So / I didn't understand about architecture / so I didn't able to create brief //
AB	14.1.	So / the answers before are the same about the trees and everything in one area?
I suggest that an additional question can be asked, to see if the participants think they could have created an architectural brief in a different way before. I offered some prompts including: not having such long gaps between activities, or changing the remote activities to be in person, or the activities don't need to be so focus on storytelling, or if they wanted to still focus on storytelling they did not have to be visual or written, but can be oral or other mediums like dance etc,		
P6	15.1.	No / I wouldn't be able to do any different on my own / before join[ing] these activities //
	15.2.	So / she said no / I have no idea to make it different //
	15.3.	She prefer to practise more / like kinesthetic //
AB	16.1.	Like / iterative / like you do it many times through trial and error and improve each time?
P6	17.1.	So / direct to drawing / for example / instead of writing /
	17.2.	This is what she mention from the first activities / she prefer to just drawing / instead of writing //
AB	18.1.	Okay / so the 'like/dislike' table and things?
	18.2.	But you like drawing the space and the character and things?
P6	19.1.	Yes //
AB	20.1.	Was that not more difficult / because I wasn't here to help explain?
P6	21.1.	So / she prefer direct to the building //

AB	22.1.	Do you think you could have gone straight to the building without doing everything else first?
P6	23.1.	No //
AB	24.1.	So the first bit [the writing parts of mixed media studies in the remote activities, which are outside of the Participant's comfort zones in terms of vocalising and articulating through writing] was not that enjoyable / but without doing that you don't think you could have gotten to the building?
P6	25.1.	Yeah / (everyone laughs) //
AB	26.1	So / it was good to do the hard stuff?
P6	27.1.	Yes //
P21 joined the workshops late in the final phase, as previous participants who studied the shelter (arguably one of the most important space) were no longer with the PKP Community Centre. P21 was not able to do all the previous activities as part of the research process which required intensive analysis, but was able to do them in his own time to gain similar understandings of the activities as the other participants. P21's answers were often short due to this, although Ibu Sari did comment that P21 had progressed a long way in their personal development, social skills, and general engagement over the activities that he engaged in.		
P21	28.1.	[Lists negative experiences of the buildings] / So / not all building placed in one space / one area / so it's separated //
	28.2.	Okay / attention also / not really good team work in each building //
	28.3.	Okay / so / leaking //
	28.4.	So / I have no idea / I won't be able to make it different before I joined these activities //
P8	29.1.	So/ the answer from P8 is yes / overall / and he wouldn't imagine to make a brief architectural before these activities //

	29.2.	And / he also mention / that he prefer work together during the activities / both the first and the second / and that would be better if he could go back again to the activities //
	29.3.	And then / with the building //
	29.4.	To make the area wider //
	29.5.	Okay / make it bigger to be able to welcome more guests to the centre //
	29.6.	I think this is everyone's wish //
AB	30.1.	From my observations, I agree that doing the activities as a group from the beginning would have worked better if it was possible.
P3*	31.1.	No / I cannot make any brief architectural before //
	31.2.	I don't have skill about that / and my head blank before you come here //
	31.3.	I don't know about building / I don't know about feeling //
AB	32.1.	But / all of that was already there / you just needed to see it / right?
	32.2.	It wasn't that you didn't understand or didnt know / nobody asked you the right question //
P3*	33.1.	No one asking about that //
	33.2.	I know in my heart / and I feel that / but no one ever ask //
P3	34.1.	I wouldn't change anything / if I would go back again to the first activities or the second activities //
	34.2.	It was just because we couldn't understand / I couldn't understand at the beginning / but then in the end / I do understand overall the activities //
	34.3	So / which / has supposed to be that journey //
AB	35.1.	So when did you understand the reasoning for the first activities / was it when you were first doing them or only now at the end?

P3	36.1.	Number 1 / Number 2 / no understand //
	36.2.	Number 3 / Understand //
AB	37.1.	So / you still don't understand why we did Activities 1 and 2?
P3	38.1.	Yeah //
AB	39.1.	Oh / you do now?
	39.2.	So / it took you until now to understand / looking back?
P3	40.1.	So she understand / finally / after the third activities / to understand the first and the second //
AB	41.1.	I think this is because we [Ibu Sari, myself, and the Participants] were developing them as we went along //
	41.2.	Do you think it would be good in the future to have a roadmap / for explaining the whole process at the start?
	42.3.	We couldn't do that now / because we didn't know exactly //
P3	43.1.	Yes //
	43.2.	Okay / the roadmap would be helpful //
AB	44.1.	So / I did send something (Fig 6.2 Discursive Data Collection Guide) / but it was not so detailed with information //
P3	45.1.	So / P3 mention that what you have done / is done very well //
	45.2.	It's just us / wouldn't able to understand earlier / not as quick as we expected //
	45.3.	So P3 wouldn't be able to make any brief architecture before experience these activities //
AB	46.1.	You mentioned how it was more difficult for you to understand the first two activities until later / is there anything else / apart from the roadmap / is there any way that those could be better presented so that you can understand them?

P3	47.1.	So / I think the translator could be better / next time //
	47.2.	Not relating to what you have done / just the translator to explain //
AB	48.1.	Could it also be the language?
	48.2.	I don't just mean English to Indonesian / but / coming from my background / even though I try in many places to be as clear as possible / I have a very academic language?
P3	49.1.	So / there is nothing that needs to be changed / just that too many works / too much works happening at the same time //
	49.2.	Its well done //
AB	50.1.	I know that you can all understand the concepts within it [the research] / there is no doubt about that / it is just / if the way that I tried to explain them is good enough or not //
IS	51.1.	[Everyone says "Bagus" - meaning "Good"]
AB	52.2.	Do you think if / instead of having all the workshop activities spread out over so long / if it was compressed and we did everything in / like / a month / making a specific time for everything / if this would be better?
A few participants discuss this idea together for a few minutes.		
IS	53.1.	It doesn't affect / it doesn't affect the time / the limit time [time limit] //
AB	54.1.	Does everyone else agree?
IS	55.1.	Everyone agree / (everyone laughing) //
	55.2.	It doesn't matter the time / as long as everyone understands //
P2	56.1.	So / the overall answer is yes //

	56.2.	And / what would be better to change / actually / not really change / it is good what you've done / to repeat the explanation many times / more often / to understand and deliver the question //
AB	57.1.	Like / reframing the questions in different ways?
P2	58.1.	Yes //
	58.2.	[Listing negative experiences of buildings] / Mixed buildings / separated //
	58.3	Worries / because it not belong to PKP / the land not belong to PKP / and the legacy [of PKP] //
P3*	59.1.	[P3 makes a pig squealing noise] //
IS	60.1.	This is for the example / one building / many chaos / many things happening //
P3*	61.1.	And / over there [points to pig enclosure a few metres away and repeats pig squealing noise] (all laughs) //
AB	62.1.	So you don't think you could have made an architectural brief before? [In all the noise and through translating, sometimes answers are missed]
P2	63.1.	The answer is no //
	63.2.	It is important to recognise the tensions / the negative feelings in the building / to be able to move forward with a new building //
P18	64.1.	This is my first time experience [experiencing] architecture activities / things //
	64.2.	It would be better to do the activities together / instead separately / individually //
AB	65.1.	Do you mean / as a group instead of individual people [i.e. individual activities but in a group setting like this] or do you mean all the eight activities?
P18	66.1.	So yes / stay with the individual activities / but do it together / like in one space //
AB	67.1.	But / time wise / together as well / or its okay that they were separated over a longer period?

P18	68.1	So / it doesn't matter the time / short or long term / as long as… //
	68.2.	With the main reason / easier to ask amongst the team / if one or two person doesn't understand / the question or the overall activities //
AB	69.1.	One of the reasons that some activities were more individual / is so that people can explore some of the individual [personal] things that they might not always want to share //
	69.2.	And it was asked after that they could share them if they wanted / but they didn't have to share everything //
	69.3.	Do you think that might be an issues / that if everyone was together thinking about how spaces affect them negatively / that there is trauma or anything / that they might find it more difficult to be honest?
P18	70.1.	Yeah / so / it's actually already done very well / individuals and groups / because it is giving privacy as well / for individuals to explore themselves without anyone seeing / erm / what they feel and things //
AB	71.1.	But I also understand your comments / so I wondered is there a way you think they could merged / how would you imagine doing it as a group to keep privacy?
P18	72.1.	So / not far from one area / but individuals could find their own little space / in the corner / or in the garden / or in the kitchen / something like that //
	72.2.	So / still individuals have their own privacy / but they are not sure about something they can easily get access to ask others //
AB	73.1.	This might be easier in some other locations where buildings are together / but the PKP buildings are far apart //
	73.2.	Some of the first activities required you to be thinking about and drawing / and mapping / the building //
	73.3.	I'm wondering / how you think about that / do you think that you need to be in the building to think about it / is it better to be inside?

P18	74.1.	Yeah / so he could understand the reason why it's put separately / because at the moment the current building are separated / so in the future of course one building separated / but still in open area //
P8	75.1.	[Listing negative experiences of the building] Many miscommunication / many misunderstanding //
	75.2.	So / the future wish / similar like others / having each space for each activities / and the land owned by us //
P19	76.1.	So / yes / I'm getting more understand / getting closer to understand more about the building //
	76.2.	It influence our mental / body and mind //
	76.3.	[Listing negative experiences of the building] / Small space //
	76.4.	Need cycles / good cycles / when working at the space //
	76.5.	So / at the current space / not possible to maximise the work //
	76.6.	But / with the knowledge that you bring to this architectural story and design / it helps P19 to be able to create something new / create a good energy / temporary at this space / even though it is inconvenience / or not comfortable / but he able to balance that energy cycles at the moment in this current space //
AB	77.1.	So the cycles in the space is between positive and negative energy?
P19	78.1.	Yes //
	78.2.	[Using bamboo model to describe the changes he wants to make to increase positive energy] So / two floors //
	78.3.	Bigger space / divided //
	78.4.	The new space is the overall story of the printing studio / where visitors / or people / outsider / can see the overall process from A to Z / in this building / including the end products //

	78.5.	So / P19 would imagine to build something / to have a brief architecture before these activities / but its unstructured and got so much distraction / all the time //
	78.6.	So / this knowledge is lead him to really have the overall result / from the beginning to the end //
	78.7.	And / especially for him as a graphic designer / it is really good for him to have this knowledge //
	78.8.	So / what you have given / has been done very well / according to P19 / it is just about the details / just need to explain more / similar like reframe the explanation //
	78.9.	More effective if you are using picture / like the second activities // [from the second activities onwards I was on-site and able to reframe questions, provide visual examples, and adapt the method of data collection to suit very easily and quickly- which was harder and longer to achieve in the remote activity workshops, hindered by time differences, work schedules, internet etc.]
AB	79.1.	The only question is related to the change you want to make [in the building] / and how this is like a story of the production //
	79.2.	Do you think that the story we have done here [the final workshop] has influenced that idea or not?
P19	80.1.	Yes / it is good guidance //
	80.2.	Imagination align //
	80.3.	So / this [stories made] very helpful to guide the imagination to be aligned / not got any distraction //
AB	81.1.	[Reframing the question] In the explanation / you explain that the building telling the story of the screen printing process / and I wondered if that had any connection to us telling stories about the experience in the building?
	81.2.	Did doing those stories make you think about doing this building like a story or did you have that idea before?

P19*	82.1.	Yes / Yes / Yes / Yes //
AB	83.1.	You can say no //
P19	84.1.	It gives a big impact / from that story [final lontar workshop] / to put in place in the model //
P19	85.1.	I can see from the stories about the higher level and the 'diving down' [in the model] //
P11	86.1.	[Listing the negative experiences of the building] / So / I can recognise that so messy / and some stuff not supposed to be / is there //
	86.2.	So / that is the tension and the negative experience / events happening //
	86.3	Okay / so the proportion of the space //
	86.4	[Describing changes they made using their model] / So / still with simple building /
	86.5	There is a small office //
	86.7.	Glass roof / glass roof can be multifunction / besides roof it can be dry space for the paper recycle //
	86.8	The sink //
	86.9	Air con / so / all glass / but with air con //
IS	87.1.	I can imagine a little bit like here [the 'White House'] //
P11	88.1.	So / to avoid all the roosters / dogs / and everything / so why glass roof / it is direct sun / so it can be dry inside of the building //
	88.2.	The roof of this space / if possible / using solar panels / so not take any electric from anywhere //
AB	89.1.	Is the air con to keep a certain temperature for the process?
P11	90.1.	Oh / three air con //
AB	91.1.	It is needed to keep a certain temperature?

P11	92.1.	Yes //
	92.2.	Of course I am not able to make this without these activities / that is his answer //
AB	93.1.	And all of the activities leading up to understanding what you need from this space / or?
P11	94.1.	Yeah //
	94.2.	Yes / both the first phase activities and second phase activities / help him a lot to be able to make this visible to see //
	94.3.	Okay / he say it has been really structure[d] / so I wouldn't change anything //
AB	95.1.	So changes to timing or anything?
IS	96.1	No / this is what he means by structure //

Questions 3 to 18 were answered as a group by 6 of the 9 participants who participated in the final workshops. Only a few were vocal throughout, with most agreeing to their comments.

Q3: What benefits, if any, have you gained from doing these activities?

P19	1.1	So / the benefits I get is having a new knowledge of architecture /
	1.2.	And in the future it will be easier for me to share my ideas of architecture through the psychologist [psychological] side relating to the building //
AB	2.1.	Maybe / at the same time / if there are any disadvantages or negative impacts from the activities / they can share those //
P19	3.1.	So / P19 mentioned the negative impact overall from these activities / is not really relating to what has been done / but is / … / erm / not as good as those people who are studying academic / of course //
	3.2.	If we look at the two sides / from us and those people / it is not really a negative impact actually //

AB	4.1.	So / what you feel you have achieved is not to the same level / or your knowledge is not to the same level as academics //
P19	5.1.	So / one example / I don't know the strength as the bamboo yet / not as much as those people who are knowledgeable //
AB	6.1.	So / as well as inviting architects to discuss these kind of situations / it is maybe better for communities [if you do this again or if other communities do these activities] / to have a much longer period to understand the materials / so they could do a bamboo architecture course for one or two weeks / or something //
	6.2.	Would that help / because of course there is a gap in the knowledge but it is the circumstances and situation / and bridging that as much as possible //
P19	7.1.	Of course / to understand more //
P18	8.1.	Yeah / a little bit similar like P19 / by having this knowledge it is really give a good benefits for me / because then I understand the step by step of architecture //
	8.2.	I understand my feeling as well that I need to put in that building //
	8.3.	The overall benefits I get is / I can see clearly the correlation between me as a human being and the building //
	8.4.	So I can explore more about myself / about what space I would like to create //
AB	9.1.	Any negatives?
P18	10.1.	No / I don't think there is any negativity / no negative impact //
	10.2.	So / the overall things of the activity / there is no negative impact / just feeling sleepy / (laughing) //
	10.3.	Not because of the activities themselves / it is because too much things also going on outside //

AB	11.1.	Is there any way you think the activities could be woven better into daily life / so that its not taking away from lots of other things / or is there no way to balance this //
	11.2.	Is there a way you think you could balance this?
P18	12.1.	So / by having the vision / by keeping the dreaming about having this building to be placed / is balance his energy from the fatigue or tiredness //
AB	13.1.	How could that translate over to the activities in general for everybody?
	13.2.	Perhaps everybody struggles to find the focus / or the time / or energy / because of everything else in life //
	13.3.	Is there a way that these activities could be made better in a way that would balance that?
P18	14.1.	So / he was mention that it automatically fill up / the energy / recharge the energy / when doing the activities / especially this model //
	14.2.	And gives him more engagement or motivation / to make it really real //
	14.3.	So / he mention that by / having a break for a while / probably rest / or sleep / or take a nap / then it also recharge the energy to continue the work he is passionate about //
AB	15.1.	If making the models is an energy giving experience / and I can tell from other answers that writing is the opposite / is it better than the activities are visual and hands on / like we did before with the objects / and less writing?
Group discuss this together		
IS	16.1.	Only P2 loves writing / (all laughs) / the rest totally agree / using objects instead of writing / lifting the energy up / so all these kind of things not relating to the writing //
	16.2.	Yeah / because most of us / a physical / communal / er / group //

AB	17.1.	And sometimes in the past / other researchers would have worked with communities to make stories / but they would be video stories / maybe 3 to 5 minutes / 10 minutes maximum / that usually require people to have laptops and make videos //
	17.2.	But I wondered if that kind of medium would also be interesting for the team / or would they prefer hands on / drawing with their pens / or would you also like to use videos?
ALL	18.1.	Yes //
IS	19.1.	As long as it is not writing / then yes //
	19.2.	This is coming from me / from my energy //
P2	20.1.	Same like others / getting new knowledge //
	20.2.	So / in Indonesia there is no architect / mostly working just with those whoever plan the building and things / that's all //
	20.3.	There is no / any architect asking about feeling or anything / and this is something unique that you brought to the PKP Centre //
	20.4.	And / this is also guiding everyone to be smarter / creative / initiative //
	20.5.	From these activities / she also could see the difference between miniatures and this model / it is called maquette //
	20.6.	There is no negativity or negative impact / instead the opposite / full energy every time //
AB	21.1.	(Joking about the participant always saying “FINISH” loudly when they finish an activity) / Even though you are always so desperate to finish?
P2	22.1.22.2.	So / actually / it is not about the activities / it is mostly about the distraction / distraction by others asking for this and that //
	22.3.	So / [s]he has been back down to others when they don’t understand / she prefer to explain to others first //

P21	23.1.	My answer has been answered //
AB	24.1.	[Joking] Okay / so we start the next question with you //

Q4: Do you think that these activities included Balinese cultural principles (like the *Tri Hita Karana*) and the PKP community rules (like the 3 Es)?

P21	1.1.	Yes / of course / because it is relating to the Tri Hita Karana concept / by taking care / there is surrounding by nature / taking care of the nature / there are human being doing activities from many different background / also put the different religion in one space //
	1.2.	So / yes //
P19	2.1.	Yeah / so P19 adding / from the building itself / representing the Bali culture [P19, P18 and P2 are not Balinese] / from the material as well / using bamboos / surrounding by nature //
	2.2.	In synergy with human activities as well //
	2.3.	It is already balance like the swastika icon / swastika symbol //
AB	3.1.	And what about all the previous activities?
P19	4.1.	According to P19 / it has been / erm / embrace the entire culture / individual and communal //
	4.2.	As well as the principles of PKP as well / the motto “From Us to Us” also being embraced in the overall activities for the first case //
	4.3.	By guiding him to learn more about himself / and then bring the individuals roles and experience together to create something as the *banjar* or communal //
AB	5.1.	Should any specific principles be included that you think weren’t?

P19	6.1.	Yeah / the statue is more represent the community work / and also represent the principle of the entire things //
	6.2.	Did I understand the question?
AB	7.1.	In all the activities / is there an PKP principle or something cultural from Bali that should have been thought about and included when I [we] made the activities and did them with the team / that they think wasn't included?
P19	8.1.	This question might right to be asked to the Balinese community //
IS	9.1.	So maybe we can ask if there is any traditional concept that Javanese might bring?
AB	10.1.	Yes //
P2	11.1.	Building material //
P19	12.1.	So / first from the building itself / the Joglo / yes / from Java //
	12.2.	The second thing / is the communal working together / to create something / to build something together //
IS	13.1.	Both actually similar like in Bali / togetherness //
P2	14.1.	The other similar concept both Balinese community and Javanese community is the guidance / architectural guidance need to be considered //
IS	15.1.	*Asta Kosala Kosali / Tri Angga* //
	15.2.	So / they don't really know the architectural guidance in Java / but it has been guided to consider / consider what needs to be avoid[ed] or forbidden //
P2 + P19	16.1.	So / one thing they say already here / both Baliese and Java concept or building guidance / the first thing need to be placed is a stone / a stone to start building //
	16.2.	So this is what is missing / so now everyone realise //

I asked the participants to also consider previous activities we have done together. The models and PKP plan were on the table in front of us as we discussed, meaning that they were referring to these later activities more frequently than previous activities.		
P19	17.1.	The way of communication has been heritage by our ancestor / both Balinese community and Javanese community / where been forgotten for long time / that communicating your feelings / communicating your passion / exploring your passions also very important / in doing anything in our daily lives //
	17.2.	So this has been really / gives biggest impact for both from the first phase of the activities and the second [second phase covers the non-remote activities] //
AB	18.1.	Have the activities in some way given you an opportunity to feel connected with that ancestral knowledge through your own exploration of architecture?
P19	19.1.	Yes / its guiding us to connected to what has been heritage //
P18	20.1.	It was very dangerous / it has been very dangerous to forget what has been heritage / so this is good activities to lead us more connected //
AB	21.1.21.2.	This is quite nice / because now in the present you can see the future [architectural models] connected to the past [ancestral heritage] //
ALL	22.1.	Thank you so much for guiding us to remember what has been forgotten / through these activities //
AB	23.1.	It wasn't me / it was you //
IS	24.1.	Yeah / but you are the guidance //

Q5: Do you think that Balinese cultural principles or the PKP community rules have helped you to:

- Write about your experience of architecture as stories?
- Make positive changes to your experiences of architecture?

All discuss and mention they think they have answered this already. I suggest they can add to their previous answers if they like.		
IS	1.1.	I think they don't have more answer / yes it is really useful / it has benefits / the overall activities //
P18	2.1.	P18 mention that / before these activities brought here / whatever things relating to building / everyone just accepted / there is nothing special //
	2.2.	So / by having these activities / both phase / it is giving a privilege to explore / to go through the journey of pre-building / and also the end result looks of the building //
P19	3.1.	From now on / from these activities / he will be able also to see the character / the characteristic of each person who are in a certain building / when he is going out from Bali / or Payangan / he will be able to recognise "this building has this character / this energy or things" //
AB	4.1.	Does this align with the Balinese / Javanese / or PKP cultural principles that were included in the activities?
	4.2.	The first one that comes to mind is the one with the spirit being part of the building //
	4.3.	You have already said yes that there are Balinese / Javanese / PKP principles in the activities / do you think they help you understand the architecture?
IS	5.1.	Yes //
P19	6.1.	So / the differences between those people who build a building without going through all these journey of activities / it will be different feelings //

Q6: Do you think that Alastair has accurately connected your personal experiences to wider social, cultural, spiritual, or historical stories of Bali (cultural principles like *Tri Hita Karana*, gods and goddesses, ideas of Land and spirits etc.)? Why or why not?

P2	1.1.	So / yes / you have been puttings connected amongst those cultural spirits etc //

	1.2.	Including guiding us to think out / to recognise all the tension in our daily activities in a space / through the first activities and the second activities //
	1.3.	So / it is good to engage us to recognise those things //
P11	2.1.	Agrees to all //
ALL	3.1.	Agree //

Q7: What do you think that Alastair could have done differently to better connect your personal experiences to wider social, cultural, spiritual, or historical stories of Bali?

IS	1.1.	I don't think they have any ideas to do different / because it is already… //
	1.2.	There is nothing what you have done against the culture / or the principles //
	1.3	Instead / you have been helping them to guide / and letting them explore their own self / through the activities //
P2	2.1.	You are the best teacher //
A short break as I was getting emotional at the kind praise of the participants.		
AB	3.1.	I expect to get some things wrong / and I expect you to be honest about it too / so please don't just say nice things //
IS	4.1.	So they mention / it is difficult for them to find what is wrong / what is not right / because there is no wrong //
P2	5.1.	The main challenge / the main problem is the language barrier / you need to speak Indonesian better / (all laughing at the semi-joke) //
P11	6.1.	I agree with everything //

Q8: Do you think that the knowledge you have gained from these activities will help you to work with architects in the future? Why/ why not?

P19	1.1.	Yes / because / by having this knowledge since the beginning / then we could understand how to collaborate and work with architects //

Q9: Having talked to architects, do you feel confident that they will work closely with you in the future to build your ideas? Why/ why not?

P21	1.1.	Yeah *'bu* //
P19	2.1.	Yes //
P11	3.1.	Yes //
P21	4.1.	Because / we already learnt to scale //
AB	5.1.	Are there any obstacles that the team think they might still encounter when trying to work with architects / maybe that they might not want to share knowledge or something like this?
P19	6.1.	For the safety building / of course that's one of the obstacles / if would like to build / or communicate with the architect about safety //
P18	7.1.	And / relating to sharing story / they have no problem //
AB	8.1.	But the architect must be open to this?
	8.2.	Would they expect / not demand / but if the teams are willing to share their stories with the architect to make a good building / would they hope or expect the architect to then share back a reciprocal relationship?
P19	9.1.	Of course / because we need the architect to be responsible for what he share / for the safety of building and things / in the future //
	9.2.	And also / good to know by having the architect honesty / we will be able to know whether he is capable or not / to do something //

	9.3.	It's like build[ing] trust //
AB	10.1.	You want to know that you can trust the architect for their professional skill / but also their ability to listen to your stories and take them into the design / to be respectful of your [life] experiences?
IS	11.1.	Yeah / otherwise it won't / it's back again to the building affect individuals / if it is not honest / or put things in place for them to want / that has been shared //
AB	12.1.	Erm / so / that is what the team want and expect from an architect //
	12.2.	Do you think you will get this from most architects that you speak to?
P19	13.1.	Yes / as long as having clear communication about what and how the journey began / to the end result of building //
AB	14.1.	That is good that you have the confidence to go to an architect now with this story //
P19	15.1.	Yes / of course / 100% confident / we are there to be having argument //

Q10: Do you think that the knowledge you have gained from these activities could help create social change in the community?

Participants discuss this together.		
IS	1.1.	Yes / of course / this knowledge help change the social change in the community / because once they see the building / or once they are here / through the activities as well / people will understand more and deeper about the essence of the activities / the building we are going to build / the story behind / and the overall history //
	1.2.	Because they will be able to explain why this is like that / where this coming from //
AB	2.1.	What social change do you think will come from this?
Ibu Sari asks me to provide some prompts/ examples after discussing this question with the Participants for a few minutes. I suggest that some forms of social change include; changes to local		

laws or policy changes like awig-awig or wider laws, that affect a large group of people, or similar to the social change they already achieve at the centre by empowering individual people.		
P18	3.1.	What P18 has mentioned was / be able to share with someone else about building / about scale [continue to spread autonomy of building]//
	3.2.	He was also mentioning that he could see that / through these activities / P21 changed a lot [renewing relationships with each other and ecologies]//
P18	4.1.	Adding / as individual / of course I changed a lot as well //
	4.2.	To be able to be a good listener / and also seeing the differences amongst the members [of the PKP community] / they were unable to listen / listen to others [listen with “three ears”//
	4.3.	So instead they only sharing things just to be listened by others / but they never want to be a good listener / something like that //
	4.4.	So / this method also guiding the circumstance amongst the community / that there is no difference among us / no matter what is the background / academic or nonacademic / we are the same here //
	4.5.	So we get the same knowledge / we having the same capacity to not understand at the beginning / but then we all together / work together to understand / individual and as a group / to create something //
AB	5.1.	And that also connects them to the ancestral knowledge that is being brought through as well?
IS	6.1.	So / there is no ownership / no ego / involved there //
	6.2.	This is the great things //
P19	7.1.	Detachment [from oneself/ the self]//

	7.2.	So this activities / once guided everyone to understand themselves / then the cycles will be *tat twam asi* / "I'm you / you're me / we are one" / so everyone can understand each other //

Q11: Do you think that Alastair has treated the information you shared with respect and reverence? Why or why not?

P18	1.1.	Yes / you have been treating this information with respect and reverence //
	1.2.	It is proved by signing also / the paper / that you will keep everything safely //
	1.3.	As well as the community stories / has been talked amongst the PKP //
	1.4.	And they haven't heard anyone coming to / kind of / giving negative information relating to these activities //
IS	2.1.	Is this what you mean by the question?
AB	3.1.	A little //
	3.2.	It is nice to know that you trust me when you sign / that I will make things anonymised //
	3.3.	Obviously I do talk about the PKP Centre and you [Ibu Sari] / but not everyone else by name //
	3.4.	You are sharing your experiences with me //
	3.5.	Do you think I have been respectful of those experiences when I've analysed them / that I've not been rude or anything towards them [the stories] / and that I've treated you and your stories well?
	3.6.	And if you do / what things did I do that made you feel that way?
IS	4.1.	No / there is nothing rude that you have done so far //
	4.2.	Instead / we try to understand all those things among us / by / kind of / fighting each other / not in a bad way / (laughing) / like a community / asking / and "no and yes" //

AB	5.1.	And do you think / so far / I've been able to share your stories authentically / truthfully / even in the very abstract ones?
P19	6.1.	Yeah / we share naked / (laughing) //
	6.2.	We share everything with honesty / all the authenticity //
	6.3.	Now / they are wondering if there is anything specific things you are concerned [about]?
AB	7.1.	No //
	7.2.	But it's not about my concerns / it is about your concerns //
	7.3.	So / you share stories with me //
	7.4.	And / through my analysis / through the lontar / I am / kind of / retelling your stories //
	7.5.	And I want to know that I'm telling those stories truthfully / that you think they represent you //
	7.6.	And if you do think that / what makes you feel that way? [and vice versa] //
Short discussion between some of the participants.		
IS	8.1.	So / you done perfectly //
	8.2.	They mention there is no / there is nothing untrue / what you have analysed / so far //
	8.3.	That's why they couldn't find any wrong things [when given the opportunity to correct/ expand / completely redo the narratives from my analysis] //

Q12: Do you think that Alastair has correctly understood the hidden meanings within your experiences?

Short discussion between some participants.

IS	1.1.	So / they mention / yes / you understood correctly / perfectly //
	1.2.	It's even something that we not able to written down on paper / you help them to make it clear / visibly written //
P19	2.1.	A+ for you / (everyone laughing) //

Q13: Do you think Alastair accurately described the settings, events, and characters from your experiences?

Short discussion between some participants.		
P11	1.1.	Yes / Yes / Yes / Yes //
IS	2.1.	They hardly find the answer no / because it has been accurate //
	2.2.	(Everyone laughing) //
I suggest that we can reframe the question to be less loaded towards accuracy, i.e. to encourage them to think of things that were negative, but they remind me that some questions already ask this and that their answer would not be different. As said previously, they feel they are being honest and authentic.		

Q14: Is there anything you think Alastair missed when describing these settings, events, and characters?

Short discussion between some participants.		
IS	1.1.	Only thing that has been missing / is are you double or single / (all laughing) //
	1.2.	Having girlfriend or / (all still laughing) //
AB	2.1.	Oh / like a form / "marital status" //

Q15: Do you agree or disagree with the way Alastair has described the settings, events, and characters? Why?

Short discussion between some participants.		
ALL	1.1.	Agree //

Q16: What would you change about the way these settings, events, and characters are described? Why?

Short discussion between some participants.		
P11	1.1.	Nothing //
ALL	2.1.	(All laughing because they are joking that the questions are trying to make them change things but they wouldn't change anything because everything is accurate)- [the questions are a little loaded towards changing the workshops; this could have made the participants defensive or alienated them if they didn't want to change anything, and was also bias towards the idea of change. However, it is good that they still did not want to change a lot considering this loading]

Q17: Was there anything new you learnt from reading Alastair's description of settings, events, and characters? If so, what?

Short discussion between some participants.		
P19	1.1.	The method that you bring is something new / it's like fizzing someone's imagination //
AB	2.1.	Did you already know all the information [from the narratives] before I presented it to them / or when you read it did you learn something new about your space?

IS	3.1.	No / they already mentioned they don't know [how] to put things in place / until you brought and combined / combined this culture / these principles / through these second activities especially [second phase of in-person activities, particularly the final third movement of workshops] //
P19	4.1.	It's more like / giving a reminder for everyone / through these activities / to clearly see the tensions / the bad experience //
AB	5.1.	So / you knew these things already / but they were almost forgotten because of other things [hidden layers of meaning] / and this brought them to the surface?
	5.2.	Or … //
P19	6.1.	Not recognise the situation before //
IS	7.1.	So / it is there / but they did not recognise //
AB	8.1.	So / they didn't connect the information //
	8.2.	Everyone said everything [story narratives] is true / which is nice for me //
	8.3	But it makes me think / did you know this information already / or you just didn't recognise it?
P19	9.1.	More into recognise everything / through these activities //
	9.2.	It has been there / but didn't recognise //

Q18: What do you think that Alastair could have done differently to understand your personal experiences better?

All singing "better, better, better, better" lyrics from 'Hey Jude' by 'The Beatles'. Then everyone discusses the question for a short time.		
IS	1.1.	They all mention that / probably / just the language barrier has been the main issue / as well as the translator / which is individual translator / me //

	1.2.	I mention also to them / probably myself didn't understand well / and sometimes [different participant] share to one person / might be different concept //
	1.3.	Everyone explain in different way to catch the main meaning / for different individuals //
	1.4.	Which is good / yeah?
Short discussion about this question.		
IS	2.1.	So / why it is still good / because everyone then can see / "oh / with this person it is better that this person explain" //
AB	3.1.	So / you understand the dynamic of the team [community] better?
	3.2.	Do you think that / something like me living here for a longer period / working with the team / volunteering doing your jobs / those kind of things would help?
	3.3.	Those are also things you can consider / because sometimes researchers will live for like three years / when they are doing their… / with a community //
	3.4.	The pandemic made this very difficult but this is something you could say would be better?
Short discussion.		
IS	4.1.	Yeah / everyone agree / so stay here one year //
	4.2.	(all clapping at the idea and we finish the questions here)