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SKIN AND BONE:
THE FACE IN THE ARCHAEOLOGICAL IMAGINATION

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ABSTRACT

Title: Skin and Bone: The Face in the Archaeological Imagination

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Thirteen unique archaeological countenances from Ireland were produced through the Manchester method of facial reconstruction. Their gaze prompts a space for a broad discourse regarding the face found within human and artefactual remains of Ireland. These faces are reminders of the human element which is at the core of the discipline of archaeology. These re-constructions create a voyeuristic relationship with the past. At once satiating a curiosity about the past, facial re-constructions also provide a catharsis to our presently situated selves. As powerful visual documents, archaeological facial reconstructions illustrate re-presentations of the past as well as how the present can be connected to the past.

Through engagement with Emmanuel Levinas's (1906-1995) main philosophical themes, the presence of the face is examined in a diachronic structure. The 'starting point' is the Neolithic period which has been associated with the notion of *visuality* with a reconstruction from the early Neolithic site of Annagh, Co. Limerick. The following layer of analysis appears with attention to *intersubjectivity* in the early medieval period with facial reconstructions from Dooey, Co. Donegal and Owenbristly, Co. Galway. Building upon the past concepts, the late medieval period is associated with the notion of *alterity* and paired with faces from Ballinderry, Co. Kildare and a sample of males from Gallen Priory, Co. Offaly. The final layer of examination culminates with the application of *response* and *respons-ibility* to the post-medieval Irish landscape with facial reconstructions from the prison on Spike Island, Co. Cork. These layers of investigation are similar to the stratigraphical composition of both the archaeological landscape and the skeletal/soft tissue landscape of the face.

The separation of the neglected phenomenon of the face from the overwhelming embrace of the field of craniometrics is necessary. Through this detachment a new manner in which to discuss the face and its place within the (bio)archaeological record is possible. Encountering the faces seen in mortuary contexts, material culture, and archaeological facial reconstructions, inform and shape the archaeological imagination.

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CHAPTER ONE - INTRODUCTION

“[P]erhaps the true source of wonder with which, as Aristotle claimed, philosophy begins, is not to be found by staring into the starry heavens, but by looking into another’s eyes, for here is a more palpable infinity that can never exhaust one’s curiosity” (Critchley 2002, 27).

This research focuses on the face in the Irish (bio)archaeological record. Seeking to demonstrate the importance of the face within the (bio)archaeological record, this thesis argues that facial reconstructions of past individuals possess archaeological merit (Prag and Neave 1997). Its intention is to extend the written and visual investigation of material culture, mortuary practices, osteological evidence, and facial reconstructions toward the very facet central to this study: the past countenance.

Archaeological facial reconstructions have become an increasingly common image derived from archaeological sites (detailed in chapter three). Their gaze reaches far beyond site reports and technical appendices, disseminated in popular media to a large viewing audience because “literally putting flesh onto the past, [facial reconstructions are] the metaphorical epitome of the journalistic translation of archaeological narrative” (Clack and Brittain 2007, 44). These countenances deserve an investigation into their being and the reason why their appearance has been perpetuated by archaeology in the contemporary world. Facial reconstructions have been present within the archaeological literature, but recent texts that highlighted their existence have not considered them to be a significant methodology for the discipline and have instead treated them merely as figures or plates within the overall archaeological discussion (short list of examples include: Kelly and Thomas 2010; Kennewick Man in Lewis *et al.* 2010; Leben-Seljak and Jamnik 2011).

This research removes the facial reconstruction from the margins to become a focus within discussion about how these objects affect a particular archaeological narrative. The value and worth of these productions as an inclusion in archaeological methodologies has not been fully evaluated (Prag and Neave 1997 and Sanders 2009 have been the closest guide). In contemporary society saturated by images and media in different forms such as television, magazines, or websites, information moves faster than ever and with diffusion of archaeological knowledge the tendency for imagination expands. Archaeology in the

contemporary world exploits the image-saturated consciousness of the public (Clack and Brittain 2007) in a positive way to gain attention and as such facial reconstructions gain a spot of immediate poignancy within the visual archaeological narrative. These faces gazing from the past represent and reinforce the absolute humanistic element of archaeology. This benefits the discipline and should continue to be part of the battery of integrated methods used today.

This is the first doctoral dissertation in the Republic of Ireland that produces archaeological facial reconstructions. These reconstructions are the author's own contribution to the archaeological imagination of Ireland's past. This research does not seek to classify or catalogue the appearance of the Irish face. It instead goes beyond the quantitative to collate the material in different spheres in order to focus on the larger part the face plays within the discipline. It also, to a certain point, illustrates how archaeology is indebted to the power of the face. Facial reconstructions are the objects which shatter the previous discourse dedicated solely to the head (see section 2.2.1).

It should be clear that this research does not aim to, in quantitative terms, *prove* or *result* in any manner of conclusion. The facial reconstructions here are not intended to be a representative sample or indicative of any physiological morphological evolution through time. This differs radically than many traditional models of structuring or understanding the archaeological past. The extrapolation and expansion of already 'knowns' within the archaeological discipline and further engagement with a theoretical model not previously used in the examination of the face in the (bio)archaeological record is solely for discursive purposes. This prompts the discussion of archaeology *in* and *of* the contemporary world and its relation with the past because as Richter stated, "of course the past is dead. But it is kept alive by thinking and talking about it, and above all, by making it relevant to the present" (1985, 289). Archaeological facial reconstructions are the conduit making the past relevant to the present.

This research and the reconstructions here concentrate on the two- and three-dimensional forms rather than their digital cousin due to their timeless nature and constant presence in the field of both archaeological and forensic facial reconstruction. Even in their volume

that examined the quality and diversity of research in the area of computerised reconstructions, Clement and Marks attested to the on-going and future reputation of clay reconstructions versus their digital counterparts, “if nothing more, the popularity and continuity of study and implementation of the traditional clay bust creation is a testament to the lack of anything better that is currently routinely accessible in a computer-based environment” (2005, 11). Due to the inherently tactile nature of the (bio)archaeological discipline (see Sofaer 2012) in regards to the process of excavation as well as artefactual and skeletal analysis, there is a large emphasis upon the vital notion of interaction with bone and surface. This tactile nature, absent in the use of digital media, is a motivation for the choice of three-dimensional clay and two-dimensional graphic methodologies chosen for creating the reconstructions. There is a discourse concerning the benefits of digitisation as well as the methodology of laser scanning skulls for less invasive reconstruction methodologies (Wilkinson 2005); however I feel that the grading of the digital over the original material is an issue which needs to be thoroughly understood before creating assumptions of hierarchy (Postman 1992).

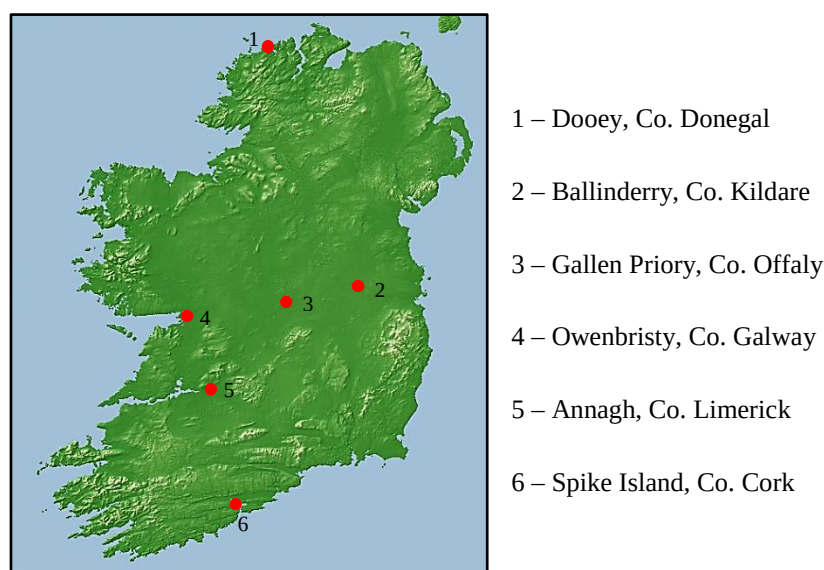


Figure 1.1: Distribution map of facial reconstructions present in this research

This is a distinctive body of research that produces never before seen three- and two-dimensional archaeological facial reconstructions as well as asserting innovative theoretical approaches. The individuals constituting the collection of skeletal remains represent a broad period of time from the prehistoric through to the post-medieval periods. They

additionally derive from multiple sites across the island (figure 1.1). It is my contention that these faces not only frame their respective time periods and discussion to follow, but also illustrate the diversity of the Irish (bio)archaeological record. The contribution of this thesis to the broad (bio)archaeological discourse resides in these completely unique facial reconstructions. Based on the theoretical discussion, I will argue that past countenances punctuate the narrative of the Irish (bio)archaeological record affecting our collective consciousness of the past.

The face was the chosen subject for this overall research because it has long gone unnoticed and neglected by the bioarchaeological discipline. Overlooked due to preoccupation with discourse concerning the generality of the head and craniometric frameworks (see chapter two), the commanding appearance of the face in the (bio)archaeological record is here accorded status separate from the head. The predominant themes of disciplines concentrating on human remains have been to focus solely on the head and its proclivity towards select socio-cultural features. Additionally, historical and anthropological dialogues have remained focused on the realm of the head as the seat of personhood and identity (Martensen 2004), undermining the commanding power of the face. This predilection towards the head arose only in the modern and contemporary period with certain factors contributing to this oversight, all of which will be discussed further in the following chapters.

There are many theoretical impacts upon this undermining of such a powerful phenomenon such as the face. The advent of anthropology as a discipline obsessed with race and the quantification of human variation (in work such as Broca 1861 and Morton 1839, 1844) lost sight of the quantitative value of the visage and its many embedded elements. Corresponding overarching themes of masculinity also adhere to this overshadowing of the face (see section 2.2.3). When considered in light of the gendered binary created in this research, the discourse of the head aligns strongly with masculinity while the face and its ephemeral and emotive qualities parallel to the feminine realm which has tended to be undervalued. The importance of this separation of the head and face has ramifications not only in bioarchaeology but in the consideration of other themes present in this thesis such as mortuary contexts and archaeological materiality. This division of head and face and the

general redaction of the positivity of craniometric (and anthropometric) frameworks is a foundation which this thesis is supported and will be examined in the following chapters.

While building upon the tradition of research of the Irish face such as that of Kissane (1986) and also with deference for the many cranio- and anthropometric studies, this research goes much further in its material and theoretical exploration. It offers a fluid examination of the face in the many aspects of humanity which bioarchaeology encompasses: as a socio-cultural presence, an economic tool, and a theoretical site for symbolically-embedded meaning.

In order to situate the work theoretically, I have focussed on the work of Emmanuel Levinas. This choice was made because the scope of the face in the Irish (bio)archaeological record can be an expansive topic. Therefore, instead of approaching this subject with the broad discipline of phenomenology which can make the topic very obtuse (as phenomenology is a vast corpus of work and the discussion of the face can go in many directions), it was decided to narrow the theoretical dimension to that of Levinas's portion of the phenomenological tradition. As such, the specific philosophical tropes which Levinas specialised will reign in the topic of the face to create a focused theoretical discussion on this (bio)archaeological topic. Additionally, the main philosophical conceptions he offered correspond with themes in the archaeological record (seen in chapters four through seven). As a result, this was seen as the ideal choice for theoretical framework and aids in the specificity of this examination.

This research is significant in the use of Levinasian themes regarding archaeological moments in that the application of his corpus of work lifts the concealed veil of various facets of the archaeological record (mortuary contexts, materiality, imagination, the traditional notion of the face hidden by the overwhelming craniometric frameworks). This occurs through the application of notions such as: visibility, intersubjectivity, alterity, and response and responsibility, which separately and combined reveal new theoretically informed interpretations. When joined, these reconstructions and the investigation into the phenomenon of the face of a certain time period, engage and create an intertwining dialogue which enrich each other to provide an examination of the face in Irish

(bio)archaeology. Levinas's aforementioned themes act as an analogy for the broad discipline of archaeology as they embody the main fundamental motivations for the questioning of the human past (section 2.2.4). More importantly, each of these philosophical notions (while intertwining) constitute the layered structure of this thesis.

A strong fundamental basis of this research is the notion of layers. Just as the discipline of archaeology is founded in excavation methodologies recording layers of stratigraphy, each temporally and spatially revealing themselves at different moments, the same basic concept applies to the stratigraphy of being that lies inherent within the countenance and human material. The archaeological landscape is marked by the trace of people through their occupation revealing itself layer by layer. In similar structure, the material of bone (that conceptionally this research is based on) is malleable to the life lived is a skeletal landscape wherein the trace of occupation is written. Both the skeletal and archaeological landscapes are dynamic surfaces upon which external narratives are embedded. By layering the archaeological data, the existing narrative and the scope of Levinas's theoretical framework towards this discipline, a stratigraphical structure is created. Each layer is peeled back to reveal further depth of examination and interpretation, an evolving model of how these objects speak to us through time and space illustrating complex stratigraphical relations. Stratigraphical examination of the face in its archaeological context is not just the ideal method in which to view this research, but also an analogy for the consideration of these two phenomena, namely the stratigraphical layers of archaeology and the multitude of physical and symbolic layers of the face.

The examination of material culture and the extension beyond its physicality towards the central concepts of archaeology parallels Levinas's structuring of his philosophical arguments concerning the basis of the face (the already existing presence of the other) towards his multi-dimensional philosophical attitude. This paralleling structure is intended to not only lend validity towards the following body of research, but more importantly to echo Levinas's corpus and its importance for the archaeological narrative of the face and its mostly unexplored (bio)archaeological potential.

Each thread of theory seen throughout the research is to articulate underlying fundamentals concerning the discipline of archaeology in the contemporary world and the role of the face within creating archaeological narratives. For instance, the themes of alterity and intersubjectivity resonate with the archaeological disciplines endeavour to discover the other of the past, those that came before which are simultaneously similar and different to our present condition. Also, the consideration of visibility speaks to the highly visual nature of archaeology as response and responsibility evoke the ethical relation archaeologists have when creating a narrative of the past. The use of facial reconstructions here is to contribute to the archaeological imagination as well as providing a focus for discussion of the different temporal periods explored. Facial reconstructions can stand alone to represent a product of research. However, within this multidisciplinary, archaeologically-based investigation, these past countenances do not constitute isolated portions of research. They are integrated as a visually stimulating portion of archaeological research but also as a conduit to the materiality and theory this research aims to combine and discuss.

The entity of the face is inherently binary in its nature as it straddles the physiological and the symbolic worlds. Therefore, the ideal framework that can explore and examine this site of focus will be seemingly incongruous as well, in so far as the structure will incorporate aspects of seminal theoretical importance and physiological observations and experiences of (past) embodied existence. Due to the interdisciplinary nature of this body of work, many themes ostensibly external from archaeology intertwine the subject and material which constitute the resulting research. The structure of the bulk of this research is diachronic in nature demonstrating the face's continual presence in the (bio)archaeological record of Ireland. In addition to this diachronic organisation, a relevant philosophical concept from Levinas is applied to each portion of the temporal (bio)archaeological record. Therefore, visibility is paired with prehistoric Ireland, intersubjectivity relates to early medieval Irish society, alterity is seen in terms of late medieval Ireland, and the post-medieval period provides considerable space for discussion of response and responsibility. This choice in pairing will be explained presently.

The wide scope of data from the Irish archaeological record is daunting as it can be discussed in terms of a multitude of theoretical notions (i.e. discussions geared towards themes such as power/authority, historiography, gender, or materiality). A diachronic structure which features a broad scope throughout time is beneficial for understanding the presence of the face in Ireland and its alteration in meaning and use. As Ariès stated, “if [the historian] confines himself to too short a time span, although it may seem long according to the classical historical method, he runs the risk of attributing originality to phenomena that are really much older. The historian of death must not be afraid to embrace the centuries until they run into a millennium” (1991, xvi-xvii). The inclusion of the broad periods of time is to the benefit of this research area. This being so, the bulk of this research is designed with focus upon specific themes rooted in Levinasian ideas that related directly with predominant overarching notions of the archaeological chronology of Ireland.

As this body of research emphasises the face in its archaeological context in material as well as facial reconstructions, it is essential that this remain foremost in the discussion that follows. Therefore, each chapter dedicated to a temporal landscape begin with the faces from the past that I have re-constructed. This primal encounter with the faces of the respective temporal era is imperative to maintaining the face as the starting point – the position of visceral beginnings – on which all further discursive material is based. Context of the site and information of the general excavation will be detailed to then prompt discussion of the individual’s osteobiography and subsequent facial reconstruction with soft tissue prediction of the individual’s unique skeletal features. Afterwards, the chapters go into detail of the main Levinasian themes respective to the period in question and its constituting material record.

This research has its foundations in the philosophical works by Levinas. Therefore, by beginning with these philosophical fundamentals, chapter two to follow, concerns the face as seen within the corpus of Emanuel Levinas’s philosophies. What is meant by the term, how it is used in this physical and symbolic metaphorical manner, and importantly, how it is applied to the discipline of archaeology is concisely discussed. The position of Levinas within archaeological theory, especially how the discipline would view this twentieth

century continental (phenomenological) philosopher clearly dictates the foundation for this doctoral research's framework of justifiable assumptions. This chapter functions as the basis for the theoretical framework of the subsequent research.

Situated alongside the corresponding discussion of the philosophical foundations for this body of research is an overview of craniometrics and anthropometrics. This includes the former discourse within the sub-discipline of bioarchaeology which contains previous studies spanning over the past two centuries. Parallel to this discussion and contracting down to the ultimate aim of investigating the face within archaeology, the last portion of this theoretical chapter is the establishment of the analogical spheres the phenomenon of the face within the main fundamental motivators for the discipline of archaeology.

Archaeological facial reconstructions possess a pivotal role in the investigation into the creation of the archaeological imagination and the remaining portion of research. Therefore, chapter three is dedicated to the history of facial reconstruction follows the historical, technical, philosophical, and archaeological engaged notions of the face. Functioning as a pseudo "previous studies" chapter, this section not only contains a traditional historical trajectory of the reconstruction methodologies but also considers less popularly discussed issues within the field of facial reconstruction. These issues include: the difference between the forensic and archaeological realms of facial reconstruction (in more than in regards to the temporal qualities of the remains used, but the aesthetic frameworks assigned to each area); the blurred lines of distinction between subjective art and objective scientific work (an issue previously addressed by Wilkinson 2010); the evolution in the types of facial reconstructions produced over the past two centuries; and the evolving theoretical notions and methodologies. Following this discussion, is a dedicated to an overview of facial reconstructions in the archaeological imagination. These re-constructed individuals and their impact on the consumption of archaeological knowledge is an expansive topic. Seen here as a selection of those reconstructions which have impacted the discipline greatly, these faces are critically evaluated.

Prehistoric Ireland (chapter four) is chronologically the foundation for later layers of occupation, habitation, and the beginning of the creation of material culture and an acquired aesthetic of Irish prehistory and is therefore the commencing point of this examination of

the face and facial reconstructions. The prehistoric people's mark upon the landscape is an integral starting point for (bio)archaeological discourse. Therefore, the thematic notion directed towards this era of 'beginning' is *visuality*. The face is 'the starting point' of ethics (Levinas 1961). Prompting the contemporary gaze with archaeological notions of the face, this chapter is dedicated to exploring the scarcity of the first visuals of Ireland's early Neolithic.

Progressing through the archaeological timeline and layering yet another Levinasian notion upon the large assemblage that is constituted by the face, chapter five concentrates on early medieval Ireland and the notion of *intersubjectivity*. Incorrectly assumed as the emotion of empathy, the intersubjective nature of archaeology is formed through the interaction between other subjects. However, it is not limited to beings and includes the dynamic interrelation between the objects that constitute and reinforce socio-cultural structures surrounding the early medieval population. The importance of the intersubjective nature of objects arises from the fact that they are made and harken to an always already present other. The increasingly important use of language in its written form of historical documents is a dominant theme relating to the intersubjective nature of early medieval Ireland. For it is language that prompts interaction, and this interaction is the basis for relations. Not only does language form the necessary space for intersubjectivity, it is also within the early medieval period where historical documents begin to create the foundations of the archaeological imagination initiated by experiences with the imprint of prehistoric peoples and encountering their archaeological traces. The mortuary practices in the Irish (bio)archaeological record begin to become standardised within this period. There are instances of 'deviant' or marginalised burial typology, which illustrate another form of intersubjective encounter.

Formative to the discipline of archaeology and one of the strongest themes within Levinas's corpus of work, the concept of *alterity* is of utmost importance and leads towards chapter six in the exploration of late medieval Ireland and the other. This was a dynamic era in which the principal dimension of the changing demography of Ireland became a dominant trope in regards to the incoming populations and the dramatic, and indeed lasting, manner in which these populations transformed the landscape of an island. Characterised in that

period by a multiplicity of internal boundaries, alterity is predominantly relevant to the late medieval Irish (bio)archaeological record. The archaeological record as well as the associated material culture created during this period displayed these evolving modes of presenting a certain socio-cultural sense of belonging and the interaction amongst encountering groups. Utilising the conception of the other in its most basic form (as the presence of the other seen in the face) this portion of research investigates the alterity of this era in regards to the (bio)archaeological qualities of late medieval Ireland.

The final temporal chapter (chapter seven) examines Ireland in its later post-medieval archaeological phase. This time period includes an increasingly colonial state wherein external institutions and larger (no longer regionalised) superstructures become apparent. Agency of the individual within this modernising worldly situation comes into question, but more credibly toward this research's perspective of the face and facial reconstructions the Levinasian theme of *response and responsibility* of the other associated with the gaze which in this time period becomes the most closely aligned to our modern understanding of how images of faces are consumed and their re-produced nature. Additionally, structural violence in post-medieval society becomes more apparent than previous periods (Nystrom 2014). This development prompts discussion of the nature of response and responsibility one possesses for the nature of the other's being. This concept is also applicable in revealing a main fundamental of the nature of archaeological facial reconstructions.

A portion of this research concerns the archaeological imagination which is often fuelled by discovery. The discovery of something new (possibly unknown as well), punctuates the unknowns and absences of information of the archaeological record. The term, archaeological imagination, concerns the cultural reception of the past (Shanks 2012) and the consciousness that arises through the fascination with the discipline of archaeology and its discoveries (Schnapps 1996). The interest in the archaeological endeavour to reveal the past impacts how audiences consume and use this knowledge to form (mis)conceptions of the past. Poetry and media are indeed important portions of examining the archaeological imagination as they function as the purveyors of myths of origin stories or of myths that filter into our collective consciousness (Smiles and Moser 2005). In the same way, there is a *need* to see the face in a manner more so than just for the public consumption of the

archaeological imagination. This is clear throughout the constant and evidential presence of the re-produced face in the many mediums within the archaeological record. The appearance of the re-created countenance adds the humanistic dimension toward archaeological investigations – reinforcing that this discipline is about the primary study of past individuals in conjunction with their materiality.

The notion of experiencing the distant past is a fascinating, self-reflexive and awakening experience. As such, these experiences prompt the emergence of a dialogue concerning the (sometimes) reversal of unknowns into revealed knowns, eliciting a yearning for increased knowledge concerning these discoveries. This contribution to the archaeological record through use of the imagination manifests itself as archaeological facial reconstructions. These findings then proceed to explain and thus acknowledge our origin stories and develop an imagination about collective shared pasts. The power of the face being just as important in the past extends with the same force into our contemporary consciousness. Coming to terms with the ruptures in time and space which appear as facial reconstructions, as well as any encounter with a face from the past, is a complex, self-reflexive issue of the contemporary archaeological consciousness.

Alongside the research into the face within archaeological materiality and the bioarchaeological evidence in mortuary practice and human remains, facial reconstruction also has an important role in the formation of the archaeological imagination and the manipulation of the past face in the present. Here, facial reconstruction in particular is a key contemporary facet of archaeology. These productions are an essential implement in the creation of a visual archaeological narrative. The visual rhetoric that is employed and articulated in these facial re-productions deserves investigation as a methodology utilised within archaeology. Their merit of description as well as the culminating, uniting sites of meaning and intention is a benefit to the archaeological discipline.

The face is argued to be primordial. It is an entity that is at the basis of our fundamentals as beings. The face frames not only our personal boundaries, sense of identities, and modes of being, but also frames the discipline of archaeology's essential theoretical issues. In the next chapter, the philosophical nature of the face and its application to archaeological

theory is explained. Additionally, the main theoretical implications which underlie this research are established as the face is detached from the overwhelming preoccupation with the face from which further discussion can build upon.

CHAPTER TWO - THE FACE: THEORETICAL FRAMEWORKS AND APPLICATION TO THE DISCIPLINE OF ARCHAEOLOGY

“The importance of faces for anthropological or archaeological purposes can hardly be underestimated, and our fascinations with prehistorical and historical visages are difficult to separate from present-day projections” (Sanders 2009, 198).

When we encounter an individual, it is the human countenance that we confront and experience first. It is the site of undulating concealment and reveal-ation as, “we cannot close our face as we close our eyes, we can only protect it by visible or invisible masks” (Waldenfels 2002, 64). As a juncture of the physical and the symbolic, the face is open to a multitude of meanings, but it is also, as elucidated further in this chapter, the starting point of interpersonal encounters and thus of the ethical relation to the other person. As such, it is proposed in what follows that it (the face) can be exploited for a new line of inquiry in the discipline of archaeology.

This chapter is devoted to explaining the theoretical framework of this thesis. The most important theoretical research on the face is presented in an attempt to show how this philosophical discussion relates in a relevant and applicable mode to the archaeological discipline. The challenge in undertaking research such as this is the unification of theoretical and practical elements. As the face in both its abstracted and corporeal forms is the intersection of biological and socio-cultural factors, a similar contradictory or incongruous theoretical foundation is ideal for the investigation of this entities multitude of manifestations. The ideal theoretical framework that engages with the (bio)archaeological material in question here is found in the extensive corpus of work from Emmanuel Levinas. The purpose of this chapter is to present this philosophical theory in such a manner that its application to the discipline of archaeology and, in particular, to the archaeological materiality of the face and facial reconstructions becomes evident.

2.1 Theoretical Notions

Throughout the history of archaeological theory, data has been framed according to various different models of thought, which inevitably condition archaeological narratives. After the antiquarian and culture-historical models of the resulting nineteenth and early twentieth century, scholars became more aware of the constraints theory was placing upon the ever-

more visible archaeological record. A series of re-actions to this realisation are manifest in the formation of new schools of archaeology such as 'New Archaeology', Post-Processualism, and other Interpretive archaeologies. Changing our understanding of the relationship between the past and the present, theory has a definitive position within the articulation of archaeological interpretations and should not be separated from its dissemination within publications.

As this chapter is dedicated to articulating the theoretical framework within which the following research is situated, it must address the intricate relationship between the empirical discipline of archaeology and its theory, which unsurprisingly has a complex history of entanglement (Hodder 1992; Trigger 2006). The construction of an overarching archaeological narrative requires theoretical models to interpret the visible record to contemporary practitioners and public (Shanks and Tilley 1987; Hodder 1991; Meskell and Preucel 2004; Bentley and Maschner 2008; Johnson 2010). The construction of knowledge and of a narrative of the past are obtained through the application of theory, opening up past phenomena towards a dynamic discourse (Hodder 2012). The examination of the face in terms of mortuary practice and materiality found in the (bio)archaeological record requires a theoretical lens through which to view and interpret these objects and past occurrences.

The necessity of the proposed theoretical model for the archaeological record and its constituting materiality for this research is based upon the philosophy of Emmanuel Levinas and his humanistic phenomenological tradition (Levinas 1961, 1981, 1985, 1987, 1989, 1998, 1999, 2003). Levinas's writings on the nature of the face-to-face encounter and the ethical power of this entity have had minimal exposure in the realm of archaeological discourse. His (anthropological) philosophies provide the ideal platform in which to discuss the face and the undercurrent of concepts running through the discipline of archaeology. His application also guarantees a focused, narrow scope (rather than the use of broad phenomenological approaches) on solely the four concepts of visibility, intersubjectivity, alterity, and response and responsibility to be considered in this research. In order to avoid an overly-esoteric tone and style and to position this thesis firmly situated within archaeological, rather than philosophical discourse, a brief consideration of Levinas

will be supplemented by an application of his philosophy to the discipline of archaeology. This will also be used to deconstruct some of the biases in the discipline.

2.1.1 Emmanuel Levinas

Emmanuel Levinas (1906-1995) was born in Lithuania and later moved to France where he gained philosophical maturity in the mid-twentieth century. He was strongly influenced by Husserl, Heidegger, and by experiences during the Second World War. The predominant theme of his work includes the non-prescriptive dimension of ethics as first philosophy, based on question of what in our experience compels us in ethical ways. In conjunction with this grand undertaking, Levinas discusses concepts of alterity (regarding the same (self) and ‘the other’), totality and infinity, exteriority and interiority, intentionality within the phenomenological tradition, signification, and responsibility, all of which are for him tied to the main topic of ethical relations. Each of these topics is relevant to strands of archaeological theory in their own right.

From the point of returning from the Second World War, Levinas’s work proliferated and resulted in many of his famous publications such as *Existence and Existents* (1978), *Totality and Infinity* (1961), *Otherwise than Being or Beyond Essence* (1981), *Collected Philosophical Papers* (1998), and *Alterity and Transcendence* (1999). His teaching and work was and is still very much highly regarded throughout the philosophical discipline, influencing many others such as Sartre, Merleau-Ponty, Derrida, Ricoeur, and Bauman among others (see Bergo 2014). With context being an essential portion of archaeological understanding to past events, we can use this background of Levinas’s situation within the world to understand his main philosophical works as reactionary to the occurrences of his situation and experiences within the twentieth century.

The narrow scope of Levinas in the broad tradition of phenomenology is being used in this thesis. This allows for a direct theoretical view with opportunity to really engage with archaeological materiality – human or otherwise – in a discussion that is grounded and avoids any unnecessary abstraction. Therefore, to understand the niche he established, Levinas’s position within this branch of philosophical thought must be explained.

Position within the Phenomenological Tradition

Levinas “is a contemporary philosopher, one who takes time – and hence movement, change, contingency, growth, embodiment, language, textuality, and history – seriously” (Cohen 2006, 25). By being part of the phenomenological tradition of appearing in the diverse philosophical landscape of the twentieth century, Levinas was intensely interested in concrete perceiving, and imagining instead of being reliant on reductionist theoretical presuppositions (Cohen 2006, 25; found in Levinas 1961; 1978, 1999, 2003). His philosophies are maddeningly contradictory as his discussion of the face holds both finite and infinite qualities. However, these dichotomies also add a level of sophistication and complexity to his descriptions of the systems in which we live and function.

This rich conceptual and experiential structure is ideal for the phenomena of the face as the countenance operates on many contradictory levels and is more intricate than simpler systems can account for. Levinas’s philosophical sight remained in the realm of lived experiences as his, “version of phenomenology seeks to consider life as it is lived” (Critchley 2002, 9). From this methodology of experiencing worldly phenomena, the concrete face of archaeological materiality that has been overlooked or only viewed within the un-reflexive attitude, with a sympathetic reading, can be revealed for its true potential. According to Waldenfels, if the face is taken as either something that is too concrete – real – or as something too abstracted – sublime – it will lose its innate powerful effect (2002, 63). Furthermore, the face is at once, “*not* simply what it seems to be, and it is much *more* than that” (Waldenfels 2002, 64). Through his comprehensive discourse, this notion of utmost importance culminated in the central idea of Levinas: an ethics of the face.

The work of Levinas stems principally from both Heidegger and Husserl’s tradition of phenomenological analysis of the lived experiences of the world. Early writings follow the Husserlian analysis of intention. The field of phenomenology, as Levinas would have seen it, could be defined “as a science...self-correcting; all of its results are subject to and demand confirmation or disconfirmation. Superficial or incorrect analyses are replaced with deeper or more correct ones” (Cohen 2006, 25). This statement is similar to the fundamentals of the archaeological tradition as increased excavations and improved analysis of remains lead to deeper, more accurate descriptions about past lifeways (Barker

1982). Although with Husserl's great contribution to phenomenology, Heidegger's work within the field (just as Levinas's would soon be) revised this constitution of the concept and rejected phenomenology as 'egology' (Hand 1989, 2). This is an important point for the application of Levinas to archaeology as it goes beyond the past lone, individual to create a broad narrative of populations and what they as a group experienced.

Beginning from what Husserl would call the 'natural attitude', i.e. the non-self-reflexive mode of operating within the world, Levinas searches for the concrete experiences underlying our abstract notions and endowing them with meaning (Levinas 1961, 28). It is in the reflection upon common, shared features of our everyday situations which have previously been overlooked in our, naivety, as Levinas calls it, that phenomenology seeks to expose these objects' concealed meanings (Critchley 2002). This is a constant endeavour amongst archaeologists, as we attempt to proceed from our concrete experiences of the past and endow them with meaning, regardless of impending theoretical framework (Hodder 2012, 6).

A note upon reflection of Levinas's writings: within sections devoted to the bulk of his writings, his use of pronouns will almost always be situated within the masculine realm. This topic is debated throughout scholarly discourse as to whether this is symptomatic of patriarchal inclinations or merited due to Levinas's philosophical assertions of feminism as the absolute Other – a mystery in herself. Individuals such as Simone de Beauvoir in her influential book *The Second Sex* (1975, xvi), Irigaray (Whitford 1991) rebuffs Levinas's privileged masculinity while others like Le Doeuff (2007) and Hand (1989) note the male-oriented overtones but in favour of the philosophical accomplishment. This feminist reading of Levinas's writings will be examined further in a gendered binary of the head and face (section 2.2.3). Within the climate of archaeological theory today, there is a noticeable presence of feminist theory (diLeonardo 1991; Conkey and Tringham 1995; Wylie 1997; Downson 2006; Kus 2006) which would also bring themes such as this to light when reading Levinas's corpus of work.

When Levinas decidedly transitioned towards the study of the other and the ethical relation to the other person, his commitment to Husserlian phenomenology remained in methodology only. This is due to Levinas's rejection of Husserl's notion of intentionality

which for Levinas, meant that the other person is not given as an object for intentional thought or reflection (Critchley 2002, 8). For him, the other person, as a problem of ethics (i.e. asymmetrical relationships), is not comprehensible and not reducible to a set of concepts or meanings. If he or she was, then it would not be a problem of ethics, but instead of merely epistemological concern.

The Central Task of Levinas

The detailed understanding of the phenomenological tradition of Bergson, Husserl and Heidegger allowed Levinas to critique these foundations and matured into the examination of the main crux of his writings. Although departing from the previous philosophical traditions, Levinas maintained the phenomenological methodology. While dealing with a range of matters and possessing great richness within his material (Critchley 2002), Levinas's "big idea", one that he excelled and specialised in, is ethics as first philosophy, demonstrating ethics is the infinite responsibility to the other person (Critchley 2002, 6). Including many inherent discussions which the philosopher expands upon, this opens discourse surrounding the problematic notion of other minds and examines the lived experience of ethical events. This is a similar concept sought after by archaeologists attempting to piece together the puzzle of a past narrative.

In his text *Totality and Infinity*, Levinas defines ethics as the, "calling into question of my spontaneity by the presence of the Other...the strangeness of the Other, his irreducibility to the I, to my thoughts and my possessions, is precisely accomplished as a calling into question of my spontaneity" (1961, 43). Many other philosophical questions feature in Levinas's attempt to understand ethics. These additional portions, however, constitute his ethical rumination and became significant philosophical endeavours as his 'central task'. In regards to the efforts placed upon understanding the relation with the other and the primacy of ethics in ethical mode of being, the structure of Levinas and the reader's experience of his dense writing is logically decided as in that it deepens with each layer of human encounter revealed. This is aptly compared to, "that of a wave on a beach, always the same wave returning and repeating its movement with deeper insistence" (Bernstein in Critchley 2002, 6).

To conceive of ethics as involving corporeal beings separates Levinas from other more intellectual approaches to ethics (Ince 1996). In this research in particular, a theme that will be explored in the following section, the face is the starting point for and conditions the possibility of ethics (Critchley 2002) because the fundamental, “essence of philosophy consists in going back from all certainties toward a principle, if it lives from critique, the face of the other would be the starting point of philosophy” (Levinas 1998, 59). Fully immersed in notions of embodiment and materiality, Levinas’s conception of ethics goes beyond any purely conceptional discourse and is grounded in a concrete and empirical humanistic dimension, which makes it resonate with social and cultural aspects of archaeology. As the face prompts humanity, the facet archaeology determines to get back to, so is its importance to this discipline.

The Same and the Other

To grasp Levinasian concepts concerning broad notions such as ethics, alterity, response/responsibility, and ultimately discussed here in this thesis, the face, one must identify the constitution and consideration of the same and the other/Other. This relation is relevant to understanding underlying issues of the overall discipline of archaeology as its main concern is the other and their lifeways through materiality and human remains. We begin by recognising we exist in our worldly situation with things and beings that are other than, but certainly not, negotiations of ourselves (Wild 1969, 12). However, in this world of things that are other than ourselves, we have a tendency to create an egotistical relationship and begin to “think of other individuals either as extensions of the self, or as alien objects to be manipulated for the advantage of the individual or social self” (Wild 1969, 12). These two objects in relation, the same and the other, will be discussed.

The ‘same’ to Levinas and his writings would be considered the self or the ego. This self is a social being entrenched within the living world. This social being exerts or discusses his or her own perspective of the world as a self and then describes or explains others which arrive in their worldview. However, the status of the self is called into question when the other person appears. The asymmetrical nature of ethics, of which Levinas speaks, places the other above the ‘same’/self which will always be standing in moral responsibility to this exterior presence and is the source of the dignity for the self (Cohen 2003, xxvii). The

same defines (not totalizes) the other without having to be determined by the other (Levinas 1961, 125). Levinas's primary argument is the breakdown of the former philosophical alignment of the 'same' with the 'other' as the other is essentially other to the same and cannot be referred to as such.

Reduction or totalising the 'same' to the 'other' refers to the conceptions of the other as the same. Creating a relationship wherein the self is similar to the other – that you are like me and therefore must need and desire the same ideals – is the problem in which the separation of the 'same' and 'other' solves. Fundamentally, Levinas overturned the common Western notion, 'treat others as you would like to be treated' by demonstrating that the nuances we once thought of inter-personal and inter-thingly relationships are not bound to us in a particular manner and operate in their own world. The reduction of the other to same had been a tradition in ontology before Levinas recognised this suppression of the other transforming them into the same. Termed 'non-ontological philosophy', this resistance of the consumption of the other into the same is described as ethical (Critchley 2002, 17). While the 'same' is an important feature of this dialectic, Levinas dedicates more attention towards the qualities of the other person. The 'other' cannot be reduced to the 'same' and much of Levinas's thoughts endeavour to appeal to this non-comprehensible relationship.

"Being is exteriority" (Levinas 1961, 290). A dense statement by Levinas, found in the commencing statement of the conclusion to *Totality and Infinity*. This assertion established the relationship between the lived experience of being and the otherness we possess. The experience of ethics is located at the beginning of exteriority, or otherness. We are at once a self who experiences others, but simultaneously someone's other person, which means that the exteriority we inherently display is a dynamic quality inherent of humanity. This role and multifaceted notion is valuable to articulate as a critically self-reflexive archaeologist positioned in the twenty-first century.

The other is not different from the same by physical delineations, qualities of character or mental abilities because "sociology, psychology, physiology are thus deaf to exteriority" (Levinas 1961, 291; see also "Time and the Other" in Hand 1989). This is not what distinguishes the other person from the self. This is not what Levinas intends when he uses the term 'exteriority'. Exteriority in Levinasian terms denoted the otherness of the other,

that which cannot be reduced to the same (Critchley 2002). If the perception of the other is reduced (or totalized) to the condition of the 'same'/self then we lose sight of the other person in the philosophical investigation. We deny them their basic, fundamental right to difference, and become a theoretical spectator within the world where the self is supposed to be actively participating. The other to me (the self) exceeds all idea of the other in me (Hand 1989, 5) and therefore overflows the possibility being reduced to a conception of similarity.

If we perceive Levinas in the highly charged sense in which he writes, the words which confront the reader would be robustly connotative of the indebted relationship we have with the Other such as 'hostage', 'obsession', infinite responsibility', 'trauma', 'demand'. He penned passionate works with language illustrative of the great asymmetry the self has to the alterity of the other. For instance, "the Other becomes my neighbor precisely through the way the face summons me, calls for me, begs for me, and in so doing recalls my responsibility, and calls me into question" (Levinas 1989, 82). This is a strongly worded impression upon the reader, but also perhaps for harkening back to the lived condition of the conflict seen in the twentieth century in which the majority of his work is situated.

With the discussion of the same and the other, it contextualises the establishment of the appearance of the face within Levinas's philosophy. The face as a location of importance within his corpus of work, "is not his physical countenance or appearance, but precisely the noteworthy fact that the other – not only in fact, but in principle – does not coincide with his appearance, image, photograph, representation, or evocation" (Burggraeve 2005, 50). This is an *essential* understanding for the further discussion of Levinas in regards to the face. Many mistake this semantic choice for solely the physical countenance, however this simplistic reading is unequivocally not what Levinas was referring to when discussing the 'face' of the other person.

The notion of 'face' from Levinas is not the imaged countenance. No, in fact he denies that it "consists in figuring as a theme under my gaze, in spreading itself forth as a set of qualities forming an image" (1961, 50). The 'face' he speaks of, "destroys and overflows the plastic image" (1961, 51) which means that the presence of the other is more than the physical. This is where form and content lose their distinction, but most importantly, the

face as Levinas puts forward is “the way in which the other presents himself, exceeding the idea of the other in me” (1961, 50). This research uses a sympathetic reading of Levinas and begins with the physical face and the ‘plastic images’ which our exteriority overflows illustrated through the archaeological record as a window to delve into the philosophical themes within these assemblages of materiality.

As abstracted as the concept of the face can become through the extension into the philosophical realm, it is still associated with Levinas’s corporeal view of the ethical encounter (Waldenfels 2002, 69; Levinas 1961, 305). The significance of experiencing this face and understanding the ramifications of the other according to Levinas, is to benefit humanity. If the dignity and status of the other person is not established or maintained they could become, “a faceless face in a crowd, someone who the passer-by simply passes by, someone whose life or death is for me a matter of indifference” (Critchley 2002, 13) resulting in violence against others. This breakdown of the ethical encounter is potentially possible due to the totalization of the other to the same, reducing the other minds in the world to that of the self. An error in relationship as the reduction to finitude denies the other its full potential is also a failure on the part of the self to uphold and sustain a ‘responsibility for the other’ (Thiem 2008, 97-8). Note this theme for later discussion of instance of violent trauma seen in the bioarchaeological record of Ireland.

Levinas posited that the main relation with the face-to-face encounter occurs within the linguistic register. The realm of speech opens the encounter to an engaging, conversing, active involvement rather than contemplation (Critchley 2002): the ultimate act of intersubjectivity. The linguistic act of conversation differs from sight as, “speech refuses vision” (Levinas 1961, 296) because speech is entirely situated in exteriority, while imagery alone is not adequate to the overflowing nature of otherness. This is inherently the main issue for the consideration of the later topic of the early medieval period where the recording and documentation of Ireland and its (bio)archaeological record beings.

Though what Levinas terms “face” is something that exceeds our exteriority and extends into the realm of the infinite, here this body of archaeological research begins with the physicality of the material culture and the concrete face of individuals and moves toward the abstracted conceptualities of how the now Levinasian use of the word ‘face’ appears in

the (bio)archaeological record. Through themes such as ethics, response, responsibility, and alterity the conceptual face appears through the archaeological record impacting the archaeological imagination.

Levinas is only one voice in the philosophical discourse undertaking the relationship with other persons or other minds. His radical ‘otherness’ is not taken up by others such as Merleau-Ponty who, critiqued by Levinas, instead would posit that the beings within the living world of experience are intertwined (1968; Johnson and Smith 1991). Still very much situated within the notion that beings are embodied and corporeal and that they cannot be reduced to one another, he avoids dualistic and hierarchical notions of alterity (Reynolds 2004). Interesting to note, the undertaking of alterity and other minds have been a part of the phenomenological tradition as well as the larger philosophical discussion, but problematic when combined with the practical dimension of the archaeological pursuit.

Through self-reflection and critique, Levinas understands ethics as the infinite, asymmetrical responsibility to the other person, where it is also a point of otherness or ‘exteriority’ (Critchley 2002, 15) namely: the face. Just as the other cannot be reduced to the same, the face-to-face is an, “irreducible and ultimate relation” (Levinas 1961, 295) in which no concept can be contained. With the construction of the ‘same’ and other dialectic (as Levinas articulates the relationship) the potentiality for the discussion of the infinite and the finite appears and will be discussed presently.

Totality and Infinity

The ‘same’/self and other dialectic that is the basis for the understanding between the beings within the world, elicits the notions of another relationship associated with experiences and encounters appear in the form of totality and infinity. *Totality and Infinity: An Essay on Exteriority* (1961) was the first philosophical investigation into this relation and its impact upon the self and other. While *Totality and Infinity* is a philosophical essay classically structured through the use of “different strata, related as founding and founded” (Lingis 1981, xv), a second text discussing the face, *Otherwise Than Being* (1981) an essay conversely on the responsible self, is written scattered and against convention. While

Levinas's structure evolves with the theme of totality and infinity under consideration, the attention towards his main thesis of the face is still phenomenological in nature.

According to Levinas if an other in general terms, object or person, can be comprehended in terms of equality, symmetry, correlation, reciprocity, or understood in general a totality is formed and the relation is totalized (Critchley 2002). The main argument by Levinas is that the other cannot be part of a totality because its presence overflows this finitude and is situated in a conception of infinity. Critchley noted that upon reflection of Levinas's view of the asymmetrical relations between beings, "it might be argued that much philosophy and social theory persistently totalizes relations with others" (2002, 14). However, Critchley goes on to assert that this totalizing ideology is only the case if one is a spectator and not an active agent within the relations.

If a reduction of the other to the same occurs and a totality is formulated, it can either be due to a breakdown in the ethical encounter or without the experience of the imperative feature of Levinas's philosophy: the face. Critchley explained, "this exterior being is named 'face' by Levinas and is defined, bringing to mind what was said about the notion of infinity, as 'the way in which the other present himself, exceeding the idea of the other in me'" (2002, 16; Levinas 1961, 50). The face is the site where the possibility for ethics (i.e. the asymmetrical relationship with the other) exists and where a totality is insufficient for regarding the other. This allows the totality to rupture and the infinite can surface, and that is when the role of the face becomes central in transcendence (Levinas 1961, 24). This is an example of the depth of Levinas's thought, but also of his complex structure of these ideas.

By definition, the idea of infinity for Levinas embodies the essence of its human subject as it, "is a thought that contains more than can be thought" (Critchley 2002, 14); an overflowing of the subject. Human infinitude derives from the multifaceted nature of living in both the physical and symbolic realms. Completely difficult to acknowledge, this type of relation can only be understood to exist by the phenomenological nature of bracketing our natural attitude. Then, by realising this system of obligation exists, we are challenged because the ethical relation, "is an excessive one: a mode of being and saying where I am endlessly obligated to the other, a multiplicity in being which refuses totalization and takes

form instead as fraternity and discourse, an ethical relation which forever precedes and exceeds the egoism and tyranny on ontology” (Hand 1989, 1). This is a philosophical frame that filters the remainder of Levinas’s philosophy which when applied to experiences and interactions expose archaeological phenomena with particular interest to this research.

The notions of totality and infinity within Levinas are difficult concepts to grasp fully, but vitally important to understanding the foundation of the self/other relationship and therefore also the concepts of intersubjectivity and response and responsibility. As emphasis upon humanism and this self/other relationship of primal importance for archaeology as well as the crucial beginning of the face in this understanding, the philosophical underpinning of this body of research should reflect this point. Therefore, the use of phenomenological examination of how the face is experienced will be produced through a pseudo-Levinasian lens. For a phenomenological framework to be used, a concrete content for this structured investigation must be provided, and for the purposes of this research it will be the human and artefactual face(s) visible within the Irish (bio)archaeological record.

2.1.2 Applying Levinas: His Position within Archaeological Theory

This discussion, firmly entrenched within the philosophical realm concerning the face, should be brought back to the primary target of the subject of archaeology. This allows for an understanding concerning how these principles align with the concepts of (bio)archaeology and the main themes of this research, i.e. visibility, intersubjectivity, alterity, response and responsibility, the face, and narrative-created imagination. The mixture of Levinas’s philosophies, archaeology, and the face function well together, in that they structure themselves in similar patterns of layers which need to be exposed in order to understand the correlating meanings attached to each surface, concealed, and then revealed. This layered notion applies to the topic of the face as well as the overall structuring of this body of research. To defend the use of this Levinasian framework in terms of an archaeological body of research we see that these philosophies address many aspects within this discipline. These are pertinent to this body of research and will now be discussed.

The discipline of (bio)archaeology is an anxious subject as it straddles the hard and social sciences (Hutterer 2001; Martin 2013, 112). The heterogeneous nature of the field with the

variety of sub-disciplines allows for a vibrant discourse in the various portions of the human past, but also can be conflicting in the direction of (a) archaeological thought (Hodder 2012, 9). Moreover, it is asserted here that the character of Levinas's thoughts in their incongruous yet complimentary trajectory respects the similar struggles within the archaeological realm. The dynamic and fluctuating qualities of both discourses and the associated material available are compatible in engaging and exposing qualities of one another for the ultimate benefit of this body of research.

The interplay between the self and the other, intersubjective relations, response/responsibility, and visibility are manifested in the (bio)archaeological record. When applied to the archaeological context, this explanation of the phenomenon of the face is readily present in the material culture of past peoples. Additionally important is the way we can physically observe their interaction with an other – through mortuary contexts. The presence of these concepts are ideal motivations for why Levinas was chosen for the archaeological application of theory. Although they are seemingly contradictory from his stance against corporeality or plastic images, the use of Levinas's philosophies to look at concrete faces is here the foundation to the investigation of many themes that run through the field of archaeological scholarship. It begins with the re-produced countenance and has an extension into the infinite qualities of the underlying theories embedded within the face. Therefore, by beginning at the (bio)archaeological record we can compile differences in the portrayal and images of the people of Ireland in re-produced manners and their osteological material.

More than anything, Levinas's contribution to archaeology is the re-invigoration of the notion of humanity within the discipline, which resonates with the merit and utility of archaeological facial reconstructions. The body of philosophy that Levinas produced is, "ineluctably anthropological without being relativist" (Cohen 2006, xxviii). Rather than focusing on epistemological questions, the primacy of ethics and the importance of the human (interaction with one another) comes to the forefront. Emphasising the humanistic element of the field, Levinas is an ideal contribution towards archaeological discourse, especially in the sub-discipline of bioarchaeology in which the space for discourse about the other and the treatment of the other in death plays such a large part in the discussion.

In consideration of the contemporary archaeological face, outside of artefactual and skeletal materiality, facial reconstructions which will be examined in chapter three are shown to punctuate the archaeological record and formulate the gaze toward the past. Additionally, what the face offers to us as the sign of the other, solidifies a discipline-wide implicit concern with alterity and the encounter of the (past) other and a study into the “humanity of the human” where the “for-the-other” takes precedence over, and is even superior to, being for-itself (Cohen 2006, xxvi). Archaeology is inherently about the other. In corporeal form or through materiality, the other is always already present. The physical face of materiality, human remains, and facial reconstructions are the materials for this phenomenological methodology. This framework operates on a valid functional level due to the fact that these three sets of phenomena all have elemental characteristics which extend beyond their finite ‘being’ into notions of infinitude within the archaeological record and the subsequent archaeological imagination.

Stated previously, the other is not delineated by any physiological or internal characteristics, but by their presence to the self by way of the Levinasian ‘face’. As Burggraefe (2005) noted, first delving into the multi-dimensional, but singular subject of Levinas’s thoughts concerning the face, we naturally misunderstand his central point to be a regard of the physical, concrete countenance of an individual. Instead, the face transcends this corporeal boundary towards the primal abstracted notion of the presence of the other person. This research does utilise the corporeal face in instances of examination within archaeological discipline, however this is merely a starting point. It is the concrete entity which this theoretical investigation is anchored within, which in the discipline of archaeology and theory is important for application. What Levinas terms ‘alterity’ is his acknowledgment that one cannot truly know another person, due to their separate-ness (1961; 1981). Therefore, when applied to archaeology it is far more divorced than experiencing alterity in a living ‘other’ due to the distance of the past.

This is an explicitly valuable notion for the realm of archaeological evidence because we cannot truly know others in the present, nor can we know them truly in the past. That being said, every aspect of archaeology and excavation is learning about past people mediated through the plethora of objects (materiality, human or otherwise) that constitute the

archaeological record. In archaeology we are limited to visible objects, sometimes in invisible ways. That is, while a post does not exist in a post-hole, there is evidence (visual regard) of a past human/material trace. This visibility and other-ing of archaeology, not in a post-colonial manner (Said 1978; Bhabha 1994), but in an abstracted humanistic dimension is posited to be a fundamental union throughout the whole of archaeological discourse.

Beyond the concepts of personhood, identity, and intersubjectivity, visibility is an important element of the face and its position within human encounters. Levinas denoted linguistic encounters as the prompting for the connection with the other person and the demarcation of the obligation towards this other person. In *Totality and Infinity* (1961), Levinas asserted that imagery alone does not allow the self to encounter the other fully in an interactive manner and is instead, just a contemplative gaze that does not recognize the overflowing potential of the face in its imaged form. Archaeological scholars such as Croucher (2005) would concur with Levinas, stating that too much emphasis of Western experience prioritises the visual experience in the formation of relationships with objects situated within our worldly domain. However, this body of research here critiques the dismissive level of visibility in favour of the power that the face imposes upon the self as viewer.

Visibility is a supremely important experience that filters our encounters and from which we begin to speak about our shared realities. It is upheld here as a primary indicator of our worldly surroundings. In particular, the embedded conceptions of the visual nature of facial reconstructions offer space for discourse to engage with these contemporary reconstructions of past individuals through the visual passage. Harnessing the weight and power that the face exhibits, facial reconstructions attract public audiences by the lure of the past which, before the visual encounter, was detached and dis-connected to the gaze of the perceiving contemporary audience. Therefore, visibility can also commence the encounter of alterity, a key concept throughout this research and its link to the other major themes. This will be discussed within chapter four dedicated to the Irish prehistoric period.

Facial reconstructions combine the previously discussed theories of visibility and alterity. Just as the ethical relationship is founded on asymmetry between the self and its impoverishment of obligation to the other, the face is in a similar manner of being,

especially in regards to the plastic form of the facial reconstruction. This comes to fruition through the inability of the present-day audience to communicate fully with the individual. Instead of being created through language, this is produced through prompted interdisciplinary contextual information that attempts to compensate for this (archaeologically) interactionary absence. The discourse upon ethics leads towards the theme of response and responsibility that the self has towards the other person if ever confronted with their face.

Conceptualizing responsibility for Levinas is not entirely what contemporary vernacular would consider being responsible in the judicial sense. Justice does not derive from an institution such as a governing, stately body. It is however maintained by the relationship created by the face between the self and the other calling upon the concepts of responsibility one has for an other. Utterly interlinked with a sense of justice (and the law, courts, and institutes that accompany this contemporary sentiment) when approached with the face-to-face encounter, we are completely responsible to and for the other. Instead, he explains responsibility as an essential action performed to solidify the self and the consequential relationship with the other, “[o]ne has to respond to one’s right to be, not by referring to some abstract and anonymous law, or judicial entity, but because of one’s fear for the Other” (Levinas 1989, 82).

This concept of responsibility uncovered by Levinas is a system precisely seen within the examples of violent trauma in archaeological record regardless of temporal or spatial contingencies. As violence is seen as the breakdown of the ethical (asymmetrical) relation, reducing the other to the self, justice and responsibility is the radical response to re-emphasizing the other’s otherness. Therefore, if we look to violence as a judicial or reprimanding action, then the full ethical relation has not been established. In the bioarchaeological record this point can be seen as a non-violent mirror of the past display of decapitated skulls (seen in the discussion of trauma in the early medieval period in chapter five). The display of decapitated skulls provides evidence that responsibility for the other is propagated through the presence of the other’s face. The use and curation of skulls and more importantly the face would be evidence of this ethical breakdown and fear for oneself through the fate of the other. Functioning in this society of ethical breakdown as

judicial practice is seen in archaeological sites such as Lagore, Co. Meath, Wood Quay, Dublin, Cahercommaun, Co. Clare, Ballinderry 1, and Ballinderry 2 where the decapitated individuals would have been positioned for the purpose of display (O'Donnabhain 2011). This confrontation with the faces of the dead (not the head, as there is a proper differentiation) causes a reaction from the viewing population, not of the judicial class, into creating the ethical relationship that they are seeing as broken. This topic will be further evaluated within the intersubjective nature of the face in early medieval Ireland in chapter five.

Response and a responsibility for the other founded in the ethical encounter with the other person can be taken two-fold within this research. Firstly, regarding Levinas and the manner in which this notion takes hold within his writing, the responsibility for alterity arises from the appearance of the 'face'. Additionally, if we are to be the self-reflexive archaeologists of the contemporary discipline, then we can see this response and responsibility of archaeological material in the realm of research. Archaeologists manufacture the archaeological narrative and therefore have a great deal of impact upon how this information is consumed. This area is not within the realm of Levinas's philosophic intention, but is of definite merit for consideration as being self-aware, responsibility for the production of knowledge must be made a certain.

In facial reconstructions, the second type of response and responsibility is vital in understanding the essence of how archaeology is utilizing the face. The face of an archaeological facial reconstruction evokes a response. This response derives from a contemporary audience reflecting upon their present condition in relation to the reconstructed past individual (this is seen in further detail in chapter three). The responsibility of the public towards the shared past is yet another application towards the sympathetic reading of Levinas in consideration of facial reconstructions and their intrinsic merit. Reflecting upon facial reconstructions we see the thread of responsibility in the act of approach by the viewing public.

Mentioned in the history of facial reconstruction provided in chapter three, the process of voyeurism of the face is especially significant in the experience and creation of the archaeological imagined narrative. While it is a dynamic relationship in that each

individual is altered in experiencing each other (the reconstruction is imposed upon by the creating practitioner), there is a one way directed gaze upon the reconstruction as it placidly or almost stagnantly gazes into the present. Although, on close inspection perhaps it may not be as voyeuristic as it first seems. Creating a pseudo-relationship between the present and the past produces conceptual implications seen here (intersubjectivity, response, responsibility, alterity) that merit the subject/objects of archaeological facial reconstructions as a portion of legitimate archaeological discourse.

Perhaps the most interesting connection between Levinas and facial reconstructions and a thread which will be developed throughout this body of work is the concept that the reconstructed face confronts us and alters our notions of the past. We actually understand more about the individual in question because the facial reconstruction takes the abstraction of the skull and places a comfortable (fleshed) knowing face upon its surface. In fact, it is quite the contrary when confronted with face without the possibility of language (the reconstruction). The individual is far from the viewing self, a stranger, and the audience will never be able to know any aspect of what this individual will conceal and they will continue to inhabit the world of their own (Wild 1969, 13). Although, there is definite room for inclusion of these subject/objects in a sympathetic reading of Levinas. By speaking with the other you enter into a relationship with the individual, facial reconstructions will always be impoverished in this aspect of philosophical interaction.

This contrarian perspective of this use of Levinasian research would posit that the face produced in facial reconstructions of the archaeological realm could never possess the same amount of weight or burden the self as much as the encounter of the otherness of a corporeal other because of the absence of speech leading to true intersubjective relation supported by the statement by Levinas, “I can never bind or identify the other with his plastic form” (1985, 90-91). Additionally, the imaged face in its plastic form cannot contain the infinite potential of the otherness which exceeds the idea of the other in me. However, this is a rigid reading of Levinas. If we consider the temporal quality of the facial reconstruction and the reanimation of fleshing the past remains as a contemporary mediator for the interface of understanding this individual, we can see a connection is still

formed, although perhaps not as much a deep encounter as Levinas speaks of throughout his work.

An extension to funerary and mortuary practices is a possibly the most viable conduit in which to visibly consider how the other person was treated in regards to responsibility within the Levinasian realm. It is known that the living are those that inter the dead (Quigley 1996; Gowland and Knüsel 2009; Argawal and Glencross 2011; Martin *et al.* 2013). Their actions and intervention with the deceased ‘face’ (or already always present other) can be illustrated throughout mortuary practices within the (bio)archaeological record. Not only being relevant to the discussion of the face, various philosophers’ discussions upon the event of death have become strong theoretical elements to the projection of mortuary practices.

Within the realm of mortuary practices, lies an interesting connection between Levinasian philosophies of death and the treatment of the dead by their contemporaries. Heidegger saw death as the true path to authenticity, termed ‘being-toward-death’. It “defines authentic human subjectivity and opens up the root philosophical question of being” (Cohen 2006, 23). Therefore, the understanding of what it is to be a being is revealed in the association to mortality and death; an essential genuine moment within a being. Levinas does not see this as a moment of freedom, but views it through his ethical relation of the other and in our suffering it is our limitation (Levinas 1989, 41).

The living buries the dead and through certain consented socio-cultural modes, we can see that there is definitive intervention between the self and the other in this instance. Although this event can be communal and brings people together, the involvement of mortuary practices is significant within the experience of the self as,

“the other man’s death calls me into question, as if, by my possible future indifference, I had become the accomplice of the death to which the other, who cannot see it, is exposed; and as if, even before vowing myself to him, I had to answer for this death of the other and to accompany the Other in his mortal solitude” (Levinas 1989, 82).

Death is “ungraspable” to Levinas (1989, 41), but it is the nearness of death that we as selves can grasp, “it is not unknown but unknowable” (Levinas 1989, 43). This is an

assertion we as selves in a social setting know to be true having experienced it with the event of death as a constant throughout the presence of humanity. Our relation with the event of death, “indicates that we are in relation with something that is absolutely other” (Levinas 1989, 43) reiterating the radical otherness we experience throughout our time as beings within the world. Even in the event of mortality, the relation with the other is one of asymmetrical association. Not as a freedom, but as a social and core human obligation, death of an other leaves the self in the realm of ethics once again as, “a face is a trace of itself, given over to my responsibility, but to which I am wanting and faulty. It is as though I were responsible for his mortality, and guilty for surviving” (Levinas 1981, 91). That being, the (bio)archaeological record of funerary and mortuary practices is incredibly insightful as a beginning to understand past social relations.

The applicability of Levinas throughout various streams of archaeological thought has been noted. There are multiple rifts throughout the contemporary discourse that can be articulated within the scope of Levinasian philosophy, however the main tropes relevant towards this body of research were addressed. Broadening the scope briefly, Levinas shares relevant attributes with regards to the overarching theoretical frameworks that have formed the main schools of thought within the discipline. Beginning with the culture-history, a swift read of Levinas through the main periods of thought of archaeological theory could be beneficial in terms of regarding how this particular corpus of philosophy is being utilised within this body of research.

In similarity towards this first phase of archaeological theory appearing in culture-history, Levinasian thought is a normative view of culture as he does not take into heavy consideration the difference in cultural nuances in approaching the face. He sees the encounter of the face as unchanging and a primal state in what it is to be human in an ethical state. The philosophical field of phenomenology is descriptive in nature as is the basic structure of the synthesis of theory stemming from culture-historical frameworks. However, while these features seemingly align in nature, the plane in which Levinas functions upon the abstracted and elevated from physicality in philosophy which is a trait very much emphasised within the cultural-historical framework. As Levinasian thought is purely about the humanistic dimensions of encountering the world and the subjects within,

perhaps also considered anthropological in his writings, his thoughts are not applicable to the framework of culture-history based on the assumption that this mode of thought places more emphasis upon artefacts as expressions of cultural norms rather than looking *through* materiality to those past populations that created the objects (Willey 1990; Johnson 2010). The popularity of the theory of culture-history coincides with the time period in which Levinas began to publish his work (Trigger 2006), but as this philosopher began to mature in his writing and dissemination of work, a new model of thought became apparent in the discipline of archaeology of the mid twentieth century, that being 'New Archaeology'.

Very few instances of relations with 'New Archaeology' can be assessed within Levinas's work. This framework of thought began with Binford (1962; 1972) was followed by examples such as: Clarke (1968), Leone (1972), Redman (1973), and Fritz and Plog (1970) which united the discipline of archaeologists to begin theoretical conversations within the discipline. Promoting science and anthropology (Trigger 2006), we can see Levinasian philosophies concur more so with the anthropological manner as he did not utilise a rigid scientific method of hypotheses and research questions. Structure is of vital importance to the philosopher in his phenomenological manner of organising his logical argument as well as in the New Archaeological theories. The quest to overcome simplistic description and become more scientific in a sympathetic anthropological manner, placed worth and merit upon the manner in which arguments are put forth with respect to logic and reason because "the goal was no longer to describe the past but to explain it" (Shanks and Tilley 1987, 32). In this, Levinas's structure, while varied depending on the publication and argument, constructs a layered, phenomenological approach to the dense thoughts he offers. The explanation versus descriptive nature of New Archaeology is apparent throughout Levinas's work because he too attempts to delve under the surfaces of encounter and the nature of the entity of the face; exposing the patterns of lived experience. Concurring with the increased anthropological dimension of New Archaeology, Levinas's thoughts there is little hard science which this school of thought dedicated itself to apparent in this philosophical body of work.

In conjecture, the most likely archaeological theory to apply towards Levinas and position these theories within this discipline would be the post-processualist model. Appearing

from Hodder's (1982) critique of processual archaeology based partly upon Gidden's (1979) theories (Meskell and Preucel 2004, 7), this theoretical approach became an examination into the pluralistic conceptions of the past. Apparent in most of the contemporary archaeological scholarship published in the late twentieth and early twenty-first century, post-processualism and interpretative models of theory are heterogeneous and contain a diverse amount of research tropes ranging from the examination of agency (Dobres and Robb 2014), gender (Gero and Conkey 1991; Gilchrist 1999; Dowson 2006; Kus 2006;), materiality (Graves-Brown 2000; Meskell 2005; Taylor 2008; Carlile *et al.* 2013; Olsen 2013), and practitioner self-reflexivity (Preucel 2010, 151; Hodder 1992; Stottman 2010). Before theory became an accepted portion of the archaeological research method (Hodder 2012), there was a tradition of archaeologists to exploit philosophers and frameworks of related disciplines and applying them to the discipline of archaeology such as Thomas' reading of Heidegger (1996), Tilley's use of phenomenology (1994), and the application of Marxist ideals by Childe (1946). Although when refined to an engaging dynamic rather than a superficial regard for philosophy, this symbiotic application illustrates links between the discipline of archaeology and the modern world.

Post-processual archaeology aligns with Levinas predominantly due to its consciousness of phenomenology within application of theory towards the past, its materiality and peoples. It is the opinion of this author that Levinas has not been seen in the wider discipline of post-processual archaeology due to his contrary theories which do not provide ultimate and fulfilling conclusions. The level of abstraction in Levinas's writings is difficult to manifest in concrete data sets or collections of materials. Just as anxious as the state of archaeology is, so is Levinas's state of conclusions. This philosopher and his rather pessimistic scope of life could also be a simplistic reason for the disregard for the application of his highly regarded body of work.

There is perhaps no one manner in which to read Levinas, thus his theories can be applied to many models of archaeological thought. However, as the previous discussion illustrates in relation to the chief themes of the constitution of archaeological theory, there are key points of Levinas which do not coalesce. It comes as an obvious problem to attempt to reconcile a framework of philosophy firmly entrenched within its own philosophical

theories, discipline, and historiography to that of archaeological theory. It should be made consciously aware that through reading this doctoral dissertation, the research is situated within a twenty-first century discursive archaeological setting. Impressions made mainly by the previous studies in respect to the general study present here which range from late nineteenth century craniometric racial studies to the present-day interpretationist theoretical movements. From the archaeological record, it is illustrated that Levinas's principles, while a twentieth century explication of a universal phenomenon, is the ideal manner in which to engage with the past, essential traces of humanity.

2.2 Archaeological Implications of Levinas

To examine the face is to begin at the primary foundational point all themes of humanistic archaeology stem: visibility, intersubjectivity, the relation with the other (and therefore ethics), and responsibility. The philosophies of Levinas and his situation within the archaeological discipline has been articulated in the previous section. However the extrapolation upon the impact of the use of this theoretical framework should be explored. When applying the philosophy towards the archaeological material it is essential that one is not exploited by the other; that each archaeology and philosophy relate in engaging modes of examination. In this particular case of research, the insights into the abstracted nature of the Levinasian face exposes a previously unarticulated feature within the (bio)archaeological material of the face. Therefore, there are instances within the background of this research that need to be reasserted in through the scope of this theoretical framework.

'Grounding' Levinas so to speak, in archaeological discourse allows for the importation of his writings in a beneficial involvement to archaeological occurrences (curation of human remains and artefacts) and the facial reconstructions that are a pivotal portion in creating the archaeological imagination. The following discussion is pertinent to understanding the basic foundations upon which this research is built. They are discussed here because this thesis departs from these past academic traditions and contributes to a new understanding of the face. Due to the layered structure and notions that constitute body of research, it is

important to reveal these certain assumptions that the subsequent stratigraphy of investigation breaks down.

2.2.1 Craniometrics, Bioarchaeology, and Traditional Interpretations of the Face

The founding trope of anthropology, and by extension archaeology, was the endeavour to examine the difference between cultures and distinguish features held between races (Fluehr-Lobban 2006). As such, the research from this beginning period was framed in the theories of racism and centred on the defining feature of humanity: the cranium. This undertaking to explain biological diversity and cultural variation was a motivation for the beginning of anthropology. Its sub-disciplines were naturally inclined to first proceed towards the examination of the face (traditionally subsumed within the head) because of its overwhelming power the prime site for encounters and the beginning location for difference – for the solidification of the other versus the self. Deriving from this tradition, the past two centuries of scholarship have spawned sub-disciplines such as bioarchaeology and have also perceived certain standards about the interpretation of the head in archaeological contexts. This section is devoted to the former (lack of) interpretations of the face in the traditional scope of the fields of craniometrics and bioarchaeology and the lack within this discourse of the face due to the overwhelming consideration of the head.

Nineteenth century academics such as Paul Broca (1861), Paul Topinard, J.J. Virey, and Samuel Morton (1839, 1844, 1849) all focused their research upon the capacity of the skull cavity in relation to intellectual abilities. Proposing hierarchies of peoples around the world and their cultural systems is a progression from a state of ‘savage’ to a classification of western civilization. Early anthropological studies were not concerned with many of the socio-cultural facets contemporary scholars see through their academic lens. From these racially emphasised beginnings, the field of studying human remains drastically developed within the twentieth century. Conscious of its beginnings and the foundation of standards, the discipline of bioarchaeology arose to fulfil the examination of human skeletal material in a manner that was free from its prejudicial foundations.

This discussion situates itself within the realm of the twenty-first century discipline of bioarchaeology. Bioarchaeology, biological/physical anthropology, or osteoarchaeology

are all fields synonymous with the analysis and interpretation of human remains through the archaeological record (Armstrong 2003; Buikstra and Beck 2009). Terminologically divided between geographical contexts, 'bioarchaeology' first appeared in the UK through Clark (1972) and referred to the study of archaeological flora and faunal while also being adopted for the study of human skeletal remains. Therefore, "from an original emphasis on faunal remains the term "bioarchaeology" is now applied variously in the United Kingdom, sometimes linked to "osteochaeology""(Buikstra and Beck 2009, viii). While in the United States, the term was concerned with the multidisciplinary approach towards human osteological research within the superstructure of the American anthropological four-field approach (Blakely 1977; Buikstra 1977; Rakita *et al.* 2005; Buikstra and Beck 2009).

Different nationalities dictate different attitudes to this subject (Márquez-Grant and Fibiger 2011; O'Donnabhain and Lozada 2014). However, the main approach of bioarchaeology consistently looks toward the skeletal material within the archaeological record as primary documents of the "personified past" (Sofaer 2006, 2012) while also giving archaeology its "human scope" (Gilchrist 2000). Information concerning health, disease, mortality rates, cultural modification, and demography of populations can all be distilled from the wide range of evidence available from archaeological skeletal remains (Larsen 1997; Joyce 2005; Stodder and Palkovich 2012). From these remains, data can be expanded and extrapolated to the creation of a broad narrative of our past (Hunt 2001; Larsen 2006; Walker 2008). The socially oriented discipline of bioarchaeology (Stodder and Palkovich 2012; Buikstra 2006; Sofaer 2006; Knudson and Stojanowski 2008; Agarwal and Glencross 2010; O'Donnabhain 2011) is the ideal setting for this discussion. This broad narrative connects the threads of the lives of individuals and impacts the contemporary collective consciousness of the past.

Predating Buikstra's discipline defining moment for the field of bioarchaeology, the descriptive mode of the culture-history approach gave way to the problem-oriented population studies indicative of 'New Archaeology' (Binford 1962) and the renewed interest in funerary practices within the realm of social theory (Rakita 2014). Even though the importance of human remains is noteworthy, their potential as a source into the past is unrealised, as portions of archaeology marginalise their role of skeletal remains (Larsen

1997). It was in the bioarchaeological discipline wherein human remains regained their high source of potential for providing information about past archaeological populations. There is still an effort to transition the information yielded by the skeletal remains from the marginalised appendix to full inclusion within the archaeological analysis of sites and the people which inhabited them. This impacted the renewed interest in mortuary practices within social theory originating from scholars such as Binford (1971), Saxe (1970), and Brown (1971) (Rakita 2014).

Therefore transitioning to the twenty-first century the field of bioarchaeology, we see a vibrant and diverse field that is self-aware and constituted by reflexive practitioners who are conscious of their scholarly position and the relationship external to the academic world. The global status of this field lends itself to the proliferation of heterogeneous qualities displayed in examples of edited volumes from the past five years such as Arnold and Wicker (2001), Buikstra and Beck (2009), Argawal and Glencross (2011), Márquez-Grant and Fibiger (2011), Stodder and Palkovich (2012), Martin *et al.* (2013), O'Donnabhain and Lozada (2014), and Knüsel and Smith (2014). The global status of this field manifested as edited volumes displays the prospering work from around the world and the universal preoccupation with understanding those who have come before us. Shifting in theoretical underpinnings, the field of bioarchaeology has evolved as a discipline in itself although there are still the vestigial signs of craniometrics within.

Interdisciplinary academics such as scientists, anatomists, psychologists, and anthropologists all took great interest in the nuanced capacities of the cranium, especially in the association of cranium size to intelligence (Gould 1996). Inherently biased towards racial tendencies of greater intelligence in Caucasoid individuals and lesser so in other races such as Negroids, scholars such as Broca (1861) and Morton (1839, 1844, 1849) collected hundreds of skulls from around the world to illustrate their hypotheses. Endeavours from scholars akin to Broca and Morton led to the rather active gathering and separation of skulls from their original contexts and their quantification through series of measurements of vault size and other craniometric examinations. Reducing the potential of individuals to the series of numerical data sets, these research tropes, while focusing on the

individual and their cranium, limited the possibilities of these skulls to what would become the foundation for racial stereotypes (Gould 1996).

A theme mentioned throughout the previous portions of this chapter is the captivating nature of the face. With the impressive nature of this entity and the location upon the surface of the head, the collection and curation of these skulls separated from their embodied context, established the scholarly pursuit of cultural institutions termed “skull cults” (Wells 1959) or ‘cult of the head’ (Ross 1959; 1967). Although the traditional interpretations of heads is not symptomatic of Ireland’s archaeological context alone it can also be found in the broad European archaeological narrative.

The overarching thought of the head as the seat of the soul appears in the not so distant past such as in medieval texts and in the early modern philosophies of Descartes (Lokhorst 2014). As Cunliffe (along with those like Ross) in his revisionist view of archaeology would posit as well, stating,

"The explicit account by Diodorus Siculus typifies the head hunting that was so common among the Celtic tribes. The practice was not merely bloodthirstiness, however. In common with many primitive peoples, the Celts believed that the soul resided in the head. The head symbolised the very essence of being, and consequently could exist in its own right. By possessing someone’s head, one controlled the person and his spirit. These beliefs are manifest in the archaeological evidence, the classical tradition, and the Irish and Welsh literature” (1995, 15).

Problematic use of the term ‘Celt’ aside, Cunliffe (1986) also postulated the use of skulls as an apotropaic function as well as the use of tokens or even further a type of amulet that one would wear. Billingsley’s investigation into ‘Celtic’ stone heads (1998) concurs with this apotropaic interpretation. Hilda Ellis-Davidson’s work (1988) positions the religious functions of the head not only in Celtic mythology and iconography but among comparative populations such as peoples of northern Europe. Megaw and Megaw also view the head through an artistic framework as being overtly symbolic (1990; 2005). This interpretation carried over into archaeological discourse accounts for the explanation of many cultural activities of skull (trophy) collection or curation. However, when previous biases are corrected, the phenomenon which was actually being interacted with was the

imposing power of the face. This body of research illustrates any re-production of the face emphasises our relation with the other and creates the bond of intersubjectivity.

The important array of information that can be gleaned from the head which was canonical in the formation of craniometrics also became the focus of socio-cultural interpretations as well. The tradition of surveys before this research, such as those by Hulbert-Powell (1944), Baring-Gould (1892), Henry and Zarnecki (1957), Jacobsthal (1944), Lambrechts (1954), Rynne (1972); Jackson (1973) and most pre-eminently by Ross (1957; 1967) were only to examine the head's (re)appearance, distribution, and culturally normative functions. These surveys each speak to some aspect of skulls and the face in which it denoted a boundary or a sense of space due to the placement architecturally and archaeologically at places of openings, i.e. doorways, hearths, gateways, serving as landscape/geographical boundaries, within proximity of water.

A prime example of the survey of heads outside the 'Celtic' tradition or Ireland in particular is the consideration of the archaeological record in the Near East and the number of plastered skulls that appear in these locations (Strouhal 1973; Goren *et al.* 2001; Bonogofsky 2003, 2005). As the first archaeological examples of 'facial reconstructions' (Wilkinson 2004, 40-41), meaning the face was re-constituted by the archaeological populations, these human remains have undergone drastic changes in theoretical models (Özbeck 2009). From interpretations relying on ancestors (Silistreli 1989; Özbeck 1988, 2005; Bienert 1991) and ritual objects (Garfinkel 1994; Simmons *et al.* 1990), there exists a post-processual transitions to gendered interpretations as well. This is seen in the shift from thinking only elderly male skulls are reconstructed in plaster (Kenyon 1957) to the re-analysis and examination that in fact all demographics of society including women and children were subject to plaster reconstruction (Bonogofsky 2004), gender has been included in the interpretation of these entities.

Not an unusual prior interpretation, earlier scholars like Cunliffe (1986) would also afford the male skulls in Iron Age hill fort site more importance than others. An aspect of the traditional interpretation of the head which will be dissected in the following section explains the gendered binary of the head and face (section 2.2.3). However, even the

significant paradigm shift in the cult of the ancestor worship and trophy heads of enemies (Testart 2008) to the non-relativist and non-universal realization of contextual uses for the meaning of the creation of plastered skulls (Kuijt *et al.* 2009) has occurred in most recent years. As we can see, the traditional interpretations of heads and the ‘cult of the head’ are insufficient in the contemporary theoretical climate of archaeology.

The fascination with the ‘cult of the head’ that Ross vehemently proposed, was decades later challenged by scholars such as Hutton (1991) who altered her traditional interpretation. He stated, “that there is no firm evidence of a ‘cult of the human head’ in the Iron Age British Isles, as was once asserted” (Clarke 1998, 21). While yet another scholar, Wait outright rejects the sacred notion attached to the head, “nowhere are there convincing associations of skulls and sculptured heads with religious sites. There are, of course a few sculptures of human heads, but an occasional stone head is too scant evidence on which to build a cult” (1985, 149; in Clarke 1998, 21). Clearly in close association with Hutton and Waits, Green noted the importance of the head within a religious context, but rightly wary of the scholarly ‘cult’ phenomena,

“why the human head was so important can never be entirely understood, but it was the means of identifying an individual, and was recognized as the power centre for human action...I refute any suggestion that the head itself was worshipped, but it was clearly venerated as the most significant element in a human or divine image, representing the whole” (1986, 216).

However, the pertinent information gleaned from this passage from Green is the acknowledgment that the head was a power centre and overtly important to past peoples. It is through this research that the writer seeks to demystify researchers such as Green, offering the proposition that it was not the head that was the factor that drew the attention, but the imposing nature of the face which has been undermined by the overwhelming attributes of the skull (section 2.2.2).

Much, if not all, of the foundation literature on the head in Ireland either an archaeological, historical or artistic sense derives from the framework of research within the problematic term of the ‘Celtic’ period. The many epic tales of heroes published in the medieval period concerning the treatment of the head can be a source from which these scholars are gathering the information about the treatment and revered status of the head (McManus

2009). However, these historians rarely observe the visible (and partial) archaeological record for this evidence. In Ireland specifically, Rynne (1972) and Hickey (1976), have contributed toward the survey and comprehension of the stone heads. These archaeological features have been subject to discussions of formal qualities, their purpose within the landscape, and their conjunction with historical documents. However, the dating of such stone heads is debated as they are presumably not as early as these scholars would conjecture.

The Harvard Mission to Ireland is especially significant to note, as it was a pivotal moment for craniometrics within Ireland (Hooton *et al.* 1955). Forming how the Irish populations were conceived, this landmark investigation utilised craniometric methodologies upon the Irish population to create a database and structure of ancestry according to cranium skeletal qualities (as well as some anthropometric characteristics). Associated with social anthropological and archaeological projects (Arensberg and Kimball 1940; Movius 1942), this project was deemed acceptable because it sought to explicate the ‘hows’ and ‘whys’ of Irish culture and the manner in which the people operate the manner in which they do. An endeavour of the discipline of bioarchaeology is to incorporate this anthropological lens through the analysis of human remains and create a broad narrative of past lifeways (Larsen 1997). In so doing, particular examination is given to those contexts which diverge from the broader scope of individuals. These non-normative mortuary contexts capture the attention of those creating this picture of the past.

In bioarchaeology, ‘deviant burials’ were commonly approached as interments that did not align with the normative typology of members of a particular society. Deemed socially marginalised, the discourse particularly relevant to this body of research is the treatment of the face in a non-normative manner, especially those burials of prone mortuary context (discussed in further detail in chapter five). In consideration of this type of interment, the individual is deposited face down with past interpretations ranging from the punishment of worldly indiscretions of the individual to the notion that a face down burial will transition the deceased quickly to the spiritual realm or detain them from roaming the earthly world as to not impede the still living (Caciola 1996; Tsaliki 2008; Simpson 2003; Fry 1999; Arcini 2008; Metzler 2011; Taylor 2010).

If read through the theoretical framework of this body of research, the interment of the deceased by the living and the intentional placement of face down is the opposition of response and the breaking of the asymmetrical ethical relationship the other once possessed. By de-facing the individual, the living has to keep the irreducible relations with this person and instead can interact with them in an impoverished manner. In consideration of death as well, it gives the population or individual interring the deceased an increased sense of freedom over death as they do not have to visualise it anymore upon the human countenance before them.

This present discussion and body of research takes a step further than these past aforementioned studies and extends beyond the head to the re-presentation of the face. Combined with the additional benefit of current archaeological scholarship pertaining to these materials and human remains, the face is understood transdisciplinarily and holistically. While not condoning the racial stereotyping and marginalization of individuals through the reduction of them to a set of numbers in their possible capacity of potential, the field of craniometrics is the beginning point of the trajectory for this body of research – ultimately arriving at the appreciation for the divide of both entities.

2.2.2 Head vs. Face: Reinvigorating the Undermined Face

It is asserted here that the face and the head should be considered different phenomenon with varying interpretations. This concept has not been noted previously. The most important assumption to be broken down for the consideration of the progress of this research, beyond the traditional interpretations of the face. In Levinasian terms, this is the breakdown of the ‘sameness’ of the face and the head. They have been combined in interpretation creating a ‘totality’, reducing these entities to a relationship that is not viable towards their unique comprehension. As illustrated in the previous section, the face and head have been referred to as one entity and interpreted as such. While occupying the same bodily space, these two entities should be detached to see the difference in connotation, purpose, and theoretical implications. There has been an oversight within the body of archaeological discourse in that the interpretations of the generality of the head have been confused with the intention of the face (seen previously in the attention to craniometric agendas). While ‘the head’ is common terminology and is used naturally in discourse, it

consumes and overwhelms the natural power and qualities of the face which, in fact, should be specifically addressed by name and treated separately in discursive and classification claims.

An imperative note upon the beginning detachment of the face from the rest of the cranium would be the essential and basic osteological classification of the difference in skeletal nomenclature. The facial skeleton consisting of fourteen (sometimes sixteen) bones is termed the splanchnocranium (also called the viscerocranium), while the osteological components of the head lie in the area of the cranium (Wilkinson 2004, 21; Gray 1973). The terminology and categorization that has been defined semantically separating these two entities. This should be the beginning point for the consideration of the drawing forth of the face's power and potential that has been consumed by the head - that there is a basic acknowledgement in the difference of these features, in this physiological foundation. From this starting point, we can recognise the previous research tradition subsumes both head and face, when in actuality these entities are completely divided upon their own accord.

In the nineteenth century, there was a popular trend for craniological research that proliferated in the early twentieth century but still pervades archaeological discourse. Although written with a complete absence of racism and under different frameworks of archaeological theories from the nineteenth and twentieth century predecessors, contemporary edited publications such as Bonogofsky and Larsen (2011); Pinhasi and Stock (2011); Armit (2012); Tiesler (2014) still insist on looking towards the head as the phenomena that is being employed rather than the harnessing by past populations of the face, which ultimately is the entity utilized for the purposes of humanistic connection.

In any discourse there is a rhythmic rise and fall in popularity of certain research areas; craniometrics has had its favourable moments within archaeological scholarship. Even though disputed and seen as antiquated, craniometrics perpetuates the primacy of the acknowledgement of the head in the archaeological consciousness. However, it should be acknowledged that this bias towards the head exists for these past scholarly reasons and by proposing a separation of the head and face and the opening of these two entities to more specific, particularised attention is a challenge towards these former assumptions. In observance of the bioarchaeological and osteoarchaeological tradition of today (Buikstra

and Ubelaker 1994), craniometric and cephalic indices still being used in methodological standards is a sign of a vestigial portion of nineteenth century research that moulded the discipline and impacted the modern lens through which the head and face are viewed.

It is posited that the field of craniometrics and undoubtedly the skilled academics it has produced has altered the manner in which archaeologists view the cranium within archaeology since the nineteenth century, continuing today. Seeing the head as the entirety of the individual, as a seat of personhood (Martensen 2004) rather than the identifying face as the significant location for the ethical relation that enforces the self/other divide and relation, this portion of the foundational scholarship of the bioarchaeological field remains unchallenged and undefined.

Passages from scholars such as Rynne (1964, 1972), Kissane (1986), Billingsley (1998), Verhoeven (2002) that investigate a range of mediums within which the face is represented, such as material culture or the archaeological landscape, seem to be on the verge of understanding that the face does have indeed power and utmost imposition upon the viewer. Aspects of this experience have a great impact just as Billingsley stated, “years later, I am still astonished by the power and vigour of the image of the human head to express religious and magical beliefs of an otherworld realm; not only in a few cultures here and there, but in cultures all over the world in all time periods” (1998, 3). Although noting the power encountered, Billingsley assigns the face and the head with the same amount of force and impact. Billingsley goes on to discuss the value of the face as symbol in its abstracted archaic form which is more likely to relate to faces everywhere, whereas the mimetic and personalized nature of classical sculpture disqualifies universal participation and instead, “narrow[s] the range of affinity towards the point where portraiture disqualifies any claim to universality and anchors the image to one person in one time and in one space...the realistic head is too firmly placed within the human and mundane world” (1998, 4). However, while the abstracted notion of the face is a relevant in the Levinasian realm and extension to archaeology, even the particularised face of an individual can cause the creation of an affinity of connection deemed necessary for a relationship to form.

By establishing these bases or assumptions of the face being a divergent entity from the generality of the head we arrive at more informed interpretations of how the face was used

or curated in the past (bio)archaeological record. From this vital point emerges the understanding of the basic importance of the face and how it has been undermined by the interpretations of the head. It will be difficult to reconcile these differences based on the entrenched nature of the discipline of bioarchaeology in the history of craniometrics, however once the notation of divergence between these entities is revealed, there should be a general consideration of the beneficial contribution towards this undertaking. This body of research endeavours to commence such a task through revealing the power of the face within a highly cranio-centric discipline with attention towards its appearance in materiality, osteological evidence, and the contemporary creation of archaeological facial reconstructions.

There will be those who disagree, insisting that by discussing the features and treatment of the head they are implicitly speaking about the face as well. However, they depart at a fundamental theoretical level and these entities that form a dialectic of power among themselves and are easily relatable in modes of knowledge about an individual and their past. Although, this should not be the case and succeeding scholars should be aware of the invisibly visible partition of these phenomena. In addition, some will dispute any separation at all insisting that these parts are of a whole and should be treated as thus; that perhaps separating them impoverishes them in some quality of discussion. This research seeks to prove that this latter point is null and that there is indeed space for scholarship and interpretation on both portions of the skull.

By separating the face from notions of the head in discourse, the reduction of terms is eliminated further allowing the viable nature of this research into the importance of the power of the imposing face within human and object materiality within the archaeological record. The formation of the archaeological imagination is greater now that this totality has been broken down because the phenomena involved are each allowed their full set of potentials.

2.2.3 Exposing a Gendered Binary

It can be argued that this split of the face and head, while being an absolute necessity for this research as well as the benefit for further discussion on the bioarchaeological instances

of this entity (as discussed in the previous section), is superfluous terminological difference. However, it has been illustrated to the contrary and is a relevant, innovative addition to this and larger discourse. Therefore, what would a gendered reading of the head/face contribute to our understanding of the nature of these phenomena in regards to archaeology and the archaeological discipline? The position of this research within an interpretive archaeological theory framework allows for not only interdisciplinary discourse but also discursive opportunities that utilise exterior models of thinking to shed new light on how to process the archaeological record. If a binary (a dialectic even) were to be articulated without being reductionistic it would be to assign the feminine realm to the face which is associated with fleeting, emotive and ephemeral traits and subsequently have the symbolic connotation of the head attached the previous scholarship of the masculine.

The head and face are gendered landscapes and have inadvertently been treated as thus. diLeonardo (1991) argued that archaeological accounts of the past have always been saturated with gendered implications. Applied to many levels of archaeological investigation such as status, division of labour, and social stratification (Conkey and Gero 1991) this portion of archaeological theory is particularly relevant to the overall discipline of archaeology and the endeavour to understanding the past. Even without feminism explicitly appearing in the discourse (as I am a female author how can I hide this), archaeological phenomena were routinely interpreted in gendered terms (Wylie 1997; Conkey and Spector 1984; Spector and Whelan 1989). According to an overview of feminism within the discipline of archaeology, Conkey and Tringham (1995) explore the history of this interpretation and the gendered readings that accompany the changing models of thought within the discipline. The New Archaeology/Processual paradigm of viewing the past on a macro-scale at the expense of “people” did not allow for the proper discursive space for the topic of sex or gendered roles (Conkey and Tringham 1995). It was not until the late 1980s wherein the post-processual model became popular, that the consciousness of this theme came to proper level of awareness within the discourse (see Hill 1998 for the multivariate qualities of feminist archaeological discourse).

As with many ideologies extolled by the male populous, the bigger the thing – the better. This same masculine overtone can be associated with the field of craniometrics wherein the

size of the cranium was linked with proclivity for intelligence (see section 2.2.1). Stated previously, the framework established by craniometrics in the late nineteenth century moulded the appreciation of the skull and its quantitative potentialities. In bioarchaeology, the qualitative potentialities excluded the face and its authoritative weight of meaning in the face-to-face encounter. As the ‘head’ became an object that was captured by masculine theoretical models and the face was undermined, there is a possibility to discuss this relationship in an alternate perspective. This being said, a gendered binary applied in an analogical manner with the cranium belonging to the masculine and the face possessed by the feminine realm will be discussed presently.

There has been a gendered presentation of these two entities in past scholarship wherein the entirety of the skull has been associated with masculinity, the head as the seat of personhood controlling the body (Martensen 2004) (analogous to a patriarchy) and in trophy-taking cultures, an appropriation of the powers of another. While, the face in its expressive and imprinting nature can become viewed with the conventional (if not stereotypical) feminine features of appearance (with associated connotations of the ephemeral and surface textures such as age), emotions, and the face-to-face encounter which propagates the creation and solidification of culture which is a feminine role within society.

Obviously, the male/female sexes are not homogenous groups and their stereotypical qualities have changed throughout the course of history (Balme and Bulbeck 2008), but instead of retreating into an empiricist model of thought in which we can never really be sure of what we know about the past, this gendered binary, in a mature feminist perspective, restructures a postulation not to obtain ‘knowns’ so much as to understand what is presented through the archaeological record in an alternative approach. Following Wylie (1997) this interpretation of the head/face binary is overcoming erasure of the female presence in archaeological content as well as providing equality in relationship, a “gylany” according to Eisler (1987). Broadening the range of conceptions of gender relationships, the androcentrism that prevailed throughout the majority of the twentieth century can be revealed in a different manner in its application within archaeological material (i.e. the head).

Viewing the face/head relationship in the perspective of gender may seem a simplistic theoretical model, however it explains a large portion about the conditions placed upon the treatment of these two features. A discipline previously dominated by male practitioners, bioarchaeology has become a vigorously heterogeneous field with a diverse amount of research questions. The ‘male gaze’ (Thomas 1993; Croucher 2005) has been a critique of the scholarship in the past concerning the treatment in the gender that was incorrectly placed upon the past instead of perceiving the past as it actually appears through the visible archaeological record. This assertion of the feminine within the overall head (and the now detached face) can be classified as “challenging the hetero-normative in archaeology” (Croucher 2005, 613-614) that had been inherent in the gaze upon not only archaeological objects, but also within methodological procedures (see Claassen 2000 and Dowson 2000 for additional discussion on hetero-normative archaeology).

If we consent and proceed with this binary, we can view the trauma to different portions of the head and face in terms of violence towards the notions of that gender. With the act of decapitation of males, the origin of masculinity is severed and emasculated. It seems predominantly that it is the masculine population that has been susceptible to the intention of decapitation through their placement within respective socio-cultural structures. This gendered instance coincides with the binary reflecting the masculine notion placed upon the entirety of the skull. While the site of the feminine facial landscape is interfered with an offence against this gendered realm occurs. Though very few instances appear within the visible osteoarchaeological record (Owenbristly, Co. Galway, Parknahown, Co. Laois as examples in chapter five), facial mutilation occurs upon female individuals with resounding repercussions in contemporary analysis.

The treatment of the face seems to have more impact upon the disruption of the female countenance. This type of interpersonal violence against the feminine face (not specifically solely intended for the female sex) is a performative act with societal repercussions demonstrating the severity of punishment. By interfering with the site which prompts ethical response and fully ‘others’ the other from the self (the face), a deeper institution is damaged than solely the individual’s corporeal countenance. Consequently, the present day practitioner who must re-experience this violence to the ethical domain, is also affected by

the harsh reality that the violence against women (discussed further in chapter five) occurred with such insistent signs of cruelty.

The previous discussion of Levinas and his male-oriented overtones within his corpus of work and philosophical agenda would lead us to believe that the female is other than other – an absolute other (1961). Furthermore, taking this rigid reading of Levinas, there is a special nature towards the mysterious feminine making violence towards women that much worse in the reduction of the other to the same with a grand totalization of the dialectic. This coincides with the judicial structure of early medieval Ireland which supports this assertion by banning violence against women and children (see chapter five). Although it does represent an androcentric perspective, Levinas did not marginalise women. He instead, positions them in a visible position as the Absolute Other (see *Totality and Infinity* 1961).

This is not a critique built upon a sexist assumptions, alternatively it is breaking down the already sexist readings of the archaeological interpretations placed on the human skeletal material. Once we understand these gendered readings that have been in place of the head then contemporary discourse can correct past biases. It should be noted that the gendered binary does not deal with sex in the biological sense. This exposure is not intended as a sexist reading of individuals or their potentiality. Instead it seeks to illuminate the gendered readings of human and object materiality in which past populations and we as contemporary archaeological practitioners embed upon things (human countenance included because during the breakdown of the ethical relation that prompts violence, subjects become objectified) we experience within our worldly horizon.

This discussion of the curation and treatment of this bioarchaeological material against the traditional archaeological gaze is important to expose due to the plethora of embedded notions within the entity of the face. The discipline of archaeology is a suitable lens in which to view the multitude of inherent notions within this phenomenon. Conceptions untapped within the power of the imposing and beseeching face will furthermore be exposed within the application of the face in analogy to the broader sense of the archaeological field and the landscape which yields a record of materiality seminal in the

formation of a narrative key to supporting an imagination that is under investigation in this body of research.

2.2.4 The Face as Analogy for the Discipline of Archaeology

Just as archaeological method and theory delve through the layers of space and time, so does the philosophical framework and subject of Levinas's thoughts concerning the multitude of meanings inherently in and reflected by the face. Analogically speaking, this research examines and attempts to demonstrate that the context of the face exists in the layers just as these surfaces are revealed within the discipline of archaeology. With the foundational theory of stratigraphy in which archaeology bases excavation methodologies as well as the association and superimposition of materials within the archaeological record, there exists moments both of revealing and concealing. The corporeal and materialistic face is present through the archaeological record and is an indicator not only of how the self re-presents itself and how the self views the other(s) within their encountered experience. This physical anchor within the archaeological record is ideal as it punctuates temporally and spatially and has the theoretical space for discursive expansion.

A desired aim of the content and structure of this research would be to construct the analogy between the power of the face and its imposing nature constituted of layers of meaning with surfaces of potential and the broad archaeological landscape of features, monuments, burials, and alternative indications of the trace of people past. The analogy between the face and the archaeological landscape is multivalent. Both are landscapes within their own right with dynamic surfaces of created meaning based on inherent qualities. In the process of creating an archaeological layer, the soil level and its inclusions are obscured by an overlying new surface which in turn becomes another concealed layer through the passage of time.

This dynamic relationship between the revealed and the concealed and the human imprint of given meaning to these entities is found in comparable instances upon the face and the archaeological landscape. When considering the face, if we look towards the structure of how it is created there is a skeletal surface in which the soft tissue/muscular anatomy and outer cutaneous surface is constructed upon. If we denote the skeletal surface as the same

as the archaeological landscape, we can perceive the face as a location for human occupation, as it were. The habitus of an individual and their trace(s) through the lived life is marked upon the surface of the skeletal or skin-ny surface just as the archaeological landscape is marked by the human impressions that have come before. Therefore, this analogy is viable in the way that each entity, the face and the archaeological landscape, function through human interaction and subsequent encounter and divulge themselves in the surfaced layers of meaning at once hidden and revealed simultaneously.

The surface of the face can be read superficially as in the physical characteristics of age, sex, and “race”. Going no further into these qualities or ceasing at an insufficient comprehension of them can be similar to the un-reflexive, solely data oriented approach to archaeology. Furthermore, if one was to enter into the symbolic realm of the characteristics of age, sex, and race then this could be comparable to the deeper theoretical reading of archaeological materiality. Each entity suffers or benefits from such a reading as these. The landscape is an object presented to us into our worldly situation with certain attributes and what the reading of this object is, delineates, or determines rather, the interpretation and perception of the thing in our horizon as beings. Therefore, as an analogy both features, presented in this research as lived landscapes with the trace of the past etched upon the surface have multiple manners in which to interpret the inherent and embedded significations.

Of all the concepts that the abstracted and concrete face contains, the main themes are relevant towards the further understanding of archaeology as a whole. Not only are the undulating and dynamic qualities of the surface of the face and archaeology similar in structure, but there is space for discourse of their shared, mutual inherent qualities such as: visibility, alterity, intersubjectivity, and response (responsibility). These theories that the encounter of the face prompt are those that are inherently the fundamental conceptions which the discipline of archaeology seeks to explore through its multivariate pursuits. Additionally, these influential notions are those chosen to structure the investigation into the Irish (bio)archaeological record for the following body of research. Their layered relationship can be seen in the following dialogue.

The experience of archaeology is explicitly visual (and tactile, but will not be discussed here). Viewing the landscape and the signs of human occupation upon its surface can be experienced many times in survey and then following with excavation (and later curation) relies on the visibility and tactile nature of the practitioner for the exposure of past layers of archaeological meaning. Noted in the phenomenological tradition of archaeological theory in the late twentieth century utilised the viewing and framing of the past landscape with additional mention towards the benefit of movement (Tilley 1994; Brück 2005). This conception of the importance of the visual is illustrated in the method in dating in a typological manner. Basing itself on the evolution of physical appearance of objects providing the ability to date archaeological material to relative date certain artefacts in relation to their predecessors or successors depends solely on the seen features. This visibility can be either applied to the present materials discovered, but also extended to the objects that are absent, as we know because there are holes in the archaeological record that can be perceptively acknowledged. This line of thought has increased in the twenty-first century with the digitization of the archaeological record and inquiries into how these images allow or contribution the visualisation of archaeological sites (Mak 2014).

Visual relations with archaeological objects are a main interlocutor for spanning the divide between the academic domain and the public community. It is in this research that the subject/objects of archaeological facial reconstructions (in conjunction with the power of the face) prove this assertion in that the gaze placed upon these countenances position the contemporary viewer in relation with past people more so than any other archaeological artefact. Stated previously, scholars like Croucher (2005) assert that too much emphasis has been placed on visibility in the Western world and in archaeology in particular. This being because of the non-sterile nature of the gaze. Perceptions are loaded with implied meanings and frameworks that objectify materiality in manners they were not meant to function within. Although, visibility has its loaded connotations, it will not be a dimension of archaeology soon to be lost. Relevant towards the experience of the face, this is where our encounter happens. No other portion of the body is afforded as much interactionary effort as the juncture of the countenance.

The encounter of the face prompts the ‘othering’ of the other person; therefore archaeology is fundamentally concerned with the approach of the other person (unlike the post-colonial manner as previous scholarship would ascertain this interpretation; see chapter six for further elucidation). Not reducible to the same (or in analogy to our contemporary selves), the practice of excavation and archaeological investigation further solidifies the pursuit to attempt to understand the past others. Although in Levinasian terms we can never fully comprehend this ‘other’. As archaeologists, this author posits that like much of Western thought, we are concerned with the totality of the archaeological record – whether it is complete, what, and how much of it is missing. Our discipline is also conditioned by the totalisation of historical record. A critique by Levinas demonstrates that the tradition of Western scholarship is fascinated with the ontological reduction of otherness to the same (1961), but can be considered that archaeologists are just as concerned with epistemological issues of a totalized version of the archaeological narrative. However, not quantitatively speaking, there is an infinitude towards this record of human habitation. Infinity is produced by the overflowing of the thought that thinks it (Levinas 1961, 25). The archaeological record and its partiality is an ideal analogy for illustrating how alterity is present (or at times evidentially absent) within the broader discipline of archaeology.

With the basis of the discipline of archaeology as a crucial experience of the other, this opens up the discourse for understanding the additional notion of intersubjectivity. To be discussed further (chapter five), intersubjectivity is not to be confused with the emotion of empathy. Instead it is the manner in which through our intentional acts, beings in the world relate to one another. In archaeological terms, this can take on multiple forms such as social networking, funerary practices, the transition of an oral to literate society (emphasis upon the linguistic register), and so forth. However, this is an important feature of the attempt to understand an aspect of the past lived lives in an attempt for an increased humanistic dimension of archaeology.

A conception of archaeology that intertwines the past material and people and the present day practitioners and their contemporary audiences is the elicitation of response and responsibility (this latter term refers to the ability to respond, not in the judicial sense; hence respons-ibility). Just as past individuals and populations had to respond to the social

cues and encounters of their daily life, based on the asymmetrical ethical relationship built through the experience of the other, the archaeologists and archaeologically conscious public also respond to the visibility of the material past (presented to us through artefacts, human remains, or in the case of this research, facial reconstructions). The face as does the archaeological landscape, forces people to consider a past and their position in relation to these phenomena. While we can choose to ignore these landscapes and their imposing surfaces through our contemporary mindset, we are not achieving the full ethical relationship between the two. Through the response and the ability to respond to these entities of the face and the archaeological landscape,

As can be seen all of these themes interconnect working together to expose facets of the human condition that are present, yet without a bracket of the natural attitude do not reveal themselves to our perceptions. What one notion lies down, the other builds upon in the same manner which the face is built upon the skeletal landscape and the archaeological record is constructed of layer upon layer. For instance, if we begin with the notion of visibility as prompting the (superficial) encounter of the other and then alterity and the foundation that there is indeed other-ness in the world, we continue to build up to the ethical relation of asymmetry and the obligation of the other. Subsequently, allowing the space for intersubjective relationships leads towards the projection of a response and responsibility that transcends time and space.

From this chapter devoted to the theoretical conception of the face, the following chapter will endeavour to investigate the corporeal object-ive anchor to this research: the historical trajectory of facial reconstructions. Through this chapter and the construction of a foundation of knowledge of the facial reconstruction discipline, additional theoretical issues are layered upon those topics addressed in this chapter.

CHAPTER THREE – FACIAL RECONSTRUCTION: A HISTORICAL TRAJECTORY AND ITS CONTRIBUTION TO THE ARCHAEOLOGICAL DISCIPLINE

“With face comes voice. With voice comes story” (Sanders 2009, 200).

The production of facial reconstructions is an engaging prospect for uniting past and present communities. Its continued use is not unexpected just as Wilkinson noted, “the fact that the facial reconstruction procedure exists at all is a reflection of our unlimited fascination with human faces, and this preoccupation has led to a more specific interest in the faces of people from the past” (2004, 39-40). The facial reconstruction record of archaeological individuals offer images that each illustrate the many different appearances of humans that occupy archaeological spaces.

These previous reconstructions offer a foundation (methodologically and aesthetically) of future reconstructions. With what could be called an image(d) review of these events, this section offers a critical historiography of the discipline that has impacted the use of facial reconstructions in the formation of an archaeological imagination. The following chapter seeks to examine the historical trajectory of the modern field of facial reconstruction, but also the socio-cultural occurrences (scientific advances included) that have lead up to the foundation of the contemporary field practitioners of facial reconstruction work within.

The scope of the current study focuses solely on re-constructions of archaeological material, but in the detailing of the historical trajectory of the practice of facial reconstruction, the notation and exploration of the realm of the forensic section is important for understanding the progression of the entire discipline. This accounts for the inclusion of the forensic background within this chapter.

3.1 Facial Reconstruction: A Temporal and Spatial Synthesis

As acknowledged in this research, the appearance of the face through diverse temporal and spatial locations posits the universal quality of the imposing nature of the human countenance. This universality is seen throughout re-constructions included in this chapter and that to follow. The following three sections are devoted to the temporal progression of facial reconstructions and methodological evolution.

3.1.1 Examples from the Prehistoric Period

The prehistoric activity of creating ‘simplistic’ re-presentations of the face can be seen in the archaeological record before the concept of forensic, historical or contemporary archaeological re-constructions became prevalent in modern and contemporary Western scholarship. These facial re-presentations were made by overlaying de-fleshed skulls with clay, perhaps then augmented with additional found materials. The curation or interment of these, then contemporaneous reconstructions, appear across spatially diverse sites independent from one another such as Jericho (c. 7000 BC) (see Bonogofsky 2003, 2005 for distribution map of plastered skulls through the Levant), Çatalhöyük (6000–5000BC), and the Chinchorro mummies (figure 3.2) from northern Chile and southern Peru (5050–1800BC). Each unique in their archaeological contexts, these facial productions have various interpretations concerning ancestor veneration or sacrifice (previous discussion of these traditional interpretations appears in the chapter two).

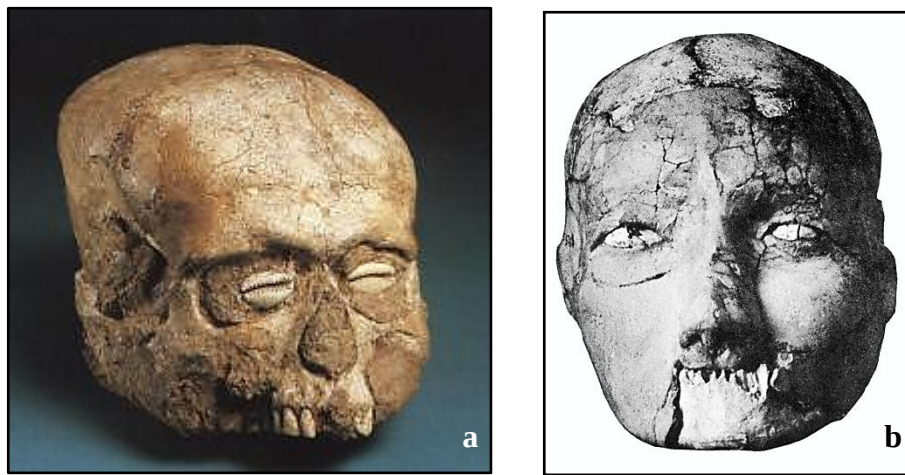


Figure 3.2a-b: **a)** Plastered skull from Jericho (Ashmolean Museum, Oxford); **b)** Plastered skull from Jericho (Strouhal 1973)

The overlaid and modelled skulls from the Near East (figure 3.1a-b) are not to be considered portrait heads with individualized traits (Kenyon 1957, 1967; Strouhal 1973). Instead, the deceased are commemorated in the basic sculptural likening of main features and focus on completion and unification of the deceased countenance rather than similarity. As abstracted as these masks are, the creation of the appearance based on the actual association with an individual’s countenance can be found in Roman and Egyptian death masks (Wilkinson 2004, 42). Unlike the over-modelled skulls previously discussed,

Roman and Egyptian death masks use the negative space of a deceased individual's face to produce a mould for the creation of a bust. According to Wilkinson, the earliest death mask was found in an Egyptian grave dating to 1370BC (2004, 42). The practice of personal reconstruction of ancestor faces continued into the twentieth century in the area of the Pacific theatre (figure 3.4). It is asserted that this cult of reconstructions acts as a totem or symbol for the past individual in which the face is completed as whole once more. This whole-ness speaks to the restoration of Levinasian elements of the deceased individual and their continued presence in their respective societies.



Figure 3.3: Example of a mummy from the South American Chinchorro culture

Similar to the restoration of skulls seen in Jericho, examples of prehistoric facial awareness come from those such as the Chinchorro mummies (figure 3.2). Not technically overlaid skulls, these are pseudo-masks placed over the deceased individual's face with simple demarcation of the main facial features. Although not like the skull interaction seen in the Near East, these prehistoric examples speak to the same notions and considerations of wholeness and complete visibility of the deceased countenance. The lost is once again restored – a consistent theme throughout the creation of these early facial constructions which predate the academic discipline. These few examples from the prehistoric period around the world exemplify this fundamental understanding of the power of the face with particular emphasis on the continuation of this power through death and commemoration for the consciousness of the living.

3.1.2 Examples from the Early Modern Period

The field and content of knowledge of the discipline of anatomy grew exponentially in the fifteenth and sixteenth centuries when painters such as Leonardo da Vinci, Michelangelo, Verrocchio, and Titian thoroughly examined human anatomical biology and “rendered images to illustrate their treatises” (Vermeulen 2012, 184). While the modern conception of craniofacial reconstruction exists in the endeavours of eighteenth and nineteenth century anatomists, artistic researchers such as Giulio Gaetano Zumbo (1656-1701), part of the *Anatomica Plastica* movement, unintentionally discovered the process for reconstructing the countenance (Wilkinson 2004). This process was revealed by examination of corpses and through the dissection by stratigraphically removing facial anatomy and subsequently replacing musculature, “although we assume that these artists were less concerned with facial appearance than anatomical detail, they pioneered the development of scientific art and were the first sculptors to realize that the skeleton is the ideal armature onto which to build the musculature and the body” (Wilkinson 2004, 44). These theories of tissue relationship can be seen in one of the finest examples of this early era of the discipline in Zumbo’s model of a wax head (figure 3.3) displayed in the collection of wax anatomical displays at La Specola in Florence, Italy.



Figure 3.4: Wax head by Giulio Gaetano Zumbo found in La Specola Musuem, Florence (author’s photograph 2012)

The *Anatomica Plastica* movement and the research of anatomical relationships originating in the central European continent was further developed by Ercole Lelli (1702 – 1766) and soon spread and found great proponents elsewhere such as Abraham Chovet (1704 – 1790) in England (Wilkinson 2004). Although the particular, individualising appearance of the

subject's face was not of great concern for this school of thought, unwittingly, Zumbo and the contribution of many other scholars had discovered the method Mikhail Gerasimov would later in the twentieth century use as the fundamental basis for the Russian school of reconstruction.

At the same time this anatomical research was occurring in the West, the abstracted, 'simplistic' pseudo-facial reconstructions of overlaid materials similar to the plastered skulls in Jericho (figure 3.1a-b) appear in the Pacific such as the New Hebridean Islands, Papua New Guinea, and New Ireland (figure 3.4). These modelled skulls from communities traditionally dubbed 'head hunters' utilised not only the heads of ancestors for veneration and as the location for the individual's 'soul', but also those of enemies distilling their conquered spirit into the form of the captured and seized skull (Dureau 2000; Harrison 2006).



Figure 3.5: Example of a New Hebridean overlaid skull (Wilkinson 2004)

The visual record of the face in this early modern period demonstrates that the use of the face, while at different stages of exploration of its appearance in societies around the world, is still a feature that is being manipulated. Past populations are very conscious of the face, although in very different situational (cultural) contexts. It is in the early modern era wherein the face becomes positioned in the intersection of scientific and artistic exploration.

3.1.3 Examples from the Modern Period

Zumbo and associated colleagues' of the early modern period with their efforts based solely on anatomical investigations gave way to nineteenth century anatomists such as His (1895), Welcker (1883), Tandler (1909) and Kollman (1898). The legacy of these early practitioners in the foundation of the discipline allowed for the flourishing multivalent approaches to facial reconstruction in both forensic and archaeological contexts. These specialists' first endeavours utilized portraits, death masks, and other historical information in conjunction with creating the faces of famous people based on their presumed skeletal material (Vanezis and Vanezis 2000). Their progress and research was a building block for the twentieth century and beyond.

Early practitioners astutely chose to begin their studies with famous individuals or individuals of note as the ante-mortem image of this demographic would be more accessible. Welcker (1883) is noted for his comparison of the supposed skull of Raphael with an artist self-portrait in addition to his investigation of the skull of Kant with the philosopher's death mask, perhaps producing the first craniofacial superimposition of the nineteenth century. Another important example of this generation of facial reconstruction originates from German anatomist His (1895) who collaborated with artist Sefner. Their reconstruction of Johann Sebastian Bach (figure 3.5) which used of soft tissue depth markers from cadavers and a subsequent comparison to pictures and busts had "favourable results" (Wilkinson 2004). This reconstruction was also tested through the efforts of Sefner in replicating the same facial musculature and final appearance onto another individual's skull (Gerasimov 1971; Wilkinson 2004) thus verifying facial reconstruction methodologies.



Figure 3.6: Reconstruction of J.S. Bach by William His (Wilkinson 2004)

It was commonplace in the nineteenth and early twentieth century for anatomists and scientists to collaborate their work with sculptors and artists: His and Sefner (1895), Kollman and Buchly in their reconstruction of Dante (1898; Vermeulen 2012) as well as a Stone-Age woman (1899) (figure 3.13), Merkel and Eichler producing an ancient Saxon, Krogman and McCue, and Rutot and Masquet (Wilkinson 2004). These partnerships while useful for the nature of facial reconstructions are characteristic of the inherent multidisciplinary nature of facial reconstruction between art and science (Wilkinson 2010). The subjective and objective qualities are combined, which Gerasimov (1971), and later Taylor (2001), would articulate as a two-step process: first anatomical/technical, then artistic.

The production of these re-constructions prompted the investigation of more aspects of the appearance of the face. These questions arose in aspects of physiology such as the prediction of soft tissue appearance from the hard surface of underlying bone, and additionally, soft tissue depth markers that aid in reconstituting the musculature of the skeletal face. Although soft tissue depth marker databases are being updated with specific contemporary populations of the twenty-first century (De Greef 2006; Stephan and Simpson 2008; Codinha 2009; Tedeschi-Oliveira *et al.* 2009; Utsuno *et al.* 2010; Steyn and Cavanagh 2011), these databases and their methodologies pioneered in this time period provide a long legacy in their use and approaches. Undeniably, it was the work and scholarship of Welcker and His that pioneered the research into both the general area and process of measuring soft tissue depths (Wilkinson 2004). This research would prompt the main methodology for the American school of reconstruction and would resonate further

into contemporary discourse with the Manchester/Combination method as well (shown in section 3.2.2 and 3.2.3).

From the early attempts at scientifically justifiable reconstructions, the use of facial reconstruction in the early twentieth century spread toward the realm of jurisprudence and legal settings. According to Wilkinson (2004), the photographic superimposition of ante-mortem appearance with unknown skeletal material had been used in Europe for legal identification, most notably in the Ruxton case of 1935 carried out by Glaister and Brash (1937). The increased specialisation of the forensic sector of facial reconstruction impacted the accuracy and prediction of archaeological specimens. The interesting niche in which archaeological facial reconstructions occupy is an area of immense space for subjectivity and the display of the imagination describing the past in modern terms.

It was within the beginning of the twentieth century that archaeological reconstructions produced began to be embedded with associated theoretical notions such as racial superiority, nationalistic agendas, or rhetoric of ‘primitive-ness’ which resonate with research tropes of race and ancestry popular at the time of re-construction. Examples of this come from the early twentieth century restoration of Neanderthal skulls (McGregor 1926) and their qualities used to support a museum agenda of a barbaric past with a similar populous (Ladouceur 2010) which will be discussed further on in this chapter (section 3.3.1). The blank canvas of the past must be interpreted within the contemporary relationship between creator and viewer and the ideas of the past individuals that they actively place upon the countenance. The experience of the facial reconstructions as symbols with rhetorical devices to portray an agenda had its beginnings as the technical aspects became solidified.

The modern period of the history of facial reconstruction is perhaps the most important to the scientific advances of the discipline. Indeed, it established a founding level of aesthetics to reconstructions created hereafter. The amount of information amassed and research accomplished throughout the world allowed for the coalescence of this field to take place in the late twentieth century. These scholastic developments lead to the establishment of three different schools of methodological standards. Within their own

particular temporal and spatial origin, each school of methodology matured through the work of the late nineteenth and twentieth century while contributing to these first efforts.

3.2 Development of Techniques

Early work of aforementioned anatomists created the foundation for the theoretical notion that the shape and proportions of the underlying skeletal landscape provide the structural support and the form for musculature and soft tissue which ultimately lead to the appearance of an individual's countenance (Wilkinson 2004). Further research upon this fundamental notion was produced in the twentieth century and continues to be produced within the field of facial reconstruction along with measurements of accuracy (see Appendix 1; Stephan and Henneberg 2001; Stephan and Arthur 2006; Stephan and Cicolini 2008; Ullrich and Stephan 2011; Lee *et al.* 2012; Decker *et al.* 2013; Parks *et al.* 2013).

These contributions took the form of divergent schools of thought. While informed by the same principals each methodological framework which evolved has come together in the late twentieth century to form a multivalent, progressing discipline. Although Wilkinson noted, “there is a great deal of disagreement between practitioners regarding techniques, accuracy levels and reliability” (2010, 236), the discourse within the field and between practitioners is vibrant and highly visible within published materials. The following sections identify these schools of thought and their origins while positing their strengths in overall contribution towards the field.

3.2.1 The Russian School

Although working in the scholastic isolation of the Soviet Union for much of the first half of the twentieth century, Mikhail Gerasimov (figure 3.6) played a pivotal role within the development of a major school of facial reconstruction dubbed the Russian School (Taylor 2001; Prag and Neave 1997; Wilkinson 2004). Experience in paleoanthropology, archaeology, and anthropology, Gerasimov worked in organizations such as the Institute of Material Culture in Leningrad and later in life, headed the Laboratory of Plastic Reconstruction at the Institute of Ethnography (Peter the Great Museum of Anthropology and Ethnography 2008). His notation of the intricate structure of the craniofacial anatomy and musculature, just as previous anatomists of the *Anatomica Plastica* movement, led to

the conclusive position that these features affect the appearance of soft tissue facial features.

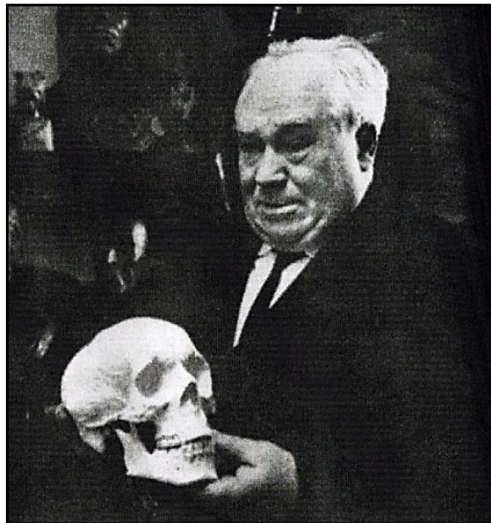


Figure 3.7: Mikhail Gerasimov, founder of the Russian School of facial reconstruction methodologies (Wilkinson 2004)

From investigating the craniofacial skeleton, Gerasimov (1971; 1975) noted that the anatomical structures of any individual can be rebuilt dependably with regards to the origins and insertions upon the surface of the skeletal remains. As well as examining the condition of the physiological face in its entirety, Gerasimov's early twentieth century work on the soft tissue prediction of the nose is still in use today and has been confirmed by Rynn and Wilkinson (2006). His soft tissue prediction of other features such as the ears has also been regarded and tested even into the twenty-first century (Gerasimov 1955a; Guyomarc'h and Stephan 2012). Further examination of Gerasimov and his successors is discussed in Appendix 1.

Although Gerasimov and the Russian School of anatomical reproduction began early in the twentieth century, he realized the importance of artistic experience and the misleading nature of subjectivity within the practitioner (Taylor 2001). Therefore, he divided his process into two phases: basic reconstruction and final modelling (Verzé 2009, 8). Recognising these phases are in actuality more sophisticated than the aforementioned binary, Gerasimov (1971) separated the process into three portions: primary analysis/determination of cranial attributes, secondary graphical predictions, and ultimately the sculptural re-construction. Gerasimov promoted the use of two dimensional graphic re-

constructions as not only the basis for a three dimensional sculpture, but also as standalone portraiture of the individual (Taylor 2001; Wilkinson 2004).

The greatest inheritance from the Russian School into the field of facial reconstruction lies with the heightened understanding of the relationships between hard and soft tissues of the face. Still avidly providing contribution to facial reconstruction discourse, the Laboratory of Plastic Reconstruction and the Federal Center for Forensic Examination investigate dimensions of the reconstruction process and advances within the aspects of computerized three-dimensional reconstruction (Taylor 2001). Research in facial anthropology from the Russian school continues to contribute to the discipline of facial reconstruction/approximation and is carried on by academics such as Lebedinskaya, Balueva, and Veselovskaya (Balueva *et al.* 1988; Balueva and Lebedinskaya 1991; Lebedinskaya *et al.* 1993; Rynn *et al.* 2012; Veselovskaya *et al.* 2013).

3.2.2 The American School

Perhaps earlier in dissemination of work, but progressing at the same time as the Russian School, the technology of the American School relied on rigorously obtained cranial soft tissue depth measurements rather than mimetic anatomical presentation (Verzé 2009). Through the soft tissue databases established in the twentieth century, this facial reconstruction methodology utilised these quantifications of race, age, and sex to produce the countenance upon skeletal material.

Wilder (1912) and his pursuits with re-constructing the faces of Native Americans brought the North American sector of practice to international attention (Wilkinson 2004; Verzé 2009). However it was concurrent work by McGregor (1926) who was the first person in the United States to carry out facial reconstruction from his work on prehistoric skeletal material housed in the National History Museum in New York from 1915 onwards (Wilkinson 2004, 51). The use quickly expanded upon European models of facial identification for legal purposes in the American setting in the early twentieth century. In 1916, the first attempt at a forensic facial reconstruction in the United States resulted in the La Rosa affair, whereby the bones of, then unrecognized, Domenico La Rosa were discovered in a Brooklyn cellar (Verzé 2009). After the reconstructed face was produced, it

was displayed to the local community and recognized as the missing individual (Smith 1980).

The first serious adoption of facial reconstruction in America was taken up by anthropologist William Krogman in 1946 with collaborations with sculptors McCue and Frost (Wilkinson 2004, 51; Verzé 2009). His methodologies began by choosing a cadaver whose face he photographed before the process of de-fleshing. Krogman then delivered the individual's skull to his collaborating sculptors who, with the use of soft tissue data contingent upon the individual's age, race, and sex, re-constructed the countenance. The resulting depiction would then be compared to the prior post-mortem photograph for comparative resemblance (Wilkinson 2004). Not only the first scientific approach to facial reconstruction in a forensic consideration, but also regarding accuracy studies, Krogman continued to work in this methodological manner and in association with sculptors.

Krogman's successes in this realm furthered when he became associated with interdisciplinary researchers such as forensic artist Betty Pat Gatliff and physical anthropologist Clyde Snow (Snow *et al.* 1970; Verzé 2009). Gatliff (1984) would later go on to determine that her use of mirror symmetry when re-constructing the face would be detrimental to the natural variability and imperfections observed in many craniofacial skeletons. From the tradition of Krogman, practitioners Gatliff and Snow (Snow *et al.* 1970) and the copious amounts of soft tissue depth data available on age, race, and sex comes the late twentieth century and contemporary field of what is now called the American 3D method, being primarily detailed in the publication from anthropologist Karen T. Taylor (2001).

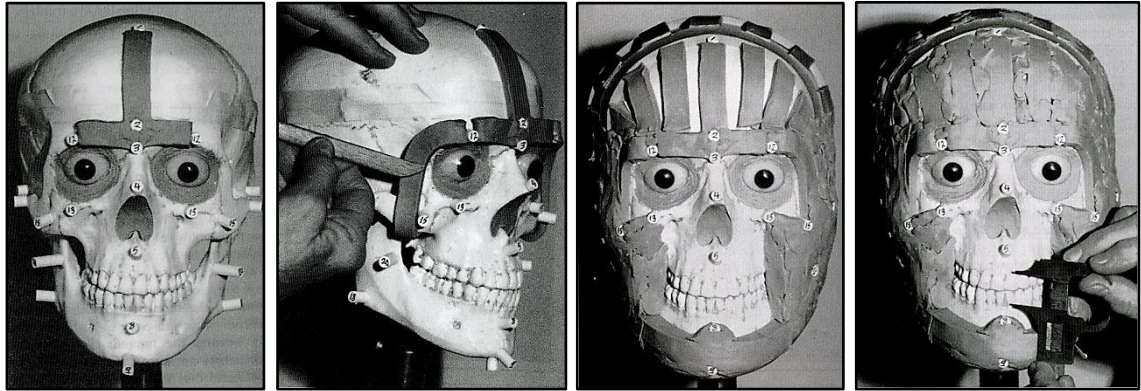


Figure 3.8: Examples of moments within the process for the American School of facial reconstruction (Taylor 2001)

While using the traditional tissue depths by which the facial anatomical structures are based upon, Taylor, much like the earlier Gerasimov (Verzé 2009), splits the methodological process into two parts: the first is technical in which the skull is analysed and tissue depths and facial contours are applied in consideration of the soft tissue depth markers instead of the detailed anatomical re-production of the Russian School; and second is the artistic phase in which the soft tissue features of the face are sculpted and the overall appearance of the face re-produced (figure 3.7). While not fully integrated into the Combination method (also known as the Manchester Method), the use of both anatomy and soft tissue markers play a major role within this American school of methodology because, “the use of the tissue depth method combined with knowledge of the facial muscles may actually lead to greater accuracy” (Taylor 2001, 359).

The legacy of the American School manifests itself in the boundless endeavours to create copious data sets of soft tissue depth measurements for particular global populations. Regardless, these soft tissue depth measurements are a vital part in the increasing accuracy of the reconstruction process and provide guidelines for the appearance of the individual (if ethnic/racial category is known). Additionally, many police departments, government and private institutions (Federal Bureau of Investigation, National Center for Missing and Exploited Children) utilize and contribute to the discourse of facial reconstruction and forensic art (Krogman and Iscan 1986; Gatliff 1984; Taylor 2001). The computerised program for facial reconstructions named *ReFace* is also a product of the North American methodology (Parks *et al.* 2013).

3.2.3 The Manchester Method

With the foundational corpus of work by both the Russian and American schools, the emergence of the Manchester methodology is traditionally viewed as a combination of the two, thus creating a technique that uses past and present research to produce an accurate representation of an individual's face (Prag and Neave 1997). However, this methodology should not be impoverished by solely considering it as a reaction from the former applications of method, instead as an indication for the progressing nature of the facial reconstruction discipline.

Helmer's (1984) work from Germany and Prag and Neave (1997) in the United Kingdom brought the interest of facial identification and reconstructions to the attention of continental Europe and Britain. While Helmer worked in the American 3D method using more sustainable wax, Neave began the new technique of incorporating the two aforementioned methodological approaches (Verzé 2009). Neave's early work in the reconstruction of Egyptian mummies within Manchester University and later use of cadavers for accuracy measurements led him to the application of the methodologies that are now to be considered the Manchester/Combination method (Wilkinson 2004). Over his career, Neave utilised more of the procedures and recommendations of previous research from those such as Gatliff (1984), Krogman and Iscan (1986) and George (1987) to realise the potential of this innovative method (Wilkinson 2004).



Figure 3.9: Illustration of the process of a reconstruction with the Manchester Method (Wilkinson 2010)

In her history of facial reconstruction, Verzé stated that the Manchester Method, “stems chiefly from the use of superimposition techniques” (2009, 9). An accurate statement as the Manchester Method relies heavily on the association between the hard and soft tissue

landscapes during all phases of the creation process. This goes beyond the re-construction process to superimposing a photograph of the finished reconstruction to the skeletal material to further investigate osteological and feature relationships. This allows for a better understanding of the re-construction process and aids in practitioner improvement.

The methodological standard for this technique is the simultaneous use of soft tissue depths as a guide for the thickness of tissue and the re-presentation of the anatomical soft tissues (figure 3.8). After the skeletal material has been analysed, the soft tissue depth markers chosen based on age, race, and sex are adhered to standardised craniometric markers. The restoration of the musculature and soft tissue foundation of the face follows as it allows for the individualisation and particular landscape of each skull's proportions to be exact. Once the individual's anatomy is presented, the surface is covered to the depth of the soft tissue markers wherein the remaining facial features necessary for recognition are applied. These procedures are outlined in Prag and Neave (1997) and Wilkinson (2004).

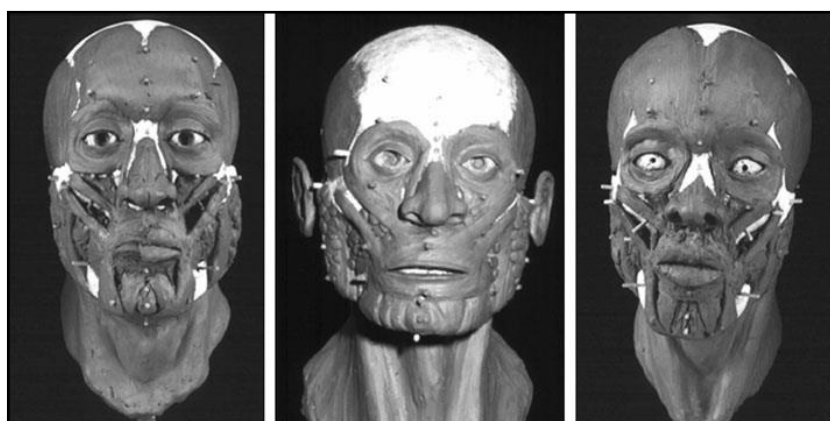


Figure 3.10: Three different individuals at the anatomical stage of reconstruction illustrating the variety of proportions of each individual's skeletal material (Wilkinson 2010)

The Manchester Method, or a variation thereof (either demonstrably aligned more with American or Russian schools) is perhaps the most widely used methodology in contemporary facial reconstruction without regard to the medium of the reconstruction. This technical school appears in methods of constructions in Europe (Helmer 1984; Neave 1989; Tyrrell *et al.* 1997; Wilkinson and Neave 2003; Wilkinson 2004; Rynn and Wilkinson 2006; Rynn *et al.* 2010; Benazzi *et al.* 2009; Benazzi *et al.* 2010), the Pacific (Stephan 2002, 2003, 2005; Stephan and Henneberg 2001, 2003, 2006; Hayes 2014), and South Africa (Gordon and Steyn 2012). It is within this framework that the dynamic nature

of the flesh and bone has been primarily researched in the twenty-first century providing the discipline of facial reconstruction with a vast literature and research production.

The article by Stephan (2003) is influential in realizing the limits of the methodological principles of facial reconstruction, or as he and many others deem it “facial approximation”. This important text, aimed more so for the forensic discourse of facial reconstruction/approximation illustrates clearly the distinct fallacies the discipline has been based upon. In his clearly scientific demeanour of encountering the subject of facial reconstruction, Stephan highlighted how practitioners can reconcile these assumptions that have been made and ‘unembrace’ the errors that have become commonplace within the discipline. This paper is just one of many in the new millennium that illustrates how self-reflexive and aware the industry of facial reconstruction has become in the interdisciplinary-touting scene of scholarly academia.

The importance of this method, especially due to the application within this research, is the large contribution it made towards the unification and progression of the facial reconstruction discipline. On a technical level, Wilkinson stated that this method of weaving previous approaches and scholarly work, ultimately combining into the Manchester Method, “appears to be the most accurate technique” (2004, 60). Even within the medium of most computerised facial reconstruction software, the Manchester Method is employed as the main technique with the primary layering of anatomical features and the later addition of soft tissue features (figure 3.10).

3.2.4 Computerized Facial Reconstruction

Beginning in the late twentieth century with the burgeoning realm of computer technology, the application to facial reconstruction became an area of increased scholastic interest. The earliest development of computerised reconstruction originated with Moss and colleagues (Arridge *et al.* 1985; Moss *et al.* 1987). This system developed for cranial reconstructive surgery was developed for 3D laser scanned data of the human face, supposedly eliminating subjective operator error. Computerized facial reconstruction offers flexibility, efficiency, decreased working time, and less handling of skeletal material (valuable in instances of archaeological reconstructions as remains can be fragile). Additionally, the founding

assumption behind the computerized versions of reconstruction is that it will diminish the subjectivity which some critics find endemic within the process of producing a facial approximation.

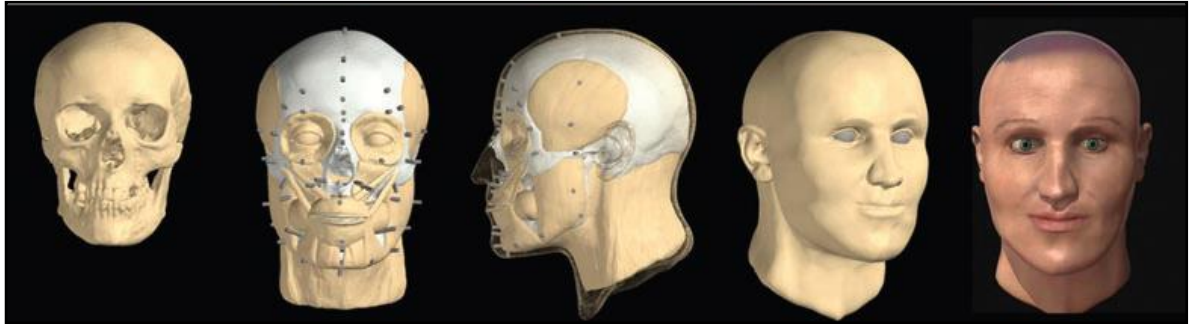


Figure 3.11: 3D computerised facial reconstruction (Wilkinson 2010)

This three dimensional computerised methodology involves the laser scanning of a skull with reference points of particular skeletal markers on the surface of the cranio-facial skeleton. Afterwards, the laser scan is imported into specific computer programs in which the individual becomes digitized and a three dimensional imaged object. From this now digital version of the skeletal material, the practitioner has the ability to begin the process of reconstruction as would occur in the similar 3D clay version. The soft tissue depth markers are placed on certain craniometric locations and schematic soft tissue musculature are positioned in association with their anatomical origin and insertion. Subsequently, this surface is overlaid with a skin and soft tissue features of nose, eyes, mouth, and ears are also included. The computer software also allows surface textures of the skin and the addition of hair.

Ubelaker and O'Donnell (1992) argued for the massive benefits computerised reconstructions offer for the productions themselves and for the practitioner relationship with viewing the material. Edited volumes such as Clement and Mark (2005) highlighted the impact of this medium and the values of technological advances in the endeavours of investigating the craniofacial skeleton and its soft tissue appearance. The twenty-first century use of these computerised reconstruction technologies are quickly advancing and being critically evaluated (DeGreef *et al.* 2005; Wilkinson 2005; Claes *et al.* 2006; Vandrmeulen *et al.* 2006).

Decker and colleagues (2013) have investigated the differences in methodological approaches from 3D clay reconstructions to the computerised versions utilising a known individual's countenance. This study is of great importance to the progression of computerised software for the facial reconstruction field. Additionally, Parks and colleagues (2013) published a preliminary assessment of a new computerised software called *ReFace* (Reality Enhancement Facial Approximation by Computational Estimation) created in part by the United States Federal Bureau of Investigation and GE Global Research. This study is another growing portion of the research into this sub-section of broader facial reconstruction methodologies with critically self-aware accuracy and performance levels.

Along with the prominent use of 3D computerised facial reconstruction in software such as Freeform® or SensAble Technologie's Phantom®, the creation of 2D computerised reconstructions with use of Photoshop is also an opportunity for this digital medium (figure 3.11a-d). Useful for both archaeological and forensic reconstructions, this two dimensional computerised technique still imports either a scaled photograph or laser scanned copy of the skull as well as the craniometric points with musculature into the digital realm and creates a countenance using with the still flatness of a photograph.

Not only are these computerized systems used for forensic or archaeological two and three dimensional facial reconstructions, but they also assist in more forensic cases such as post-mortem or composite depictions. These depictions as are forensic approximations and reconstructions are for the purpose of possible recognition of an individual. These post-mortem or composite images make the appearance of the appearance and state of the deceased individual acceptable for public dissemination. The range and increasing advancements within the capabilities of these systems is a great advantage towards the discipline of facial reconstruction.

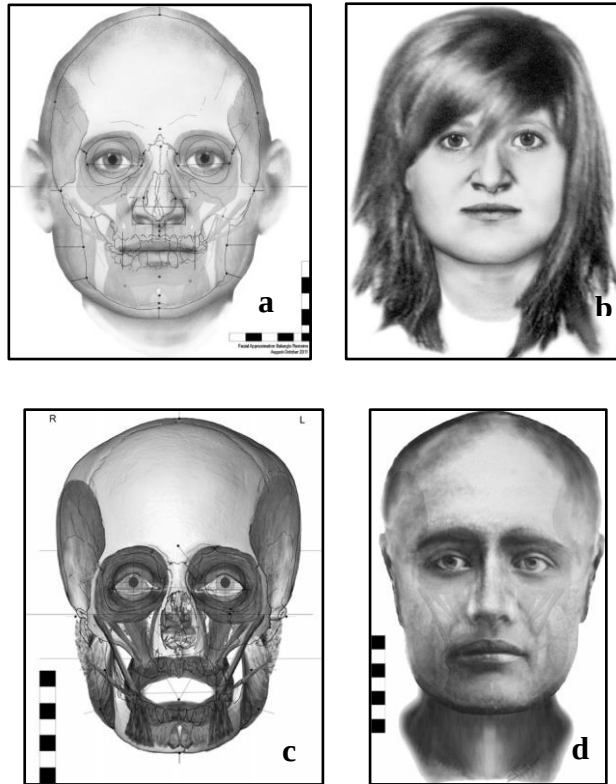


Figure 12a-d: **a,b**) 2D computerised facial reconstructions (Hayes 2014); **c,d**) Examples of 2D computerised facial reconstruction of a Maori individual (Hayes *et al.* 2014)

The benefits of computerised facial reconstruction are significant. The decreased time (practitioner working time and time handling of fragile human remains), materials, and labour are also regarded as advantageous towards this digitalised process. However, Wilkinson (2005) argued against these statements and this methodology becomes problematic in that the older systems of computerized systems of facial reconstruction rely on a limited library of facial features and soft tissue depth data (see also Verzé 2009). The level of successes for these computer programs and their final result has been tested (Decker 2013; Parks *et al.* 2013). This innovative manner for re-construction or approximation purposes has also provided the viewing audience with a new aesthetic of how reconstructed faces can appear and how we view these countenances.

3.2.5 Variation between Forensic and Archaeological Realms of Re-construction

Forensic art is, “any art that aids in the identification, apprehension, or conviction of criminal offenders, or that aids in the location of victims or identification of unknown deceased persons” (Taylor 2001, 3). Therefore, forensic facial reconstruction being a sub-

section of this legal artistic discipline focuses solely on producing a countenance of an individual for the various purposes assigned in Taylor's (2001) definition. Forensic facial reconstruction and its methodologies which can be evaluated more on their efficiency and accuracy than most archaeological specimens. There are of course limits to the exactitude of forensic facial reconstruction methodologies and what they can accomplish (Stephan 2003). This portion of the field of facial reconstruction is tied to regulations and the formalities of legal protocol. Forensic facial reconstructions are prompted by unidentified individuals. They are not distributed in an artistic sphere or a context of learning such as a museum, but in the communal, public sphere as a means towards recognition and ultimately, identification.

These forensic re-productions are controlled in their aesthetic presentation by being dressed or presented with known materials associated with the individual. Ambivalence in hair style, clothing, accessories, or even weight presentation casts the widest net as possible and will aid in the recognition of the individual thus leading to the identification. However, if we turn to the archaeological realm, there is a discernible difference in the finalised reconstruction as well as their intention for the public.

Rather than initiating a gaze of recognition, the area of archaeological facial reconstructions provides a view into the past appearance of a person and is partial to more subjective frameworks of construction than their forensic cousin. Archaeo-historical productions do not have to adhere to the constraints of legal and judicial restrictions or contemporary perspectives. Instead, they can be augmented in manners that would not be useful or justifiable in the forensic realm, such as the inclusion of costume, more detailed skin textures, or other stylistic choices (Wilkinson 2010). The subjective nature is tempered with historical and archaeological knowns concerning material culture and respective time period appearance. Coupled with the potentials obtained from the individual's osteological profile in addition to the contextual observations about their interment a delicate mixture of justifiable subjective choices in appearance is produced.

Limitations of archaeological reconstructions were discussed by Stephan (2005) and include taphonomic alteration of skeletal material, the use of average soft tissue depths, and

increased subjective interpretations. While these archaeological approximations, “offer the public intriguing speculations” (Stephan 2005, 300) how someone of the past looked, the suggestion that the use of forensic methodologies increases the accuracy of these particular countenances should not lend it any more authority in appearance.

The motivations for archaeological facial reconstructions are not for the immediate necessity of identifying an individual (with the exceptions of those re-constructions by His (1895) and Welcker (1883)). Instead, it would seem that the predominant number of archaeological facial reconstructions would be driven by educational, academic, or media motivations due to their display in museums and highlighted in news sources. The presence of the face for these uses thus differs entirely from the inherent worth value of the forensic partners and extends into another realm of meaning entirely. Re-constructions augment the humanistic aspect of a site or are used in an examination of a methodological procedure (soft tissue prediction or application of soft tissue depth data of modern populations upon archaeological material).

From the artistic and anatomical undertakings of the sixteenth century to the nineteenth century collaboration between scientist and sculptor, the field of facial reconstruction has been a crossroads of disciplines engaging with one another (Wilkinson 2010). The cooperative balance between science and art has been present since the collaborative efforts of the anatomist/scientist and artist production of the later nineteenth and early twentieth century. Mistakenly, some practitioners still feel that the field of facial reconstruction should embrace increasing inter-discipline cooperation (Lee *et al.* 2011), when in actuality these sources are unaware that there has been an inherent and implicit multidisciplinary nature of this field for centuries.

Perhaps the most problematic aspect of facial reconstruction is this bridge between the subjective nature of the practitioner and the attempt to produce an objective re-production. As seen previously in the methodological trajectories of all the major schools of facial reconstruction, there is an artistic phase of sculpting (sections 3.2.1-3.2.4). How impartial and unbiased can a process with an inherent ‘artistic’ portion of the process be? Does the field require an expertise or is there a medium such as computerized programs that attempt

to eliminate the margin of human error? Contemplating the challenging nature of the field in which they participate within Taylor (2001), Stephan (2003, 2005) and Wilkinson (2010) have devoted time investigating the role of subjectivity and objectivity in the practice of forensic art and facial reconstruction.

Forensic artists such as Taylor respond to questions such as these in the manner that, “the art/science relationship occurs because forensic art can present scientific information or use scientific principles in a visual format rather than a verbal one” (2001, 6). Whereas when considering forensic reconstructions, more scientifically oriented and academic positioned individuals would propose that the anatomical phase of facial approximation and even the soft tissue facial feature portion should not rely on artistic license (Wilkinson 2010). This is also a constant difficulty seen in the discipline of archaeology with the articulation of the visual ‘seen’ with the written description. Others like Suk (1935), Vanezis and colleagues (1989) Stephan (2003, 2005) have been openly and constructively critical of the success of facial approximations or reconstructions and their subjective interpretative dimension.

In contemporary academia, especially a discipline such as archaeology which straddles social science and hard science (Martin 2013, 112; Hutterer 2001), the call for interdisciplinary endeavours is vital for the holistic understanding of social phenomena within the humanities. The bifurcation of art and science in facial reconstruction is not a distinct binary as it may seem. As Wilkinson’s sub-heading of her paper (2010) is entitled, “anatomical art or artistic anatomy”, the two fields converge to coalesce into a field of its own. Dynamic and fluctuating in the nature of scientific or artistic intervention, the thought of facial reconstruction/approximation being an either science *or* art endeavour is truly in the past with discourse now recognising its complex constitution.

Past countenances are an aspect of research into specific sites and deserve to be merited as a standard within their own being. The archaeological nature of these re-constructions entail that they are for public consumption. They offer a connection to be harnessed that resolves the ontological divide and temporal situated-ness of past individuals and populations to become relevant once more. It is through the likes of research such as this

that the people are found among the materiality within the archaeological discipline once more.

3.3 Further Themes in the Discussion and Critique of (Archaeological) Facial Reconstruction

The basic fundamental nature of facial reconstructions may not have overtly changed during the past centuries, but their significance for archaeological and criminal imaginations has evolved. There is certainly opportunity to contribute to the rumination of the history of facial reconstruction as there are a handful of texts (Vanezis and Vanezis 2000; Taylor 2001; Stephan 2003; Wilkinson 2004; Verze 2009; Vermeulen 2012) that write explicitly concerning the background and historical trajectory of this discipline while not considering overt social, cultural, or economic factors involved within the growth of this field (Sanders (2009) extends into several of these conceptual features). A critical perspective on the nature of the growing discipline and the connotations of how their research has and is being utilized, if not exploited, by other disciplines, is needed. This follows and will be ascertained through investigating the following selected thematic sections which detail specific issues applied towards facial reconstruction which merit discussion.

3.3.1 The Face in the Archaeological Imagination

As we will remember, archaeological imagination espoused by Shanks (2012) is the cultural reception of the past and to Schnapps (1996) is the consciousness that arises through the fascination with the discipline of archaeology and its discoveries. It is a dynamic and fluctuating creation that is a product of the emerging historical period and intensification of reflexive thought upon humanity and the interaction with the landscape. The imagination of the past is embedded and transferred by the discoveries of archaeology and the contemporary gaze onto the countenances of the past. We take meaning and intention that archaeological and historical scholarship provides and extrapolate upon this, actively creating the narrative of the past. In this case, the ideas of the past archaeological landscape are transferred to the landscape of the surface of the facial reconstruction. As discussed in the previous chapter, certain aesthetic rhetoric of facial reconstruction have

changed over time from stoic bust-like representations to twenty-first century examples of digital, hyper-realistic reconstructions. While variable in appearance, facial reconstructions maintain a strong presence in the pathos of consciousness of the viewing audience when consenting to the skeletal basis in the character of the reconstruction.

Examining the specific role of facial reconstruction in the broad sense of its contribution to the global discipline of archaeology, not all of the facial reconstructions ever constructed are seen here. It is important to note that this chapter offers a brief survey of facial reconstructions. The sample chosen here are arguably most influential or exemplary case studies which are the most formative upon the archaeological imagination. The Irish archaeological facial reconstructions record is very small. Outside of this current study and to present knowledge, five facial reconstructions based on skeletal material from the island of Ireland exist within its cultural institutions.

At first sight, the face is judged on physical appearances. These physicalities are linked to particular personal characteristics and personality traits. The discipline of anthropology based in racialization of different cultures is an important feature for how facial reconstructions were and are consumed by the archaeologically aware public. This background that was established affects the lens in which collective consciousness view and experience the past face. However, past physical appearance and with interaction of an other's face more abstracted notions become involved and embedded within the layered surfaces of meaning upon the face. In the asymmetrical gaze of archaeological facial reconstructions that cannot speak for themselves, these embedded ideologies are amplified and go unchecked until the viewer becomes self-reflexive.

The emergence of an archaeological imagination arises from our embodied experience of those facially re-created and our encounter with their gaze and presence. This embodied experience of approaching or even seeing the reconstructed skull as a subject occupying space is important because,

“the embodiment of human meaning and understanding manifests itself over and over, in ways intimately connected to forms of imaginative structuring of experience. The kind of imaginative structuring uncovered in these studies does not involved romantic flights of fancy unfettered by, and transcending, our

bodies; rather, they are forms of imagination that grow out of bodily experience, as it contributes to our understanding and guides our reasoning” (Johnson 1987, xiv).

Although physicality is important for the creation of imagination and its structure of our connection to our worldly surroundings, we are reminded that Levinas’s conception of face is, “definitely not a plastic form like a portrait” (2006, 89) and not the physiological countenance of an other but instead appears as the modes of ethics, responsibility, and the primal site for encounters. In archaeology, we can build upwards from the corporeal face seen in material culture or the osteological material towards these abstracted ideologies that are embedded within past activities of interments and material creation.

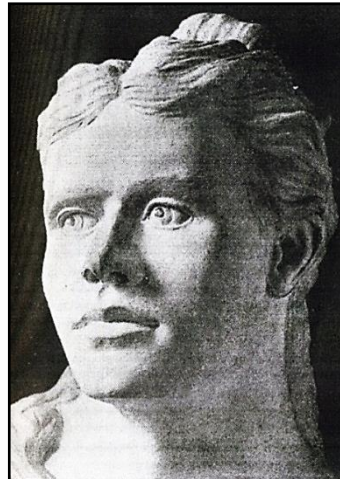


Figure 3.13: Reconstruction of a prehistoric woman from Auvénier, France by Kollman & Buchly (Wilkinson 2004)

Considered the “first real scientific reconstruction” (Wilkinson 2004, 46), Kollman and Buchly’s (1898) sculpture of a Stone Age woman from Auvénier, France was produced by the innovative methods of pooling soft tissue depth data from the local, living population of women. This bust is notable for its procedural merit and position in the history of facial reconstruction. Beginning as a baseline for the appearance of facial approximations, Kollman and Buchly’s re-construction (figure 3.12) is classical in its formal qualities. As the scientific endeavour was seen as a noble pursuit so the portrait of this past individual reflects these frameworks and illustrates a graceful and elegant woman different than the actuality of her time period. Regarding the hairstyle, skin texture, and composition of the sculpture, this prehistoric woman is clearly seen through an early modern lens instead of the realism we will see in later portrayals of prehistoric individuals.

This reconstruction by Kollman as well as one created by the German anatomist Friederich Merkel of an older male from the area of Gottingen is what Danish professor of anatomy Hansen calls a “race portrait” (Sanders 2009, 209). According to Sanders (2009), Hansen assessed these portraits as stereotypical, idealized Aryans going on further to note that the individual’s gaze is sensitive to the nuances of one’s own race and that we are then increasingly unresponsive to an external race’s peculiarities and unsympathetic to potentialities.



Figure 3.14: The first popularised depiction of a domestic Neandertal scene in 1873 *Harper’s Weekly* (Trinkhaus and Shipman 1993)

The anonymous drawing of a Neandertal submitted to *Harper’s Weekly* is an important example of a parallel for facial reconstructions such as those from Kollman and Buchly and McGregor. All visual archaeology appearing in popularized media forms (figure 3.13) impacts the manner in which the public discusses and is consciously aware of the past (Clack and Brittain 2007). Discussed previously, there have been evolving theoretical notions and types of reconstructions and in this portion of investigation there are fluctuating sets of meaning attached to the viewing of re-created faces of the past, “each generation projects onto the Neanderthals its own fears, culture, and sometimes even personal history. They are a mute repository for our own nature, though we flatter ourselves that we are uncovering theirs rather than displaying ours” (Trinkhaus and Shipman 1993, 399). This nineteenth century depiction asserted a pseudo-modern nuclear family type with undertones of a dirtier existence. Many of the prehistoric depictions, while illustrating brutish qualities also evoke the rhetoric of dirt to subscribe to a fundamental lack of culture dividing the past from present populations.

As Privateer suggested when discussing the ideologies of human origin narratives, the associated imagery, “despite all their figurative language...are really about the business of culture making” (2005, 13). These “culture organizing systems” as he terms origin images are the reiterated and concentrated efforts of (imagined) narratives on institutionalizing certain societal behaviours. Just as in the past, in contemporary society images of faces from a shared past instruct the archaeologically aware and consuming public how to process and (re)act towards those that came before. This is pertinent when considering the importance of origin images and the reverberations they make within modern narratives and the tradition they established for the foundation of the discipline under examination in this thesis.

Moser (1992; 1998) discusses the visual language of depictions such as those which represent early hominid lifeways. They act as influential visual documents which actively, “play a part in the shaping of archaeological debates” (Moser 1992, 831). Fully saturated and entangled with ideologies external to early hominid’s physical appearance, reconstructions of Neanderthals which were legitimised by the use of scientific methodologies, “emphasized how they [Neanderthals] had distinctively non-human qualities in a manner which verbal text could not achieve” (Moser 1992, 837). The visuality of the past in its re-imaged form is of utmost importance because of what ideologies of the past these images can generate. Additionally, reconstructions of the past as presented by Moser (2012) are illustrative of the self-reflexive awareness of the developments of archaeological theory through theory-laden archaeological images. This discourse put forth by the likes of Moser and Trinkhaus and Shipman is extremely relevant to the realm of archaeological facial reconstructions which are the type of heavily theoretically embedded re-productions of the past which should be consciously experienced.

As noted previously, the field of craniometrics brought the rhetoric of race and intelligence into the examination and measurement of cephalometric points. As we know now, this incorrect correlation between skull vault size and intelligence was thought to be scientifically proven and associated levels of intelligence to certain races (Gould 1996). The contemporary use of race/ancestry in facial reconstructions is strictly for the understanding of the relationship between hard and soft tissues and is demonstrably *not*

intended for antagonistic, racist purposes. Additionally, there has been a paradigm shift of the western world's perception of sciences which are fundamentally obsessed with recording and categorizing. Now understanding that the power of the individual and human variation is of a viable option to portray – the classification and restriction of an individual to measurements has unleashed the power of the face and the amount of potential it has over the audience.

Some of the earliest modern examples of facial reconstruction concerned producing the countenances of prehistoric individuals and Neanderthals (McGregor 1926). These extremely biased appearances appealed to the assumed 'brutish' and 'primitive' nature of these individuals. This symbolic undertone has been overlooked within the core texts regarding the history of facial reconstruction, but has been highlighted in anthropological discourse by those such as Moser (1992), Trinkhaus and Shipman (1993) and Smiles and Moser (2005). It is particularly important to note this type of symbolism within reconstructions because the discipline of facial reconstruction has since been working on transitioning away from such assumptions. However, the problematic nature of how reconstructions can be exploited for ulterior purposes contradicts its academic or culturally driven uses. This act needs to be understood and a healthy, consistent part of the historical trajectory of the history of the development of facial reconstruction in order to avoid such future lapses.

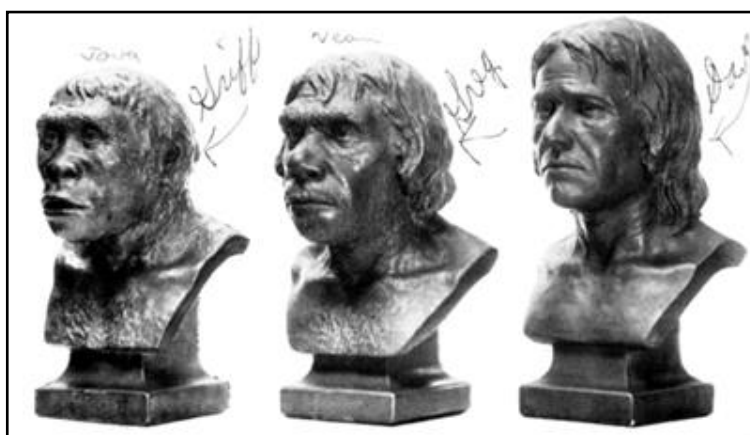


Figure 3.15: Facial reconstructions by McGregor 1915 (Ladouceur 2010)

Re-constructions from the early twentieth century by McGregor (1926) for the American Museum of Natural History consisted of three busts: Java Man (*Pithecanthropus*),

Neanderthal, and Cro-Magnon Man (figure 3.14). According to Ladouceur (2010) these faces were appropriated to promote the eugenics movement. Using images as an epistemological device which seeks to classify archaeological material (Moser 2012), these facial reconstructions supported a narrative in which the agenda was to illustrate a racial hierarchy. The traits of reconstructions such as those supporting a racist agenda used “brutish faces were supposed to explain brutal customs” (Jorion 1982, 9) branding prehistoric or other faces with far more theoretical ramifications than usually considered. Their display in a museum (a private or publically funded context for learning) legitimised this motivation. A visual progression of evolutionary countenances, we can see how facial reconstructions, perhaps not created with the intention of becoming part of a racial agenda, can be appropriated for a wider narrative invested in a type of societal epistemology.

In many prehistoric societies the transference of culture relied on oral tradition and herein lies where our modern words fail and is instead substituted by the visuality of the past seen in the facial reconstructions. However in a time period that lacks written documentation, prehistoric facial reconstructions “are far from silent; they speak volumes across time” (Sanders 2009, xvii). These countenances seem to capture the only link between how ‘we’ appear *now* and how ‘they’ appeared *then*.

The beginning of archaeological facial reconstructions relates to the racist, anthropometric research questions in the late nineteenth and early twentieth centuries. Throughout the facial reconstruction record, an evolution in the appearance of re-produced countenances can be seen relating to the changing, increasingly relativist anthropological frameworks. Transitioning from the evolutionary perspectives of the beginning of the twentieth century (seen in the Neanderthal and prehistoric depictions) and shifting towards the awareness of processes and socio-cultural systems, research questions began to probe structures and the position of the people within them. Separate from legal cases, archaeological and anthropological topics impacted the manner in which facial reconstructions were portrayed and thus viewed. In contemporary media saturation, the re-production of a famous face makes more impact than the significance of a site for the understanding of the archaeological record. The usurpation of the portrait for the attention of the media is in naïve hope to garnish consideration for funding and attention. As the media gives more

attention to archaeological reconstructions, the more they are discussed and popularized away from academic discourse. This is not a detrimental occurrence, as facial reconstructions long reach into the public imagination is its main merit and duty for the archaeological material that it covers. The change from places of discourse not only means it will reach different audiences but it will be discussed differently as well. The non-scholarly discourse is open to more emotive and empathetic readings of the facial reconstruction and its context than a strictly academic paper would be.



Figure 3.16: Hyper-realistic 3D computerised reconstruction of Robespierre by P. Froesch (2013)

The beginning of facial reconstructions went from the stoic, classical sculpture-esque, serene portrait busts such as that by Kollman and the origin images of prehistoric individuals and famous persons (Raphael, Kant) have evolved to the contemporary hyper-realistic depictions such as those produced by Froesch (figure 3.15) and those by Kennick and Kennick of Otzi (figure 3.18c). Technological advances as well as the image saturated society have prompted the popularity of reconstructions like those created by Froesch and other digitised computer versions. The change in the aesthetics of contemporary facial reconstructions is also a prime example of the evolution of these cultural objects. These twenty-first century productions, no matter how realistic, still demonstrate an, “artificiality of “making it look real” (Sanders 2009, 189). Startling differences in aesthetic appearance and rhetoric of what a reconstruction can become, contemporary twenty-first century reconstructions such as Froesch’s have become the most recent addition to the aesthetic trajectory of the discipline of facial reconstruction.



Figure 3.17**a-b**: **a**) The presumed skeletal material of Richard III illustrating the extreme curvature of the spinal column, a trait associated with this individual; **b**) The facial reconstruction of Richard III by C. Wilkinson and J. Aitken (2013)

Perhaps the most forceful facial reconstruction at this time of writing, the face of Richard III (figure 3.17b) has enraptured the consciousness of Britain and been publicised widely. There are yet to be any scholarly articles or publications to date concerning the facial reconstruction methodologies, however Appleby and colleagues (2014a, 2014b) have published osteological analysis. In many instances, facial reconstructions are an expression of national pride in an individual. Bringing forth the face of a past individual of note so as to invigorate their legacy and remind the public consciousness of their existence. The reproduction of faces that carry the weight of nationalistic or ethnic connotations constitute portions of the facial reconstruction record which make people curious to see the personas of history which have been condemned forever in historical narrative as somewhat evil, tyrannical, or powerfully corrupt.

Many portraits of the monarch exist so why would this depiction capture such attention? Commissioned and funded by the Richard III Society, this re-construction was so important to the visual record of Britain and the discipline of facial reconstruction because it was the discovery under a car park in Leicester which prompted the imagination of this character to begin again. The discovery added layers of new information to the mythical persona that is Richard III. Mostly prompted through Shakespearean interpretation in *Richard III* and the sinister aesthetics assigned to valorize this monarch as evil (Slotkin 2007), the public consensus of this man was a negative portrayal with little else substantiating this set of traits. The remains of this man which had become demonised by political division were discovered under a car park in Leicester in 2012. This body was under the scrutiny of the public past and present with his curved back which became a signifier for this man even as a modifier for personality traits. Therefore, reflecting upon the face of Richard III is an

experience that is detached from the embodiment that pigeonholed the characters of the man. This re-construction allows for others to contemplate the complex nature of the face and the conception of embedded features which are incidental to the fundamental surface of the countenance.

One of the most fascinating concepts of the Richard III reconstruction was that the public astonishment in how seemingly ordinary this man appeared. The reconstruction (figure 3.17b) illustrates a youthful, man with no hint of malice written upon his countenance. The notion of evil and treachery that had been placed upon this individual throughout literary sources can be at once abandoned when viewing the placid face or could become the literal face for a seditious nature. The glaring lack of deformity aids in this new interpretation of Richard III as it speaks to fifteenth century ideas of disability as a divine punishment for sins. Not only does this countenance give the skeletal remains a connective surface in which the public can situate their sentiments concerning this past monarch and resolve the previous notions of his personality by being confronted with his face.

A face that captured the public's attention in the early twentieth century immortalised the fascination with the discipline of the romantic archaeological endeavour and the potential past treasures that wait to be found. The misfortune of those involved with the excavation and encounter with King Tutankhamen caused speculation of a "mummy's curse" (Nelson 2002). The captivation of this discovery led to the desire to gaze upon the popularity of viewing the lavish grave goods of this boy king who left many questions to be answered. The enigmatic aura surrounding the appearance of the hauntingly complete face (figure 3.18a) of this ruler of one of the most consciously present archaeological societies.



Figure 3.18a-e: **a)** The mummified remains of King Tutankhamen; **b)** Torso of Tutankhamen created in painted wood and housed in the Egyptian Museum, Cairo (photo by Andreas F. Voegelin, Antikenmuseum Basel); **c)** Reconstruction of Tutankhamen by French team E. Daynès and J.N. Vignal (2005); **d)** Reconstruction cast by U.S. team S. Antón and M. Anderson (2005); **e)** Reconstruction by Egyptian team with principal investigator K. Elsaid (2005)

Reconstructions by three different groups (Egyptian (figure 3.18e), French (figure 3.18c), and American (figure 3.18d)) represents the striking face of this powerful player in the archaeological imagination. The reconstructions created by different practitioners produced slightly varying appearances. All externally funded by the National Geographic Society or Egypt's Supreme Council of Antiquities, the team working from the United States worked "blind" not knowing the origin of the skeletal materials, unlike the French and Egyptian teams. These three reconstructions were widely lauded and, "largely validated the scientific processes used in their construction" (Handwerk 2005, 2). What they have besides the contribution towards the discipline of facial reconstruction, is added to the imaged record of this important individual. The new facial reconstructions will embed within the public consciousness expanding the imagination of King Tutankhamen as well as the archaeological existence of the empire in which he embodies.

The existence of King Tutankhamen and the exhibition of the things that symbolise the world view of ancient Egypt is argued to represent a larger importance for mankind (McAlister 1996) as a symbol for the potentiality of the human condition in the creation of

a grand civilisation and the insistency of the influence of the past. Therefore, to reflect upon his countenance would be an important moment for the connection of the present to the past and the beginnings of the human narrative.

Similar to the many faces of Tutankhamen and the interjection of personality in the narrative of the prehistoric past, is the famous Otzi the Iceman. These mummified remains of a Chalcolithic male have contributed to the larger body of archaeological knowledge by the amount of information available through the investigation of remains such as diet, health, clothing and adornment (see Barfield 1994; Gostner and Egarter 2002; Sharp 2002; Dickson *et al.* 2003; Ruff *et al.* 2006; Pernter *et al.* 2007; Ermini *et al.* 2008; Maderspacher 2008; Dickson *et al.* 2009). His mummified form has also been highly visualised through the appearances in popular culture and his facial reconstructions representing the prehistoric past and the scientific methods of investigation of past bodies (Fowler 1998; Lorenzi 2011; Ghose 2012; Owen 2013; Fang 2014).



Figure 3.19a-c: The changing face of Otzi, from left to right: reconstructions by **a)** John Gurche (1993), **b)** Peter Vanezis (1998), **c)** Adrie and Alfons Kennis (2011)

Since the discovery of Otzi which prompted entire conversations of the prehistoric period, there have been several facial reconstructions produced of this man. Very different in appearance, the chronological illustration of Otzi and his body demonstrate the artistic relevance within this field as well as the perfunctory purpose of facial approximations in constituting the imagination of the archaeological past. Not only does this emphasise the speculative nature of archaeology, but the face's very important role in prompting imagination and discourse of past individuals and populations. Seeing these three

depictions side by side, the evolution of artistry or the rhetoric of what the past should look like can be seen clearly illustrated (figure 3.19a-c).

The first bust-like reconstruction from artist Gurche (figure 3.19a) was recreated two years after the remains were discovered with modern soft tissue depth averages and with no 3D replica of the skull. With the increased use of technology, the following two approximations had the benefit of the availability of a 3D model of the craniofacial skeleton. The latest full-body reconstruction of this individual by Kennis and Kennis (3.19c) is curated in the South Tyrol Museum of Archaeology with the mummified body of Otzi and is markedly dissimilar from the preceding reconstructions. This face illustrates this man as a lean, greying, older, dirtier and weather-beaten individual. This is the third reconstruction of the prehistoric man in a manner that highlights his very much *lived* experiences shown in his weathered face and the advanced age of the difficult life of the prehistoric man. Seen as too realistic for the man it is portraying (Zink in Chamberlain 2011), the subjective experience of the sculptors within the creation of this facial reconstruction is very much present in its encounter. This reconstruction of Otzi highlights the subjective manner in which facial reconstructions can behold as well as the many *given* meanings embedded with the countenance.

This prehistoric mummified male is thought to have been about forty years of age at time of death. Considering the facial depiction by the Kennis brothers (2011) we can see an identifiable progression in how the contemporary consciousness believes age in past populations supposedly appears. The grizzled face and rough surface textures applied to the latest reconstruction of Otzi is a stark determination of the present perspective of how the difficult the prehistoric everyday life could be. There is an element of conjecture when it comes to the depiction of age in archaeological populations. The archaeological imagination describes the past lifeways as tough and dirty, conceivably rightly so with the resources available and health statuses of populations, but the surface texture of age in the past is almost non-comparable to the modern day appearance of age.

The Wetwang Woman and her lavish burial is an example of the intersection of the presence of facial reconstructions and research which challenges the traditional thought

towards gendered notions of archaeology (see also the female re-construction from Domuztepe for a similar example; Gauld *et al.* 2003; Croucher and Campbell 2009; Croucher 2012; Erdal & Erdal 2012). Excavated in 1984, a female was found deposited with a chariot, horse-bits, faunal remains, and an iron mirror (figure 3.19a; Dent 1985). These mirrors tend to have an exclusive association with female burials (Giles and Joy 2007, 16; Edwards and Pope 2013, 469). However, what made the inclusion of a mirror and the entirety of this burial context more interesting appeared with the creation of the facial reconstruction which noted a previously unnoticed facial deformity.

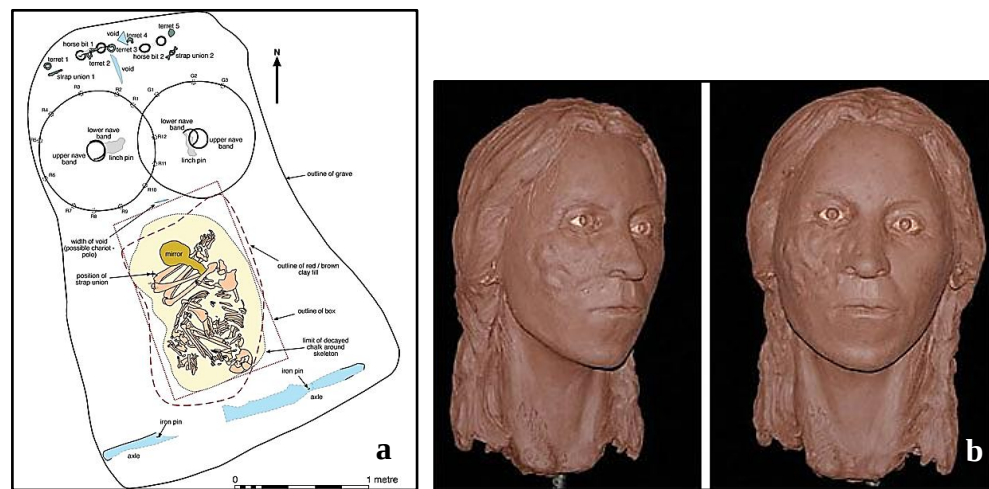


Figure 3.20a-b: a) Burial plan of Wetwang Woman's mortuary context and associated materials (Giles 2012); b) Reconstruction of the Wetwang Woman by C. Wilkinson

The Wetwang woman possessed a pathological condition of a large facial haemangioma which would have markedly altered her appearance (Hill 2002). This would have appeared as a large red growth on the majority of the right side of her face. However this is contested and the skull have become deformed during interment (Giles 2012, 248). It is thus curious that a mirror, an object that would propagate her appearance, is included amongst her grave goods. The gaze of her contemporaries cannot be compared to the manner in which the twenty first century would view such an appearance. There are interpretations that physical differences in prehistory would have made an individual a candidate for special roles in society (Aldhouse-Green 2001; Giles 2009) and could be applied to this woman.

A BCC programme attracted to this elaborate burial and enigmatic woman commissioned Caroline Wilkinson to re-construct the Wetwang Woman (Giles 2012, 248). On a technical

note, this facial reconstruction illustrates the ability of this practice to display pathological cutaneous conditions. However, when re-created in the form of a facial reconstruction (figure 3.20b) the archaeologically consuming public is free and even willed to look at this woman without fear of her gazing back. Her inhumation is an important portion for many aspects of studying the Iron Age in Britain (Stead 1991; Pope and Ralston 2011, 396), but more importantly is a unique contribution the records of facial reconstructions visible throughout the discipline of archaeology.

This is evidence of the undeniable voyeuristic aspect (and perhaps pleasure) to the gaze directed at a facial reconstruction. Re-creating a countenance that once did, but no longer does, exist produces an ontological shift in how we treat the remains of an individual, however with added consideration of its plasticine quality it goes further to be openly fascinated with an individual's face. There exists in our worldly encounters with others those who deviate from the appearance of “normality” – that being, when a disruption occurs to their face as a result in traumatic or pathological conditions. Contemporary gaze and treatment would be to avoid drawing attention to such disruption of the normal variations which occur in the face and look passed them to the individual instead. However, the desire to stare at abnormalities akin to those seen upon this Iron Age female perpetuates and quite possibly could be classified as a motivator for re-constructions.



Figure 3.21a-b: **a)** Reconstruction of a healed wound sustained in the Towton Battle by C. Wilkinson and R. Neave (Wilkinson and Neave 2003; Wilkinson 2010); **b)** The face of Robert the Bruce and the effect of leprosy on the face by R. Neave (Prag and Neave 1997)

In addition to the appearance of pathological changes (see also figure 3.20b reconstruction of Robert the Bruce (Prag & Neave 1997)) and his illustration of leprosy and Needham *et*

al. 2003), facial reconstruction can be a visual aid in the illustration of a healed wound (figure 3.20a). This example comes from the Battle of Towton (1461) which took place in Yorkshire, England during the War of Roses and is said to be “the bloodiest battle ever fought on English soil” (Gravett 2003, 7). The wound consistent with a sword blow supposedly occurring in battle is found on the older male’s mandible. The new bone growth suggested it occurred ten years prior to death. It would decidedly mark the individual’s facial appearance by surviving this injury. By understanding the concepts of trauma and the process of healing in regards to the skeletal and muscular material of the face this male is an example of how the anatomical expertise of the facial reconstruction practitioner comes into the creation of illustrations of healed wounds. However recognisable this facial characteristic is, we can see would have been an identifier through this male’s life, he is unnamed and one of the many anonymous faces which peer out at us from the fifteenth century.

The imagination that facial reconstruction proliferates is not always of a desired face to gaze upon. There can often be backlash towards the archaeological endeavour, just as there was a “curse” upon the expedition that exposed Tutankhamen. The mythical nature of facial reconstruction can be seen in the archaeological work of Gerasimov (1971, 1975). His career in archaeology has spanned the Palaeolithic to the historical period. One excavation in particular prompted a reaction from the public illuminating the mythical nature of archaeology. In June 1941, Gerasimov was in the midst of excavating Gur-e Amir, the mausoleum where the Asian conqueror Tamerlane (Timur) was laid to rest. According to locals, the opening of the tomb would bring a curse upon those responsible (Williams 2013). Indeed, on 22 June when the tomb was opened, Hitler’s army invaded the Soviet Union, fulfilling this ‘curse’ for some. This effect on the archaeological imagination of a nation illustrates the point that the past has an existing connection to the present.



Figure 3.22a-f: **a)** The coffined deposition of an African woman in eighteenth century Maryland (Photo by Chip Clark, Smithsonian Institution); **b)** Facial reconstruction of the African woman produced by J. Hughes and StudioEIS (Photo by Chip Clark, Smithsonian Institution); **c)** A fourteen year old girl supposedly a victim of cannibalism from Jamestown, Virginia (Studio EIS/Don Hurlbert); **d)** The skeletal material illustrating the cut marks to the individual's frontal bone (Smithsonian Institution/ Don Hurlbert); **e)** Reconstruction of a indentured servant illustrating his heavy work load (Smithsonian Institution); **f)** The mortuary context of this individual

Anonymous faces illustrate the lived reality of America's colonial past. These exquisitely sculpted re-constructions housed within the Smithsonian Institute curate: a strikingly beautiful African woman who displayed skeletal markers of hard labour who was found deposited in a hexagonal coffin from the Harleigh Knoll site in Talbot County, Maryland (figures 3.21a and 3.21b; Owsley and Bruwelheide 2009; Caputo 2009); a young woman supposedly a victim of cannibalism whose remains were found in a trash deposit in a seventeenth century cellar at the important colonial settlement of Jamestown, Virginia (figure 3.21c). The skeletal material is said to be "butchered" and display signs of cannibalism (figure 3.21d; Neely 2013). This is obviously an interpretation of the cut marks found on the female's skull and could point to some other trauma sustained peri-mortem. As cannibalism is taboo in a most societies (West 2007; Avramescu 2009), this evidence of the practice and the demure face which it belongs to is an arresting reminder of the human dimensions of the archaeological past; and finally, a young male aged fifteen or sixteen years old thought to belong to a section of society constituted of indentured servants (figure 3.21e). Discovered in a cellar under layers of domestic rubbish this individual also showed indications of hard labour upon the skeletal surface of his remains (figure 3.21f).

The burial of the young male within a rubbish pit has allowed archaeologists to conclude a date range of 1665-1675 based on associated material culture (Caputo 2009). Interestingly, these dates coincide with a change in legislation prohibiting the private burial of servants. These new set of laws hindered the concealment of neglect to the servant class, but had not been implemented in this young man's burial. Additionally, to look upon the face of the young female from Jamestown, while also being conscious of her postulated cannibalism begs the question why was she re-constructed. Why do the investigators of the site and the archaeologically consuming public desire to see the face of an individual that could have died or been used for sustenance in the harsh conditions of Jamestown leading to a cannibalistic event? The voyeuristic element of re-constructions is amplified in contexts such as this, creating a desire of contemporary audiences to know the site through a past face.

All from the same spatial and temporal context, when combined these three facial reconstructions from colonial America illustrate is a different image than the origin stories of historical America. It displays a society that is demographically diverse and socially stratified with human resources being pushed to their extremes with labour and the adaptation to the harsh environment. Arduous years to colonialize the New World had many faces, but these three have been added to this record illustrating the emerging reality of colonial America.

If we look at how the face has been presented in the Irish archaeological imagination specifically, we see few available examples of facial reconstruction based on skeletal material from the island of Ireland. Interestingly enough, within the Irish (bio)archaeological record the formation of an archaeological consciousness for the public has been very much intertwined with the landscape, which coincides with the emphasis upon the discourse of landscape archaeology within academic and commercial settings. Prominence of features such as ringforts, hillforts, crannogs, cemetery settlements, and ecclesiastical enclosures has filtered through the public consumption of Ireland and its history rather than the faces of those reconstructed. As human remains are a common find on archaeological sites and the quality of the material is predominantly good enough for use

in the area of facial reconstruction. This can be seen in the increasing presence of facial reconstructions in Ireland. These are briefly detailed below:

A) Excavated by MacAdam and Getty in 1885 (Hartwell 1991, 12) with modern scientific excavations by Collins (1954a) and Hartwell (1991, 2006), the prehistoric passage tomb of Ballynahatty offers a face for the elusive prehistoric period of Ireland. Located within what is called the “Giant’s Ring”, this passage tomb and its surroundings (figures 3.22a, 3.22b, and 3.22d) are monuments that mark the landscape with a semblance of importance. Its small interior and the variety of funerary rites illustrate it might have been a ritual site rather than a familial burial site.

Large complexes of prehistoric landscapes such as Newgrange, Knowth, or Ballynahatty have been considered in the archaeological imagination as the imprint of the first people of Ireland and the narrative of their presence in the archaeological record has been articulated in overtly emotive ways. For example, Herity’s clearly culture-historical account of the prehistoric transition in populations and their effect on the landscape uses affective language in their description:

“Defilement came soon enough, with the rush of the new, Food Vessel people, burying in the single rite of the Early Bronze Age, who wished to establish a place for their dead with these gods of an outworn but most prestigious cult. Beaker people had come, but only on pilgrimage, squatting in the shadow of the sacred cairn, converting the last of the passage grave people at Monknewton to a new, central European way of burial, and circling the tombs of Newgrange 4 and Ballynahatty with their massive embankments, New Grange itself, Moyadam and Ballynoe with their peristaliths” (Herity 1974, 186-187).

It should be noted that Hartwell (1991, 2006) and his eleven seasons of excavation prove to be more authoritative than Herity. At least nine individuals represented in the tomb, two of who were represented by intact skulls and the others by cremated remains (Hartwell 1991). The Late Neolithic/Early Bronze Age re-construction from Ballynahatty, Co. Down utilised skeletal material from a young adult female, aged at 17-25 years old (skull 2). The osteoarchaeologist consulted was Eileen Murphy (Black 1999) who aged and sex the individual on the sole basis of the skull as the mandible and post-cranial material were not recovered from the site. This female was found in association with another skull of a

similarly aged, disarticulated female (skull 1). Skull 1 is missing, but according to the original assessment, both skulls belonged to young adult females and had no indications of pathological conditions.

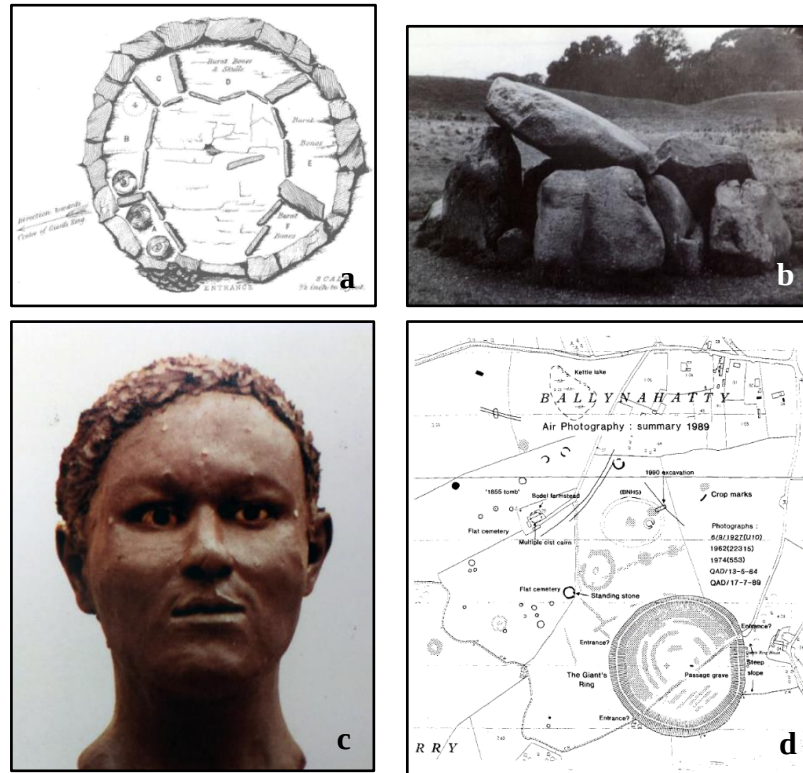


Figure 3.23a-d: **a)** Plan of the stone chamber of Ballynahatty, Co. Down (MacAdams and Getty 1855); **b)** Photograph of the tomb at Ballynahatty, Co. Down (Mallory and McNeill 1995); **c)** Facial reconstruction of skull 2 from Ballynahatty, Co. Down (Black 1999); **d)** The ceremonial landscape at Ballynahatty (Hartwell 1991)

Black's (1999) re-construction of this female (figure 3.22c), dubbed "Hattie" because she was from Ballynahatty, is estimated to be about 5,500 years old. Although no radiocarbon dates on this individual has been dated on prehistoric activity and associated funerary material. The skull was first discovered in 1855 in what was described as an "ancient sepulchral chamber" associated with cremated human and faunal remains (Black 1999). The reconstruction methodologies of this individual followed the Manchester/Combination method. This reconstruction was produced in 1999 before the soft tissue prediction of such features such as the nose and lips were solidified (as can be seen in the soft tissue literature review in Appendix 1). As there was no associated mandible for this individual, a mandible from the teaching collection at Manchester University was used instead. There are many limitations to this archaeological facial reconstruction, especially in archaeological context which are not noted within this thesis.

B) Ireland is included in terms of the presence of contexts common in north-western Europe which are important in the formation bog bodies (Sanders 2009). The landscape of Ireland offers the particularly fascinating possibility of discovering bodies deposited in a bog context which produces a remarkably well preserved individual due to environmental circumstances (see Painter 1991 for explanations of preservation). There are multiple examples of individuals which have been excavated in this particular context (Ó Floinn 1988). In particular found amongst peat from the bog which he derives his name, Clonycavan Man (figure 3.23b) was radiocarbon dated to the Iron Age (Miller 2006) which is a comparable age to many other deposits which are similar to this individual. Kelly (2006) and Giles (2009) posit that the deposition of these individuals is in relation to important barony boundaries. Not only were human remains found in this manner, but also a variety of archaeological materiality (Kelly 2006).



Figure 3.24a-b: **a)** Reconstruction of the Clonycavan Man (Clonycavan, Ballivor, Co. Meath) by C. Wilkinson and J. Aitken (University of Dundee); **b)** Human remains of the Clonycavan Man house at the National Museum of Ireland, Kildare Street

Clonycavan Man is curated in the National Museum of Ireland as part of the ‘Kingship and Sacrifice’ exhibition alongside other bog bodies such as Oldcroghan Man, Gallagher Man, and Baronstown West. The exhibit is an overarching contemplative tone, where each bog body is displayed in their own space acting as a mirror for the original deposition. The curation of this exhibition is a combination of maintaining the ethical display of bodies such as these as well as continuing the mystique of these individuals.

Clonycavan Man is an insight to Iron Age Ireland with the amount of information that can be offered from the study of his remains. Of particular note, is the resin found in this individual’s hair which may have been styled in a certain manner. The reconstruction by Wilkinson and Aitken (figure 3.23a) illustrates not only the revived countenance of the

Clonycavan Man but also this prominent hair style which makes this individual stand out in the record of bog bodies.

Bog bodies such as Yde Girl (seen previously) and Clonycavan Man extended to other mummified remains can be the most overtly utilised faces for archaeology because

“fantasizing about the lives they once lived can be, and has been, powerfully articulated both within and outside the discipline of archaeology proper. Indeed, when wrapped in a more generalized definition of archaeological imagination, bog bodies often resemble actors dressed in costumes to play assigned roles directed by inquisitive imaginations. Like dressmaker’s dummies, they are given voices by inventive ventriloquists to tell tales of sacrificial victimization, nationality, power, and sexuality” (Sanders 2009, 219).

Perhaps the most important insight taken away from Sanders’ (2009) research is that the experience of the bog body is an interruption in the normally considered linear flow of time, “this is because these bodies are visible to us as uncomfortably fleshed humans rather than as comfortable skeletons whose humanity is distanced by the absence of muscle and skin” (Aldhouse-Green 2010, 72). This sensation can be expanded to the phenomena of facial reconstructions at large.

C) The importance of Viking culture to Ireland and in particular to the landscape of the city of Dublin has been the motivation behind the creation of the museum *Dublinia*. The exhibitions detailing life in the Viking and Medieval world of Dublin is colourful, interactive, and informative about this significant period of time. Near the conclusion of the various exhibitions within the museum, the visitor is confronted with how the history they have just seen is interpreted and what the data can tell us about the past population of Dublin City. In this culmination of history and archaeology, the facial reconstruction of a woman is presented. Her skeleton is laid in an articulated, supine position in close proximity to the reconstruction of her countenance which allows for the contemplation of her remains in conjunction with her soft tissue appearance. Information concerning the reconstruction process (Manchester Method) is detailed within the exhibit, but the practitioner is unknown. No scholarly material for this reconstruction has been published or disseminated in an academic sphere.

D) Armagh was an important ecclesiastical site through the early and late medieval period. From this portion of the archaeological record, late medieval Ireland and its potentially violent characteristics is given a face (Gilmore and Murphy 2001). Late medieval Ireland was undergoing extensive changes in societal formation and demographic constitution. Instances of violence in the Irish (bio)archaeological record appears throughout temporal and spatial contexts and in the case of Armagh, the face of the violence has been reconstructed as a victim of decapitation (figure 3.24b). The reasons for this action are unknown. The skeletal material cannot explain whether it was punitive or a crime itself (Gilmore and Murphy 2001, 17).



Figure 3.25a-b: **a)** Cranium of the decapitated individual illustrating the trauma; **b)** Facial Reconstruction by D. Smith (of (then) Manchester University) of an adult decapitated male from Armagh (Gilmore and Murphy 2001)

The cranium was found in ditch fill “sitting upright and facing eastwards on what appeared to be the surface of the primary ditch fill” which when radiocarbon dated provided a date range of 1000 – 1300AD (Gilmore and Murphy 2001, 17). The male aged from 25-35 years old has indications upon his skeletal material of decapitation. This trauma is apparent on the individual’s left mastoid process and a portion of the occipital (figure 3.24a). This male is the illustration of funerary practices of this archaeological period and a glimpse of those that structured this time period of Ireland in its archaeological humanistic dimension.

E) A contribution of a historical figure to the Irish facial reconstruction record originates from the countenance of Edmund Ignatius Rice. The website dedicated to the Edmund Rice Global Network details the history behind the reconstruction (figures 3.25a and 3.25b). The idea to use modern reconstructive technology for Edmund Rice first originated in the 1980s but was later taken up again with more motivation during the construction of

the visitor centre/museum for this individual. The reason behind this reconstruction was due to the realistic qualities of the portrayal as,

“most of the portraits we have of Edmund have not been painted from life. Satisfying though these works are, they do not leave us with the impression that what we are seeing is what Edmund Rice really looked like. Generally speaking they tend to be bland, the stresses of life brushed away. Now modern technology has been employed to give us a likeness we can be sure of” (The Global Edmund Rice Network 2014).

This was accomplished by utilising pictures of the skull to create a life-sized resin cast of the skeletal material wherein the soft tissue appearance was produced. Wilkinson depicted Rice at the age-at-death (82) with the surface textures of the skin to reflect this age and difficult life.



Figure 3.26a-c: **a,b)** Edmund Ignatius Rice reconstructed by C. Wilkinson (University of Dundee); **c)** Portrait of Edmund Rice

Social and scientific phenomena do not happen in a vacuum of events and impressions. They are subject to socio-cultural systems and structures which define a range of their situations within the world. The entity of the face is already an area that contains a multitude of meanings (as in identity, age, ancestry, sex). Facial reconstructions of important individuals are used as tokens for the site that people can take with them having experienced the exhibition or site (i.e. Lindow Man, Yde Girl, colonists from the

Jamestown colony). However, the facial reconstruction featuring a place or a person is more like a totem – a totem of an entire place or time era encapsulated into the countenance of an individual.

Facial reconstructions are the ideal conduits in which to invigorate the dimension of humanity within the discipline of archaeology. Literally putting a face on the most mysterious of pasts for archaeology (Clack and Brittain 2007), there is much to be gained or lost with the depiction of past countenances. For what we see here is more than a face from the distant past. What has been created and strategically shaped is not in *just* a face, but an imaged aspect of our past selves (Sanders 2009). Our origins and past stories are being visualized through these visual documents of facial reconstructions (Moser 1998, 2012). Their story and the manner in which they are displayed speak volumes of their contribution towards archaeology and its drive towards illustrating the inherent, overarching prehistoric humanistic narrative.

Perhaps an impeccably expressed exploration of archaeological imagery by Moser and Smiles would be the ideal manner in which to transition to the following section devoted to the critique of the use of facial reconstruction within the discipline of archaeology:

“Images of the past survive longer than the theories they were designed originally to support; they linger on in museum displays, as illustrations in archaeologically oriented books, and as part of popular culture. And perhaps one of the reason they do so is that archaeologists have not taken them seriously enough. Precisely because images are not generally considered by the scholarly community to be authoritative interpretations or explanations of the past, requiring detailed refinement or rebuttal, visual representations are often overlooked by archaeological researchers. Because they do not seem to offend they are not ascribed with enough power to merit critical examination. As a result archaeologists have tended to overlook images or, at best, to consider their existence as an adventitious phenomenon, divorced from the work of “real” archaeology” (2005, 6).

Viewed in the setting of a museum or in other media concerning archaeological sites or populations these images are the driving potential for the formation of the archaeological imagination. More importantly, how they are presented is the basis for how this imagination can be consumed by the public audience. The formation of imagination is perhaps the most important portion these reconstructions offer because “without

imagination, nothing in the world could be meaningful. Without imagination, we could never make sense of our experience. Without imagination, we could never reason toward knowledge of reality” (Johnson 1987, ix).

Community outreach in the form of facial reconstructions can contribute to a wider sense of identity in which the narrative of a landscape is anchored upon one individual’s face. The face in the facial reconstruction creates, maintains, and proliferates the cultural reception of the past (archaeological imagination) by the gaze of the contemporary audience. In addition to the sole physical face, the historical account of the person also feeds into the mind of the viewer(s). As long as the gaze of a facial reconstruction meets an interested party, the imagination of who this person was, what they saw, how they lived will always linger and seek to be answered.

3.3.2 Critique of the use of Facial Reconstructions in the Discipline of Archaeology

Social identity and memory is constructed through public ritual (Kuijt 2008). The encounter of archaeological facial reconstructions is at the public interface for archaeological dissemination and is therefore important for construction of images of our selves: past, present and future. In defence of archaeological facial reconstruction, Prag and Neave (1997) have stressed the main theme of this research: that archaeology is a humanistic endeavour not to be forgotten amongst the materiality of the past as “one might quote again Mortimer Wheeler’s dictum that ‘Archaeology is digging up people, not things.’ If there is any value at all in the study of history and of one’s past, then the reconstructions should be seen as an important element in completing the story” (Prag and Neave 1997, 219). This thesis by Prag and Neave is applicable to entire corpus of work produced under the discipline of facial reconstruction and essentially the determination of their use-value within the archaeological realm.

A fundamental aspect of this research is to investigate the use of facial reconstructions within the construction of the archaeological narrative and the manner in which it forms the contemporary consciousness of a shared, humanistic past and support their definitive merit within this process. As seen in the previous section, facial reconstructions punctuate the archaeological experience. Beyond the traditional archaeological processes of research and

excavation, the re-presentation of facial reconstructions has a virtue within archaeological methodologies. Facial reconstructions contain ideas of the past, personification of an era, through the reflection upon and encounter of facial reconstruction. However their use within the discipline puts the viewer in various modes of being mainly being a voyeuristic relationship – a curiosity of the past – initiated when experiencing the facial reconstruction. This feature reinvigorates the archaeological discipline as well as the past body through a fleshing of the present. They provide archaeology with another method in which to disseminate research and education to the public about the past.

The power of images is in the ability to organise knowledge of the past and to assert conclusions and put forth a vision of archaeological events (Moser and Smiles 2005, 6). This insistency of reconstructions as ‘proper’ archaeology is demonstrated by Sanders when pointing out that facial reconstructions such as that of Yde Girl (and multiple examples from the previous section 3.3.1), “indicates a kind of interconnectedness between verbal and visual expressions in archaeological, poetic, and literary imagination” *after* and *because* her face was reconstructed (2009, 274). This is a prime example for the influence of images and visuality overall in the archaeological record. Key to the imagination process, the type of involvement that comes forth from a facial reconstruction is funnelled into many avenues of the union between the visual and written records of the archaeological discipline.

The construction of past faces for the archaeological record is perhaps the most widely used aspect of these objects namely due to the power of the face and its imposing gaze as a learning opportunity. Within archaeological examples of facial reconstructions, there are potentialities for the presence of pathological and traumatic instances recorded upon the skeletal surface. As the distant archaeological past had different resources to health management as our contemporary society, these instances can be encountered quite frequently. There have been the depictions of other aspects of the past human condition such as disease which bioarchaeologists find an important insight into the archaeological past (Needham *et al.* 2003). The provoking images elicit the question of what is gained from seeing this past state of being.

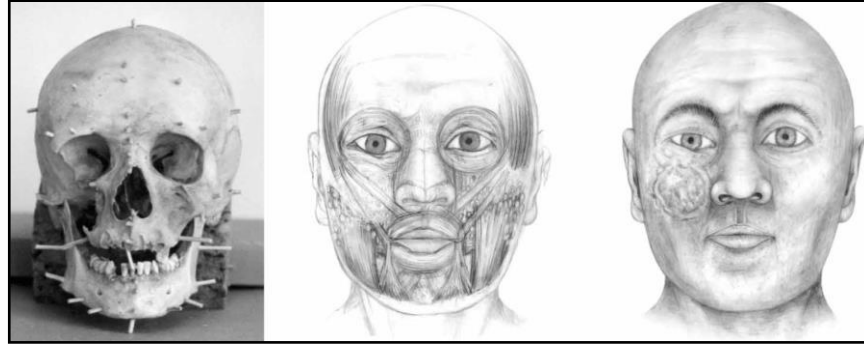


Figure 3.27: 2D reconstruction of an individual suffering from a facial neoplasm (Needham *et al.* 2003)

Pathological instances such as neoplasms or leprosy (figures 3.26 and 3.20b respectively) even syphilis can be displayed within reason. However, the depiction of trauma is certainly a sensitive endeavour with only those with healed ante-mortem trauma being depicted with their wounds (like the healed trauma from Towton by Wilkinson and Neave 2003). There would never be a facial reconstruction of an individual illustrating the wounds at time of death. Seemingly offensive towards the individual as well as non-beneficial towards the audience, archaeological facial reconstructions do contain certain boundaries and limitations of material. The depiction of these within the faces of the past are argued by some to give an insight into the life ways, but besides the purpose for studying the health and medical proclivity of past diseases, these faces expose the voyeuristic curiosity when the viewer encounters individuals who suffered in the past. The oddity of the gruesome or the cathartic release from viewing these disease reconstructions is another function of the archaeological experience of facial reconstructions.

In experiencing facial reconstructions, becoming a voyeur is inevitable. There is of course the desire to connect to the past and see a face that had lived so long ago, but alternatively there is a level of comfort when experiencing the outward gaze. The comfort can arise from the familiar faces that peer out, but on the other hand comfort comes from the distance between the acknowledged difficult lives of the past and our presently situated selves. Such satisfaction arises when experiencing growths like that of the Wetwang woman (figure 3.19b), which could be rather easily be treated medically in the western world. A cathartic release from experiencing abnormalities begins with a direct stare and knowing the person in which it inflicts cannot stare back is liberating and a freeing experience. Perhaps it is this which motivates reconstructions such as the Wetwang woman or the

young woman from Jamestown (figure 3.21c). Debatably, it is suggested that these previously mentioned reconstructions are also a portion of the erotic or fetishised past.

Indeed, the significance of understanding the voyeuristic experience of viewing an archaeological facial reconstruction is that they can only be viewed and never be fully interacted with. Therefore, an asymmetrical relationship is created and the contemporary audience can look at the past in such an unadulterated way without the embarrassment of their gaze being returned. In this way, the presence of archaeological facial reconstructions is a significant tool not for the practitioner, but for the engagement with the public audience and community involvement with a shared, perhaps even ancestral, past. As such, this research contributes beyond this doctoral body of writing, it goes further than the scholarly academia. The faces of the past are difficult to separate from the projections made by the present day viewer (Sanders 2009). Examining the archaeological imagination and the manner in which facial reconstructions impact this narrative is most active in the realm of the public lay audience.

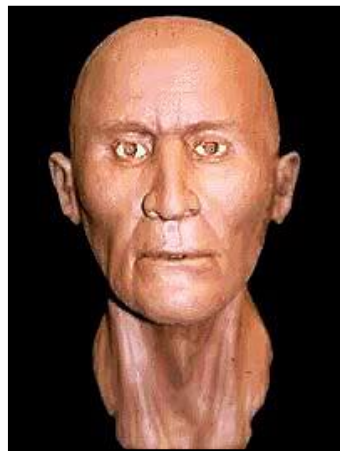


Figure 3.28: Grauballe Man by C. Wilkinson

Museum curations of facial reconstructions are popular sights with relation to visualising human origins or archaeological themes. The presence of a reconstruction within a museum setting does not have to be by any means a complex sculpture with extravagant details for a personal connection with the past. For instance the bog body, Grauballe Man (figure 3.27), is not about the hyper-realistic mode of appearance. Instead, the absence of certain details allows for a stronger more visceral connection between the present self and

the past other. Furthermore, the overall placement within the gallery space moulds the experience of encounter:

“The viewing box is designed to offer the possibility of recognition and identification while still maintaining a sense of estrangement. When the visitor places her head in the box, she is bifurcated not only into these two viewing positions (mirroring and alienating) but also into an epistemological schism involving the nature of humanness. The face she sees recognizable as a fellow human being. But it is also an artefact, a *thing*. The visitor is not seen in return. Therefore at the very moment she identifies with (and implicitly reanimates) the countenance in the box, she must also acknowledge and accept the artificiality of this reanimation – accept that it is partly a fabrication of the imagination. Inside the box, the spectator finds material for re- and self-archaeologization, and also for the production of presence; this material illuminates the very liminality that fuels a modern archaeo-artistic concept and practice. This self-contemplation is different from that which takes place vis-à-vis the “authentic” body” (Sanders 2009, 180-1).

The account Sanders provided with encountering the reconstruction of Grauballe Man is an impeccable interpretation of not only experiencing this particular facial reconstruction, but also of encountering facial reconstructions as a generality. The feeling of simultaneous alienation and belonging in addition to realising it once is a person and a *thing*. The inclusion of one’s self, which is outside the field of archaeology but actively participating within the archaeological process, is undeniable when in the face-to-face position with an archaeological facial reconstruction.

As Sanders commented regarding the curation of this individual, “the mirrors inside the box continually reflect the face of the visitor, who is caught in a position where she cannot help but see herself in the act of observing. Thus, curious visitors are forced to contemplate their own physiognomy vis-à-vis that of the ancient man, and are implicitly encouraged to engage in a kind of self-archaeologization” (2009, 179-180). Although the this body has a resurfaced contemporary flesh from its desiccated form as a bog body, the viewer can “touch” the past with cerebral visuality (Sanders 2009).

What are facial reconstructions to archaeology and the non-archaeologist? To the archaeologists or the bio/oste archaeologist, facial reconstructions can provide information within osteological investigation. They are also the presence of a theoretical model of the human in archaeology. They are the face of the main endeavour of the discipline. To the

discipline of archaeology, facial reconstructions are an extension of the archaeological materiality (the human remains) into the contemporary gaze. The creation of the face of the past countenance through osteological analysis

To the individuals that seek the layers of past human experience, a facial reconstruction is a more endearing gaze of their efforts and a symbol of the fascination with the past and the preservation of the past and the material culture which also appears. However, the majority of this group of people which constitute the experts in the field of archaeology or sub-disciplines therein, “felt that the reconstructions would be of more use in communicating information to a non-specialist audience than to experts...this suggests a possible use for such reconstruction beyond simply being academic ‘props’ for interpretations expressed in the literature” (Needham *et al.* 2003, 107). Needham and colleagues (2003) signalled the essence of the use of archaeological facial reconstructions.

To the lay person, a non-practitioner of archaeology or facial reconstruction, the encounter with a skull in its skeletal form is abstracted with very little meaning attached to it other than the association with that of the deceased individual. As stated previously, the face-to-face with a facial reconstruction is more (in)formative than with the skeleton. The ability to read faces, would then bring the contemporary viewer in a closer state of relativity to the past. The skin is the interface upon which the current human gaze can latch on to. To the non-archaeologist, the presence of the human in the past becomes obvious and very real.

There is a problem in determining human remains as people or archaeological artefacts and as Prag and Neave questioned, “when do human remains become more than mere museum objects?” (1997, 227). Facial reconstructions do not solve this contention, but in fact heighten the dilemma. They are a borderline between the objective realm of sculpture and archaeological remains and the subject of the creation actually being the product of an individual with subjective properties. Perhaps further discussions should utilise terms such as subject/object when speaking of these productions because they are at once a subject but a plasticised form of the once that was and is presented as a sculptured object. This type of nomenclature (or that which suits the discipline) illustrates a consciousness within discourse of the integrally dualistic space these productions inhabit.

However just as the curation of human remains has ethical implications, some would argue that the countenances created from those said remains incur the same set of issues. The creation of facial reconstructions is a breach within the ontological relationship with human remains. They are re-surfaced and a countenance is created re-creating the physical existence of an individual through the interface we are commonly used to experiencing them: the skin. With the application of this worldly skin and the publically consumable appearance, an ethical question is prompted. Prag and Neave were the first to have established the ethical dimensions of creating a facial reconstruction:

“On the one hand, the academic detachment that goes with both medical and archaeological research tells one that any form of preservation is only an interruption in the natural process of total decay: ‘earth to earth, ashes to ashes, dust to dust’ is how the Prayer Book puts it. Yet as fellow human beings, one can readily feel intrusive as one seeks out someone’s personal details. Is the making of a reconstruction a prying into a person’s private life, almost a form of voyeurism?” (1997, 219).

The appropriation of the face in archaeological reconstructions for the intention of creating a narrative of the past is not as exploitive as it might seem (as the archaeological narrative is also actively created by archaeologists (Thomas 1996)). The use of the face to prompt a response to the past has been utilised before as we have seen in the previous chapter with past populations reconstructing faces as part of ancestor veneration. This too elicited an emotive-like remembrance for the past. It is however, as Prag and Neave stated a truly voyeuristic encounter, entering into a relationship with a face which would have never survived without the capabilities of facial reconstruction.

There is not one archaeological experience derived from viewing faces from the past, but the applicability of these productions and their appearance within society has evolved throughout the discipline. The archaeological experience of past faces reinforces the thread of analogy between the archaeological landscape and the landscape of the face. Each composed through layering of surfaces containing a plethora of meaning, the face-to-face meeting of an archaeological facial reconstruction is very similar to the encounter of the archaeological landscape as it is spatially and temporally contingent and the nature of each site is comprehended only through the knowledge of the manner it was produced.

The use of forensic facial reconstructions has been legitimised and justified as an aid to judicial motivations of eventual identification of individuals (Taylor 2001; Wilkinson 2004). However, the archaeological use of these reconstructions has not been given the stringent backing that productions of the former have. This fuzzy area of legitimacy perhaps only pertains to the other practitioners within the field, but are predominantly due to the fact that these reconstructions are commissioned and not used within research to proliferate soft tissue depth measurements or soft tissue feature prediction. Not subject to the protocols of published methodologies or standards, reconstructions like Richard III based on the ‘known’ individual in an archaeological setting could provide a wealth of knowledge for reconstructions similar to these. There are examples of famous reconstructed individuals that have been published in academic spheres (i.e. Dante in Benazzi *et al.* 2009; Hayes *et al.* 2012), but many of the facial reconstructions that permeate through the public consciousness (such as the hugely famous Richard III) are not asked to be substantiated in academic journals. This lends the faces to a wrongly posited superficial purpose, which then becomes an un-reflected, voyeuristic experience for the contemporary gaze.

The end of the twentieth century prompted a more reflexive examination of the production and appearance of facial reconstruction. For a large period of time in archaeological discourse, these faces only stood as a figure or a pleasant image to place on the cover of a book or throughout the text of an archaeological report or research endeavour, but as Prag and Neave (1997) posited, facial reconstructions themselves are a visual archaeological report. The placement of reconstructions have become as a desultory image in that many of the twenty-first century in publications. They have been created with the primary aim of obtaining the presence of the superficial physical visage with historical and medical research aims as secondary motivations.

The facial reconstructions we have seen in this chapter have shown that the re-constructed face is regarded as a cultural commodity. It is at once an object *and* a subject in which the past is appropriated by a cultural body (i.e. a museum) to represent an application to a broader theme, most notably by entering a group of people into a “face to face” relationship with the past. Vital to the comprehension of the following investigation is the ideology

that the face is primordial, as it has been an essential and vital landscape for emotional and physical expression for a multitude of meaning(s) through temporal and spatial boundaries.

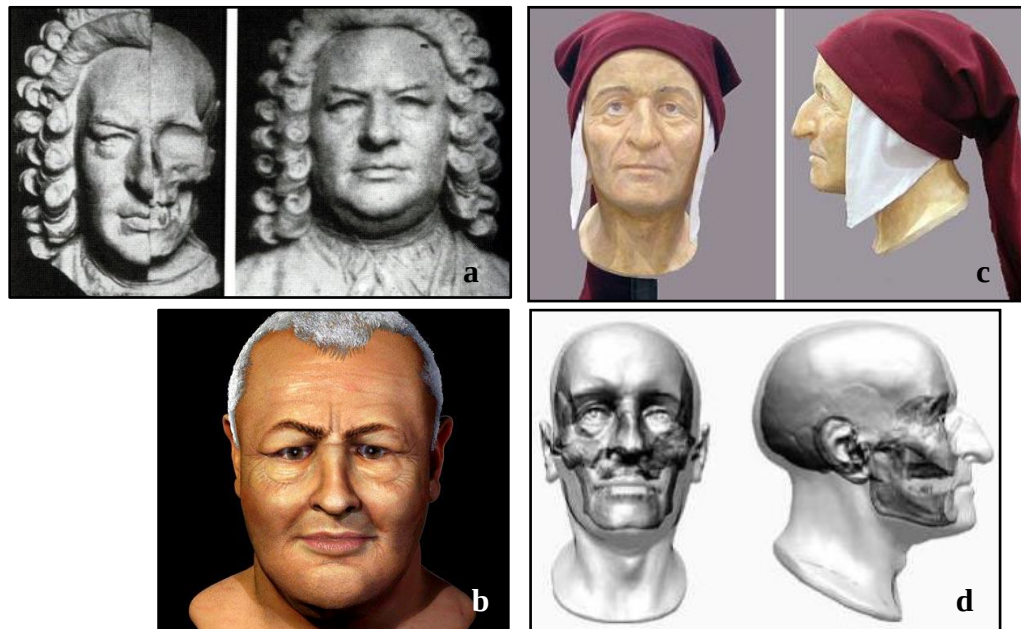


Figure 3.29a-d: **a)** The first reconstruction of Bach by His and Sefner (1895); **b)** 3D Computerised reconstruction of J.S. Bach (Wilkinson 2010); **c)** Reconstruction of the historical figure of Dante Alighieri (Benazzi *et al.* 2009) **d)** 3D computerised craniofacial superimposition of Dante (Benazzi *et al.* 2009)

An aspect of voyeurism in archaeological facial reconstructions that should be explored originates with the reconstructions of J.S. Bach (figures 3.28a and 3.28b) and Dante Alighieri (1265-1321; figures 3.28c and 3.28d). These men are notable for their contributions to the musical and literary soundscape of the modern world. These are people whose inner consciousness we have heard and experienced, but through the encounter of their re-constructed countenance a new relationship is formed by approaching in a face-to-face situation. As Joerg Hansen, managing director of the Bachhaus Museum stated concerning the presence of the facial reconstruction purpose stating, "it's not really that important to know what he looked like – we love Bach through his music, that is why people come to the museum – but they are also interested in the man" (CBC News 2008). It is however, the encounter of the three dimensional face in conjunction with his musical inheritance which aids in the overall visitor experience.

The reconstruction of Dante (figures 3.28c and 3.28d) was produced in celebration of the seventh centenary of *The Divine Comedy* and for the purpose of acquiring an idea of how this poet actually appeared (Benazzi *et al.* 2009). However, this face of Dante is not altered

into a soundless portrait. Instead the constitution upon his human remains and the three-dimensionality of this reconstruction has reinvigorated his corpus of work and the impact that he has made on the realm of literature and linguistics. We have known these men before through their endeavours in the humanities, but now we are changed and know them in a different way because we experience their faces (physically and in the Levinasian sense).

I assert under the Levinasian framework which this thesis is situated, the cultural objects of facial reconstructions are the most prominent materiality that influences the creation, adoption, and continuation of a connection with the human past. Visible from diverse temporal and spatial contexts, archaeological facial reconstructions are a universal presence universal within the manufacturing of the archaeological narrative. Facial reconstructions are a global presence. They are re-constructed and presented to communities all over the world. Each revealing a discreet, concealed moment in time, these faces punctuate and inhabit the archaeological record.

There is considerable merit within the archaeological facial reconstruction. It should not be included in marginalised appendices or seen as only empty, flashy imagery at conferences, but instead be integrated in context like examples within this chapter. Prag and Neave (1997) defended the use of re-constructions as an imaged archaeological report. The realm of visual archaeology has increased considerably since the heavy inclusion and adoption of digitalisation within archaeological methodologies. Therefore, the subject matter of what is considered to be ‘archaeology’ has greatly broadened in the twenty-first century. It is put forth in this body of work that archaeological facial reconstructions no longer belong in a cursory representation of archaeology but *are* archaeology.

CHAPTER FOUR – “THE STARTING POINT”: PREHISTORIC IRELAND AS PROMPTING VISUALITY

“Then if the essence of philosophy consists in going back from all certainties toward a principle, if it lives from critique, the face of the other would be the starting point of philosophy” (Levinas 1998, 59).

The presence of the face within the early Neolithic period of Ireland is problematic. While the discourse surrounding the Neolithic period and prehistory in general is a thriving and increasing collection of holistic and interdisciplinary investigation (Whitehouse and Kirleis 2014; Brozio *et al.* 2013), the artefactual evidence of re-presentations of the face is rare. However as paradoxical at this seems, this chapter is devoted to exploring the theme of Levinasian visuality and the scarcity of the (bio)archaeological record of early Neolithic Ireland.

As both the prehistoric period and visuality are the foundation for further archaeological and theoretical discussion, it seems apt that this pairing occurs. The increased visibility of the (bio)archaeological material of the early Neolithic in Ireland illustrates to the contemporary viewer vital information about past lifeways and ideological structures. The use of visuality in exploring this topic is a viable theoretical framework because it is more than just seeing as visuality is, “always an integral part of the complex structure of our dwelling in [the world]. Seeing is being seen. And being in the world involves living that intersection of vision and visibility” (Kenaan 2013, 134). Through this theoretical conception of the gaze in conjunction with the material expression of the face as a social object, the early Neolithic period is engaged here in a unique manner open to the theoretical threads to follow in the subsequent chapters, namely: intersubjectivity, alterity, and response.

There are a multitude of concepts which constitute the discourse concerning the Neolithic which regard diverse topics from the many different themes of prehistoric lived experiences. These include such topics as environmental transitions (Berger and Guilaine 2009; Schulting 2010; Robinson 2014), settlement patterns (Whittle *et al.* 2011; Bernabeu *et al.* 2014), socio-cultural adaptations and power structures (Boujot and Cassen 1993; Midgley 2005; Müller 2014), creation of symbolic conceptions (Müller 2010), as well as the formal traditions of prehistoric aesthetics (van Hoek 1993; Shee Twohig 2004;

Cochrane 2006). Alone and in combination, these theoretical strands are integral to understanding the Neolithic, but will not be addressed here. Instead the focus is upon the main theme of the face which anchors discussion of visibility in the monumental sites, mortuary practices, and material culture.

Traditional Phases in Irish prehistory	Approximate dates
Mesolithic	8000-4000 BC
Early Neolithic	4000-3600 BC
Middle Neolithic	3600-3000 BC
Late Neolithic	3000-2500 BC
Chalcolithic	2500-2000 BC
Early Bronze Age	2000-1600 BC
Middle Bronze Age	1600-1200 BC
Late Bronze Age	1200-600 BC
Iron Age	600 BC – 400 AD

Table 4.1: Traditional periodization of Irish prehistory (after Lynch 2014)

The time line (table 4.1) provided illustrates the traditional periodization of Irish prehistory. The ‘Three Age’ model of Stone Age, Bronze Age, and an Iron Age is applied as an archaeological principle to the classification of successive ages which becomes an apparent evolutionary model of chronology and the progressive development of material culture through the ages (Waddell 2000). While the ‘Three Age’ model is useful for writing prehistoric events as convenient chapter headings, they no longer allow us to see the important themes in our prehistory (Barrett 1994, 104) and therefore are not utilised in this body of research. Cultural transitions are dynamic and fluid with periods of punctuation, but contextualising the Neolithic with the preceding and subsequent periods is crucial to the understanding of cultural phenomena.

The earliest discourse on Irish prehistory was formed by the 1830s Ordnance Survey of Ireland as well as endeavours by antiquarians and their collaboration of knowledge created a pseudo-history of the landscape and a problematic narrative founded on certain artefacts.

Work by individuals such as George Petrie (1789 – 1866), John O'Donovan (1806 – 1861), Eugene O'Curry (1796 – 1862) would later marginalize the older tradition of antiquarian speculation found in archaeological investigations (Waddell 2000). The endeavours of these individuals established a preoccupation with the prehistoric past, but more importantly put forth notions of past life which is critically and self-reflexively challenged through the growing twentieth and twenty-first archaeological discourse.

Agriculture became the new type of economic and socially centred activity of this period with more energetic clearing of land for this new settled habitation type (Whitehouse and Kirleis 2014; Timpson *et al.* 2014). Relying heavily upon palynological evidence for these assertions, sites such as Ballynagilly, Co. Tyrone and its pollen diagram illustrate the notable decline in elm and pine pollen with the additional increase in grass and some cereal pollen around 3900BC thus reflecting more human intervention with the vegetation landscape for agricultural purposes (Waddell 2005). The landscape of the Neolithic continued to change throughout the following millennia. This evolving sight would be something utterly different from the Irish landscape we see in the twenty-first century.

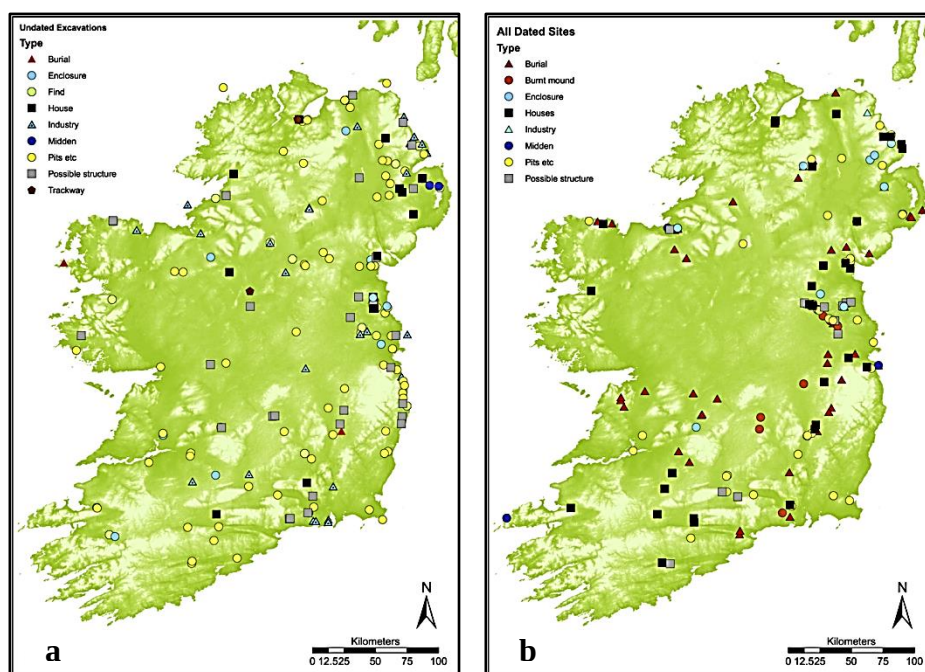


Figure 4.30: The distributions of undated (a: left) and dated (b: right) excavated Neolithic sites in Ireland (excluding megalithic tombs) (Whitehouse *et al.* 2013)

Alongside the environmental changes of the prehistoric period, the distribution of sites in the Neolithic shifted from predominantly coastal to inland occupation (Bamforth and

Woodman 2004; Driscoll 2013). This transition represents a range of evidence from the transhumance of populations to the presence of habitation sites (Zvelebil and Rowley-Conwy 1986; Woodman 2000). Within the Neolithic, the most visible and recorded feature of construction would be megalithic structures. Four types of structures (passage, wedge, court, and portal) combine with various other types of funerary traditions (Linkardstown, etc) to form the sites for the veneration of the dead. These sites and their osteological evidence in association with burial rites will be examined in regards to the curation of the face which elicits the fundamental notions of beings and their relationships with the surrounding world.

To simply look and perceive (while not simple acts) are performed to gain knowledge, which we implement when experiencing the face. The face is more than just an object of vision (Kenaan 2013, 29). Dependent upon what has been excavated and what material survives, this term of visibility impacts the archaeological endeavour. This limitation should be noted and here is questioned in relation to the presence of the face. Visibility is a large portion of archaeological discourse as it is relevant to the discipline's experience of the sparse (bio)archaeological record. Through what arises, archaeologists piece together the lives of the first peoples of Ireland who have, "inscribed the land with human activity" (Cooney 2000, 92). It is in this period, the Neolithic, that the trace of Ireland's inhabitants becomes imprinted upon the landscape. Levinas (1998) stated in his ethical, anthropological body of philosophical work, that the face is the starting point of all philosophy. Therefore, we can begin our discussion of the face in its first encounter – in its visibility and presence on the horizon of our worldview.

Visibility is connected with the human gaze and therefore prompts ethics. As we remember, ethics is the asymmetrical relationship between the other and the self. This is when the self is always obligated to the needs and presence of the other (see chapter two). Although, the appearance of the face is essentially a duality between its visual and invisible nature (due to its physical and symbolic presence), Levinas has harsh critique of the embodied process of vision and its effects on gazing upon the face (Kenaan 2013, 9). Thought to impoverish the infinitude of the face, Levinas (1961) posited that vision is the equalisation of an idea to a thing, becoming a totalising force. Therefore, the concept of

visuality goes beyond simplistic vision and references the encounter of the presence of the other by the self. This chapter offers a sympathetic reading of Levinas's ethics as optics.

The previous assertion dividing the face from the head is an exceptionally prominent notion which presents itself throughout the material of this chapter. The rarity of the face in the early Neolithic is acknowledged in this chapter and subsequently explored. As the Neolithic is a temporally broad period, inclusions of sites which blur into the subsequent prehistoric timeline do occur within this discussion. It is admitted that these sites vary greatly in time, but are seen here to seek to aid in exploring the overwhelming absence of the prehistoric face. Commencing in framing this discussion is the reconstruction from Annagh, Co. Limerick. Additionally, this individual's re-constructed countenance will elicit the themes such as visuality and imagination which this chapter provokes and investigates.

4.1 Annagh, Co. Limerick

A facial reconstruction from Annagh, Co. Limerick is a unique offering to further understand early Neolithic Ireland. The face which peers out from the unwritten past of Ireland captures the imagination that is abundant in this time period. This is in part due to the power of the face in its Levinasian concepts and the commanding, voyeuristic experience of facial reconstructions. Additionally, with the encounter of this facial reconstruction, the early Neolithic is brought forward into the twenty-first century, punctuating what little we know about the lives of those living in Ireland during the massive transformative Neolithic period.

4.1.1 Site information

The cave site of Annagh, Co. Limerick was excavated in 1992 when machinery stripping topsoil in advance of blasting at a limestone quarry dislodged the opening of this cave site blocked by a large pillar like stone (Ó Floinn 2011). When investigated, it was revealed that the natural cavern at Annagh consisted of an oval chamber (4.5m long by 2.5m wide) containing five inhumations and pottery vessels of the Linkardstown/Drimnagh type (Ó Floinn 2011).

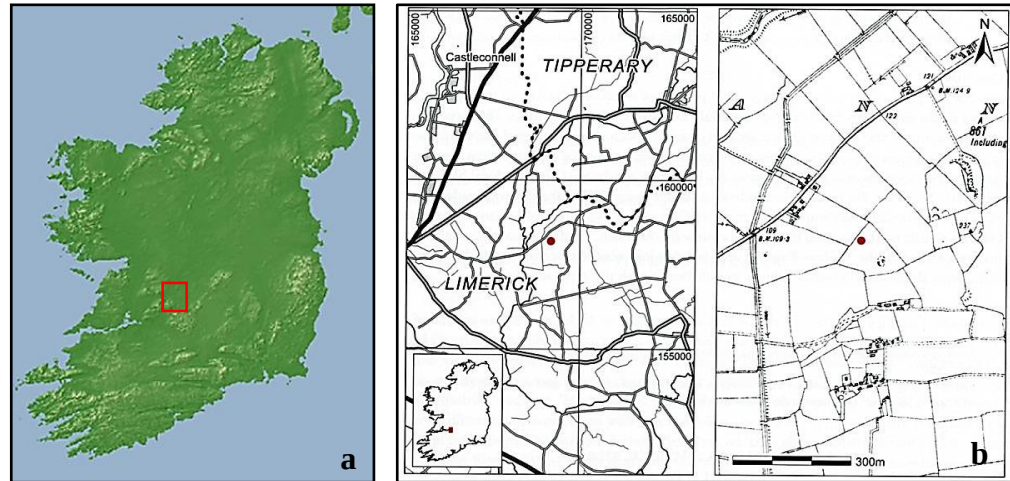


Figure 4.31a-b: a) Location of Annagh, Co. Limerick within Ireland; b) Annagh Site Map (Ó Floinn 2011)

Dateable to the early Neolithic period, Annagh, Co. Limerick was obviously not a site meant for the deposition of an entire community. The human remains present at the cave site of Annagh demonstrate that the individuals interred were deliberately chosen due to their status in society (age and/or sex). This possibly alludes to a certain higher social status in this early Neolithic community. The contribution of this site and its excavation is toward the increased visibility and therefore potential understanding of the early Neolithic populations and their socio-cultural structures.

4.1.2 Burial 2

The site of Annagh yields some of the most well-preserved, intact inhumations discovered in the context of a cave setting in Neolithic Ireland. The well preserved remains of burial 2 were found lying on his left side against the west wall of the cave in close proximity to burial 1 (figure 4.3; Ó Donnabháin 2011). The inhumation of burial 2 was articulated in a tightly crouched position with the head to the south-east and a flint knife found at the base of the spine (Ó Floinn 2011). Also associated with sherds of a plain carinated vessel and the faunal remains of pig and hare, the remains of burial 2 were found to be comingled with the other present inhumations within the cave at Annagh.

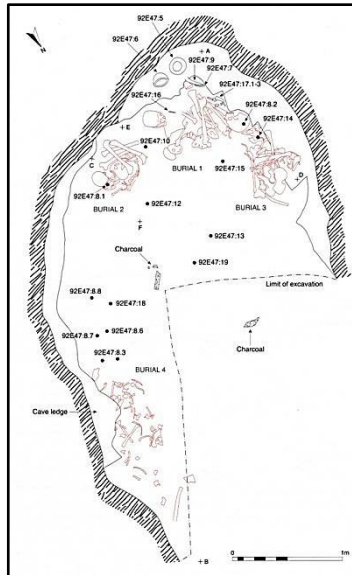


Figure 4.32: General plan of excavated area at Annagh, Co. Limerick (Ó Floinn 2011)

Osteobiography

Burial 2 represents a Neolithic individual radiocarbon dated to a range of 3660 – 3375BC (Ó Floinn 2011). Characteristics of sex were very masculine, most notably in regards to cranial morphology as well as the availability and presence of the individual's pelvis. The presence of ossified thyroid cartilage and analysis of the pubic symphysis indicated the male was aged at least, but perhaps older than, fifty-five years. A stature of 166.5cm for this individual was obtained (Ó Donnabháin 2011). Although the four central incisors were missing upon excavation, the dentition was complete at time of death. Teeth present indicated no signs of caries as well as the absence of dental abscesses. Ó Donnabháin (2011) noted periodontal disease around the left first molar in addition to the evidence of calculus deposits on the majority of the permanent dentition. A striking amount of attrition was found upon this individual's dentition in a heavy and uneven manner of appearance (Ó Donnabháin 2011). This feature could perhaps reflect the use of teeth as a tool and not just a dietary impact as indicated by the heavy wear and abrasion on the anterior dentition.

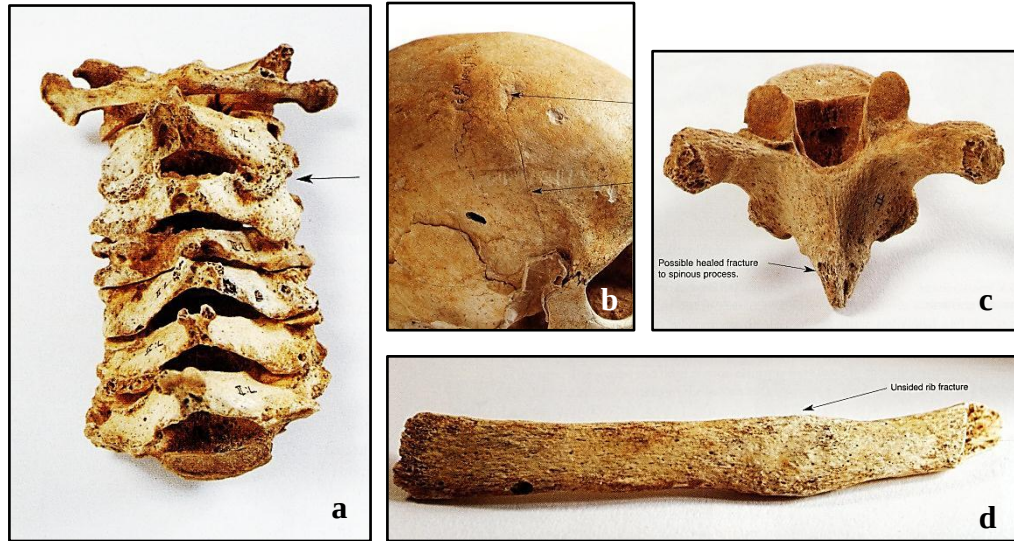


Figure 4.33a-d: **a)** Vertebrae of burial 2 from Annagh, Co. Limerick with an arrow indicating the fused joints (Ó Donnabháin 2011) ; **b)** Arrows indicating depressed lesion received from blunt force trauma and subsequent hairline fracture (Ó Donnabháin 2011); **c)** Possible fracture to the spinous process on a mid-thoracic vertebrae of burial 2 (Ó Donnabháin 2011); **d)** An un-sided rib fracture from burial 2 Annagh, Co. Limerick (Ó Donnabháin 2011)

This older male had several pathological conditions in both cranial and post-cranial skeletal material. According to Ó Donnabháin's (2011) report on the Annagh burials, this individual suffered from degenerative joint disease or arthritis in his right elbow and vertebrae with severe lesions in the cervical region with mild lesions in the thoracic and lumbar. Fractures of the spinous processes of the fourth and fifth thoracic vertebrae appeared (figure 4.4c) with fusion of the second and third cervical vertebrae (figure 4.4a). These are signs that were determined to originate from the habitual activity of carrying heavy loads (Ó Donnabháin 2011). In regards to possible signs of violence and trauma to the individual, osteological evidence illustrates several healed fractures: cranially, on the lateral side of the right frontal from a blow to this area from a small, blunt object (figure 4.4b) and an un-sided rib fracture (figure 4.4d) from a direct blow to the chest.

The age of this individual in relation to the discussion of demography to follow in the next section (section 4.2) will illustrate a male at this age would have most certainly been a much older individual in the community. The survival to such an advanced age could have been a motivation for the deposition in the early Neolithic cave site of Annagh, Co. Limerick. The pattern of life written upon the skeletal material of burial 2 illustrates his periodically difficult life in early Neolithic Ireland.

Soft tissue prediction

Burial 2 from Annagh, Co. Limerick is an overtly robust male from the Early Neolithic. The heavy brow ridge, rounded supraorbital ridge, strong angular mandible, and muscular surface of the skeletal material are each stand out traits for the sexing of this cranium.

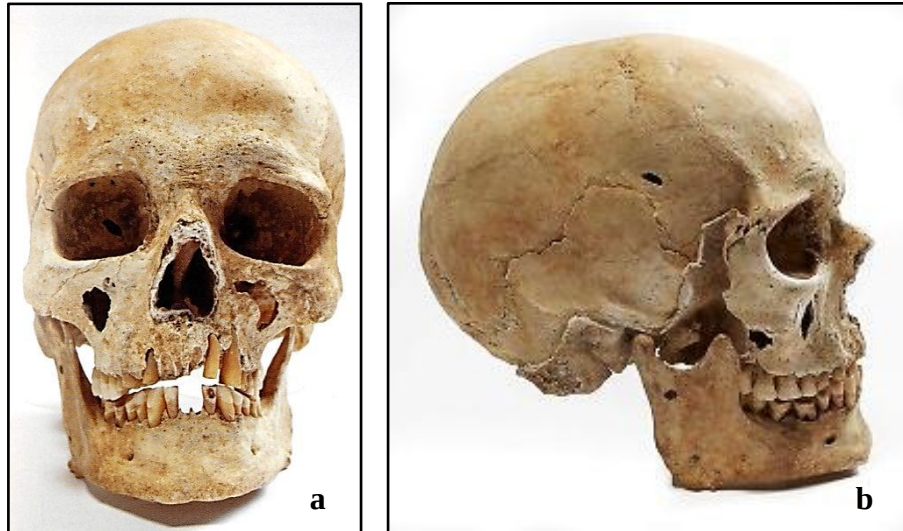


Figure 4.34a-b: **a)** Frontal view of burial 2 from Annagh, Co. Limerick (Ó Donnabháin 2011); **b)** Lateral view of burial 2 (Ó Donnabháin pers. comm)

The extremely well-preserved remains of this prehistoric individual are an ideal candidate for facial reconstruction of a prehistoric countenance.

The methodology of facial reconstruction dictates that it begins with a considerable examination of the osteological material undergoing the process. Therefore, the analysis of the overall skull is performed with careful consideration of the interplay between each feature. Commencing with the upper portion of the facial skeleton, the association between the orbits, the supraorbital ridge, the frontal bone, and the nasal region all effect the predicted appearance of this section of the countenance. The trauma indicated by the depressed lesion and hairline fracture (figure 4.4b) would not have had any presence on the soft tissue of burial 2.



Figure 4.35: Approximation of eye tangent for Burial 2 from Annagh, Co. Limerick

The orbits of Annagh, Co. Limerick are roughly rhombic in appearance with a heavy, masculine brow. The lateral supraorbital ridge expresses a lateral eye fold with perhaps medial tendencies. The tangent drawn between the lacrimal crest and the malar tubercle insists that this male displays a horizontal slant of the eye (figure 4.6). The juncture of the nasal root and the brow ridge illustrates the appearance of the eyebrows of burial 2. The high nasal root and the strong brow ridge will produce an eyebrow which has the medial third of the brow that is higher than the lateral end of the brow which will hang on or lower than the heavy supraorbital rim.

This male has a very strong nasal profile (figure 4.7). The deep set nasal root along with the curved portion of the nasal area predicts that this feature would have been a prominent aspect of the overall appearance of the individual with a striking profile.

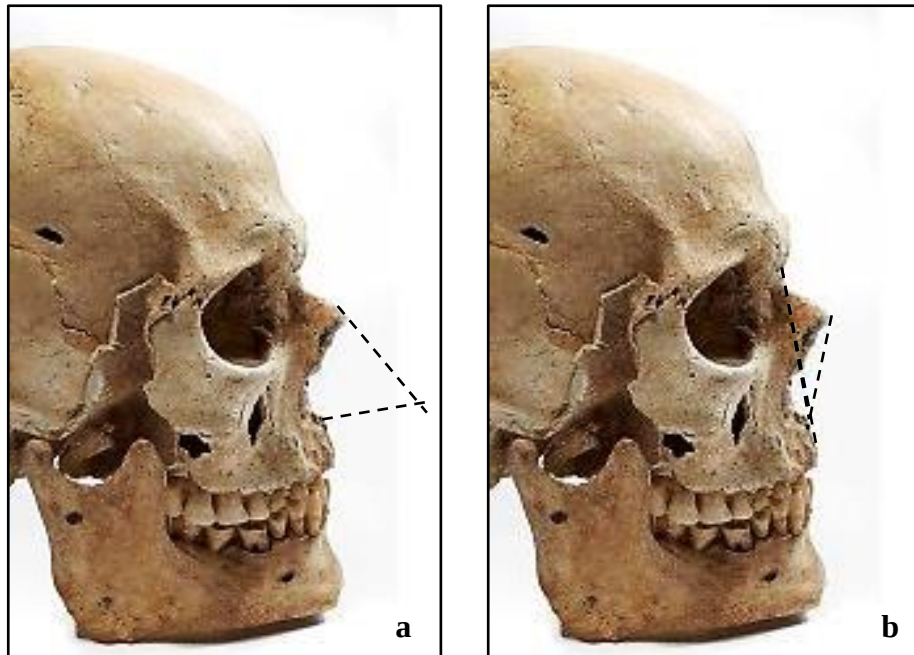


Figure 4.36a-b: Nasal prediction of burial 2 from Annagh, Co. Limerick using **a)** the two tangent theory (Gerasimov 1975); **b)** approximation measurements by Rynn *et al.* (2010)

With attention to the lateral edges of the nasal aperture, the tip of the nose is potentially curved with a pointed tip. The overall preservation of burial 2 from the early Neolithic period is excellent in its intact nature; however delicate portions of the skeletal material have been lost such as that of the nasal spine which would be possibly horizontal in nature. This estimate is a potential source of error within the prediction of this soft tissue feature.

Measurement for Prediction (mm)	Annagh Burial 2 Measurements	Predicted Dimension	Simplified Equation	Burial 2 Results
Nasion – Acanthion (x)	65.37mm	Pronasale anterior projection	$0.83Y - 3.5$	32.02mm
Rhinion – Subspinale (y)	42.79mm	Pronasale vertical height	$0.9X - 2$	58.83mm
Nasion – Subspinale (z)	57.48mm	Pronasale projection from subspinale in Frankfurt Horizontal Plane	$0.93Y - 6$	33.79mm
		Nasal length	$0.74Z + 3.5$	46.04mm
		Nasal height	$0.78Z + 9.5$	54.33mm
		Nasal depth	$0.4Y + 5$	22.15mm

Table 4.2: Nasal measurements and feature prediction for Burial 2 from Annagh, Co. Limerick based on Rynn *et al.* (2010)

Estimation of the nose is illustrated here using two methodologies. The two tangent theory by Gerasimov (1975) aids in the overall projection of the nose utilising the uppermost and lowest edges of the nasal aperture, although with some danger in over estimation of the length (6.7a), but with the addition of Rynn and colleagues' (2010) measurements (table 4.2), this can be amended to allow for the ultimately most suitable appearance of the nasal feature.



Figure 4.37: The angle of the mandibular ramus of burial 2 from Annagh, Co. Limerick predicting lower face shape

The extreme attrition seen on the dentition (figure 4.9) of this male was caused over an extended period of time and due to habitual activity. Due to the individual's advanced age, this is not an unusual condition. All teeth were present ante-mortem however and would have supported the appearance and structure of the lips. Although with the further deterioration of the anterior dentition the lower face would change and the lips would have less to support their appearance. The equations for lip thickness that are the main methodology for predicting this soft tissue feature could not be performed due to the absence of the four central incisors. The potential source of error in the completion of this feature will be performed in careful consideration of the rest of the dentition and the height of the alveolar roots in both maxillary and mandibular areas. The strong chin of burial 2 is a trait featured in robust males and would have been a prominent feature of the lower face.



Figure 4.38: Close-up of the dentition and chin of burial 2 (O Donnabháin 2011)

The angle of the ear is predicted by extending the angle of the articulated mandibular ramus upwards towards the external acoustic meatus (figure 4.10). This shows a normal angle of the ear. The mastoid processes are small for the proportion of the rest of the skull. The individual will display lobed ears with the approximated height of the distance between the craniometric points of the nasal root and the subspinale.



Figure 4.39: Prediction of the angle of ear based on angle of mandible

Facial Reconstruction

There is only one other reconstruction from this time period in Ireland (see Black 1999), but with the addition of this facial reconstruction, the narrative grows. Burial 2 from Annagh, Co. Limerick was an elderly male. He was interred in a location emphasising his highly regarded social status in this portion of early Neolithic society as, “it seems not unreasonable to expect that battle-scarred old men such as these may have been highly regarded in life and may have merited exceptional treatment in death” (Ó Donnabháin 2011, 47). It is possible that this male was a pillar of the community and suffered the evident skeletal trauma in some defence of his community to become a pseudo-hero allotted a special place of burial, or it could be that the cave site at Annagh was reserved for the older men of the community regardless of the acts performed in life. The face which we see gazing outwards from the facial reconstruction of burial 2 (figure 4.11) allows us an insightful image of the early Neolithic through his imposing gaze. This presence of a facial reconstruction provides another face for the connection to prehistoric Ireland and allows his story, like the unreciprocated gaze of the reconstruction, to remain as mysterious as that time which he inhabited.



Figure 4.40a-b: **a)** Annagh facial reconstruction superimposed with skeletal material beneath; **b)** Annagh facial reconstruction

This re-construction was difficult to undertake due to problems with the National Museum of Ireland's (NMI) involvement with this body of research. The re-construction of Annagh was intended to be a three-dimensional reconstruction, as promised by the NMI, but the cast was never produced. Therefore, a two-dimensional medium was used for this re-construction. There are additional potential sources of error for the male from Annagh as measurements were never acquired, which allowed for incorrect scaling of the two-dimensional image. However, the previous assertions concerning the prediction of soft tissue and facial features are justifiable to the methodologies established in Appendix 1.

4.2 The Face in the Neolithic Irish Archaeological Landscape: Burial practices and osteological evidence

Beginning with the Neolithic period, the archaeological landscape begins to take shape in the form of the prominent constructions of megalithic tombs (Prendergast 2014). These sites with their high visibility (to the archaeological as well as contemporary gaze) prompted importance not only for the people who constructed them, but continual usage throughout subsequent time periods becoming a mystical, liminal place where the past is at its utmost present and social identities are manifested (Furholt *et al.* 2011; Whittle *et al.* 2011).

The mark of the Neolithic people of Ireland upon the landscape is an extremely notable feature in this archaeological inquiry. It is in the trace of people and their imprint which we can extrapolate upon and discover the complexity which they place upon materiality such as the skeletal material of the face. The active and intentional curation of the skeletal material of the face can be considered akin to what Cooney asserted about other ritually deposited material, as “a central element...to placate these powers or simply as the material expression of the ritual action” (Cooney 2000, 89). These powers which Cooney speaks of are the symbolic cultural structures prehistoric people create and support through their ritual actions. These abstracted cultural structures of prehistoric people are similar to contemporary uses of symbols and are not static or simplistic in nature. When investigated, the embedded meaning provides insight into Neolithic lifeways and the subsequent lived experiences. It will be shown that in the curation of the countenance appearing as skeletal remains was utilised, harnessed, or even manipulated in its Levinasian terms.

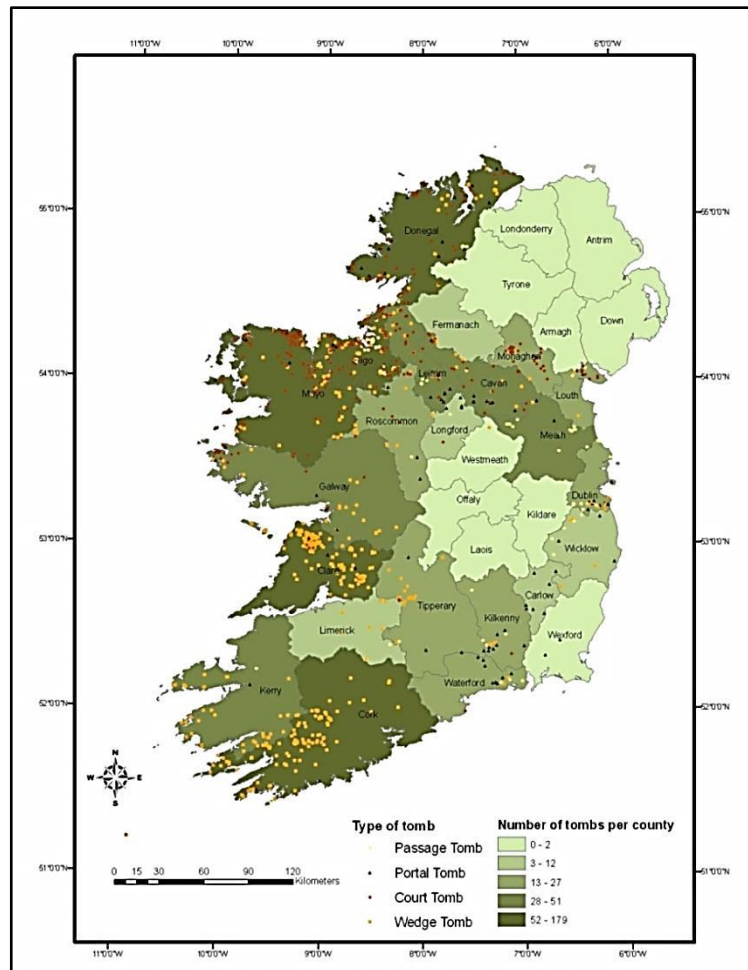


Figure 4.41: Megalithic Tombs of Ireland (Ruigrok 2009)

The most visible sites seen throughout the Irish Neolithic landscape arise in the form of megalithic tombs (Cody 2002). The skill and ability to source materials for these construction projects exemplifies the level of sophistication the Neolithic people could gain from their environment. Additionally, the amount of effort placed into the creation of a landscape dedicated to the dead and past generations poses an interesting insight into the living populations and their engagement with these sites (Müller 2014). As the surface of the archaeological landscape is akin to the surface of the face in that the traces tell us of the life lived, these sites will show insight into the people of the Neolithic and their intangible social meaning placed upon these locations and those interred within.

Each tomb context (Waddell 2005) outlined earlier comes with its own archaeological specific context with varying types of artefacts assemblages and form and distribution within the landscape (figure 4.12). However divergent the megalithic structures may seem,

their differences lie instead in the construction of symbolic structures as, “different tomb types may not represent different cultural groups but different responses, some regional, to various social and ritual imperatives” (Waddell 2000, 100). Furholt and Müller (2011) examine the same concept although on a broad scale throughout Europe to find that the difference in tomb structures clearly delineates transitions of social identities.

Although the structures of these tombs are dissimilar, their distribution and chronology overlaps leading “Cooney and Grogan (1994, 57-8) to suggest they should all be considered in relation to each other and that the design of a tomb should be seen as a deliberate choice out of a range of possible options” (Schulting *et al.* 2012, 2). The ability to read these abstracted ideological changes is accomplished precisely through the synthesis of a holistic examination of the prehistoric (bio)archaeological record. To look at these monumental constructions in the archaeological record means that we are not only investigating the aspect of mortuary practices and the treatment of the dead which is prevalent in these locations, but also exploring the broader socio-cultural placement these sites possess for the people that utilised and harnessed their potential (see Parker Pearson 2006).

Cultivating Societies, a project led by principal investigator Nicki J. Whitehouse, has very much altered the way archaeologists and historians perceive the Neolithic within Ireland. This study not only examined Ireland’s place in the spread of Neolithic agriculture within the wider European context, but also how the nature of settlement developed with this climactic change as a backdrop creating new ways of living (Whitehouse *et al.* 2013). Furthermore, apart from the impact of their ecological conclusions, their study diminished the dichotomy between hunter-gather and farmer life patterns as they present evidence for a more fluid use of the environmental surroundings. Their focus upon archaeological visibility (figures 4.1a and 4.1b) and the accountability of dating methods to reveal accurate information is a contribution that is altering the chronology of the Neolithic arriving at a more sophisticated understanding of this period of time and its relationship with the technologically evolving discipline of archaeology (Smyth 2011 also noted the impact development-led excavations have upon the increased understanding of the Neolithic).

In a general overview of the analysis of prehistoric skeletal material, Cooney (2000) asserted that there were short generation spans with frequent deaths of children and the

average age of death for individuals was in the mid-twenties to early thirties, although not necessarily ruling out the older demographic. He also stated that there were indications of periods of stress and overall physical hardship evident from osteological collections. These fluctuating population levels that followed the introduction of farming were confirmed through radiocarbon dates by Timpson and colleagues (2014). Although having tiny sample sizes, the study by Power (1993) stated that, overall, the Neolithic populations of Ireland were a healthy one with a low population density, exposure to fewer pathogens due to less animal husbandry with several instances of stress induced by possible seasonal inadequacies leading to temporal periods of malnutrition. Power's (1993) osteological analysis of a meagre sample size noted an absence of caries as well as low incidences of cribra orbitalia which suggests that there was a diet based predominantly on meat with no over dependence on cereal crops. Demography becomes an important aspect that when expanded reveals what portions of society were treated to particular burials, either formal structures or within other contexts.

Death in the later increasingly modern societies has become a detached portion of the human experience, but in the scope of Neolithic societies, these differed in their accepting and coping of death as a central part of life (Cooney 2000; Ariès 1981). With consideration of the archaeological evidence, Cooney and Grogan (1994) and Cooney (2014) suggested that only a small portion of the population was formally buried within megalithic tombs or caves or treated as ancestral in Neolithic Ireland. This statement coincides with the context of the facial reconstruction from Annagh, Co. Limerick which prompted this chapter's conversation. The Linkardstown tradition of single graves of communal deposition (Manning 1985) provides evidence for another dimension of Neolithic mortuary practices of the prehistoric population. The handling and experience of death would have been a daily reality. This proximity towards the deceased was performed with active, selective uses (Cooney 2014, 190) that would have been important in manifesting a link between the living and past populations (Helms 1998, 24-29; Whittle 2003).

The examination of megalithic structures regarding their importance to the population and landscape around them has various interpretations. Renfrew (1976) along with Chapman (1995) posited theories wherein the megalithic tombs and the assemblages within denote a

territorial model wherein they function as boundary markers. There are also interpretations of the heterogeneity of mortuary practices originating from the complexity of overall societal organisation as well as being evidence for the control of scarce or valued resources (Binford 1971, 14-15; Saxe 1970). While another approach by scholars such as Shee Twohig (1997), Bradley (1998; 2010), and Davidsson (2003) have acknowledged certain ideological shifts that arrived with the transition from burial customs to increased emphasis upon ancestor rites.

Dividing burial customs from ancestor rites is difficult unlike Barrett who clearly delineated ancestral rites as “the presence of ancestors in rites concerned with the living” while funerary rites are concerned only with practices of inhumations (1988, 31). Barrett went on to emphasise ancestral rites by asserting human remains intended for ancestor worship were more prominently seen than normative inhumations/burials. According to Cooney, it was in the importance on the ancestor veneration in which curation of human remains increases within the narrative of the archaeological record, “this is seen as linked to changes in world view, as people placed more emphasis on notions of regeneration and long-term attachment to the land” (2000, 90).

Differing from the weight placed upon the discourse of ancestors, Whitley (2002) asserted that the discourse concerning ancestors has become too prevalent in British and European archaeological traditions. He stated that ancestors should cease to be the first case of interpretation and calls upon archaeologists to re-interpret monumental structures in terms outside of ancestor veneration (2002, 125). This framework takes power away from the typical ancestor veneration interpretation. Whitley’s position is an interesting alignment with the curation of the face that holds the commanding presence instead of the individual. Consequently, through this range of thought just discussed and through the lens of this research it is proposed here that ancestor veneration and burial rites are to be interpreted as grounded in terms of the link of the skeletal face and its Levinasian themes. Meaning, though difference and variation of tomb structure and position exists, the face (the presence of the other; and at times curation of the skeletal face) conjoins all these former interpretations because it can act as ancestor, personified boundary marker, and example of societal organisation.

The tradition of passage tombs in Ireland have a developmental link in the broader context of the European prehistoric period. Just as noticeable these monuments are upon the Irish landscape, so are they visible within prehistoric archaeological research as discourse considers developmental stages of passage tombs, their trajectory of diffusion and arrival in Ireland, as well as their interrelationship with other types of tombs (court, portal, and wedge). Famous examples of passage tombs sites are found in the Boyne Valley at Newgrange, Knowth, and Dowth as well as those at Carrowkeel, Lough Crew, Knocknarea, Co. Sligo, Seefin, Co. Wicklow, Baltinglass Hill, Co. Wicklow, Slieve Gullion, Co. Armagh, Slieve Donard, Co. Down, Carrowmore, Co. Sligo. Excavations at each of these tombs as well as at their satellite accessories (where applicable), demonstrated that not only were the constructions an important sight upon the landscape, but the skeletal remains themselves were a landscape to be curated within the power and authority of the megalithic tombs.

During excavation, a cruciform monument was revealed at Fourknocks I, Co. Meath south of the Boyne cemetery valley. Decorated stones can be found as well as few grave goods intermingled with the mass of human remains on site within the tomb. The human remains consisted of cremated and unburnt bones with a demographic range of both primary and secondary deposit burials. While it has a small MNI of fifty-two, Fourknocks has evidence of ritual patterning in regards to funerary deposits (Waddell 2000). Cremated remains and children remains seem to be consigned to peripheral locations, there is also the deliberate deposition of unburnt adult skulls and long bones within the central position of the tomb (Hartnett 1956/1957, 206).

In Fourknocks, not only do we see the deference to particular portions of the body in their secondary deposition, the evidence of curation of skulls in a particular position within the tomb, but also the beginning of re-presentation of the abstracted human countenance in a stone carving (figure 4.19b), which will subsequently increase in production within the Iron Age. Alongside the purposely kept and displayed skulls of the assemblage contained in Fourknocks it is also one of the few Neolithic sites that can claim anthropomorphic motifs visible upon an orthostat within the main chamber (which will be noted in the following section).

The Irish Neolithic was diverse in its structure and use of materiality. In interments such as those in Passage Tombs at the Boyne Valley, Carrowkeel and Fourknocks I, Co. Meath, the remains found were mainly cremated with mingled with grave goods of beads and pins (Cooney 2014). There is no emphasis on the individual in these burial contexts with many persons being found within various locations of these sites. This diverges from other contexts in which the number of individuals can vary from a low number to a highly dense demography of burials. This dissimilarity is seen in Linkardstown burial types wherein there is a single burial or a single individual is interred (Brindley and Lanting 1989/1990). However diverse the contexts of prehistoric remains may be, the main theme of the face is evident throughout each of these differing situations. This is relevant because with inhumations there can be an actively curated skeletal face (Labbacallee, Co. Cork or Annagh, Co. Limerick), but also in the instances of cremations in the abstracted manner of representing the presence of the other.

The visual experiences of sites such as Knowth or Newgrange were extremely important to the overall encounter of such a ritually assigned location. In the use of visibility in the creation of a type of consciousness directed to maintaining proclivity to ritual activity, Dronfield stated that the tunnels of passage tombs “were associated with a complex of consciousness-altering practices involving the induction of subjective visual experiences by means of flickering light, hallucinogenic substances and neuropathology” (1996, 37). However, others utilise the embodied vision of a being to draw attention to the structural significance of tunnels such megalithic constructions being similar to activity of being born and conversely a transition to the realm of the dead (Bahn 1996).

Allocated and found in survey mainly in the north of Ireland with dense distribution in counties Mayo, Donegal, Sligo and the northeast of Ireland, court tombs fluctuate within this category with some examples being simple, open, crescent shaped courts and others built in a more complex, elaborate manner for its monument type (Waddell 2000). Schulting and colleagues have dated samples of the construction and initial use of court tombs to a range of 3700 – 3570BC (2012, 42). In their isolated and scattered locations, these megalithic structures have been argued to represent communities which lack centralised hierarchical structures autonomous from larger political and economic entities

(Waddell 2000). In consideration of human remains within court tombs, it is a possible contention that *if* these sites did lack hierarchical sociocultural superstructures, it was the skeletal material which lent the sense of belonging and infrastructure for the living population.



Figure 4.42: An example of the deposition of remains found in Audleystown, Co. Down (Collins 1954b in Schulting et al. 2012)

Case (1969; 1973) asserted that court tombs in particular could be perceived as shrines where deposition of human remains were offerings rather than strictly for burial purposes. As interesting example at Audleystown, Co. Down (figure 4.13) which according to Clarke illustrated the “earliest evidence of a human skull in a ritual context” (1998, 94). This provides archaeological evidence that these locations utilise the symbolic realm of material. As we recall from chapter two (2.2.2), the head and the face are separate phenomena, and in relation to the placement of the skull, this action indicates an intentional harnessing of the power inherently embedded within the face. The surface of the face is therefore incorporated into the surface of the landscape, by the action of deposition (inhumation or cremation). This use of the face makes this context of a court tomb an object of integrity for the examination in a scope particular to court tomb features.

The portal tomb at Poul nabrone, Co. Clare is perhaps one of the most famous sights/sites for megalithic architecture. Synonymous with prehistoric Ireland, the human remains

analysed range in radiocarbon date from c.3800BC to c.3200BC (Lynch 2014). The site of Poul nabrone is extremely informative for the understanding of the Irish Neolithic because of the wide range of remains available (figure 4.14a). This collection of skeletal material informs archaeologists of the funerary rite of secondary deposit, meaning individuals were laid out to decompose before being moved to the area of the portal tomb. Also an analysis of which bones were present indicates the bigger bones of the body, mainly long bones and skull material, were the chosen features to move to the tomb (O' Donnabhain and Tesorieri 2014). Although in the company with a large range of human remains at Poul nabrone, a cache of skulls found at the base of the eastern sidestone of the portal tomb illustrating the emerging reverence for this portion of the body and the evocative qualities of the face (figure 4.14c).

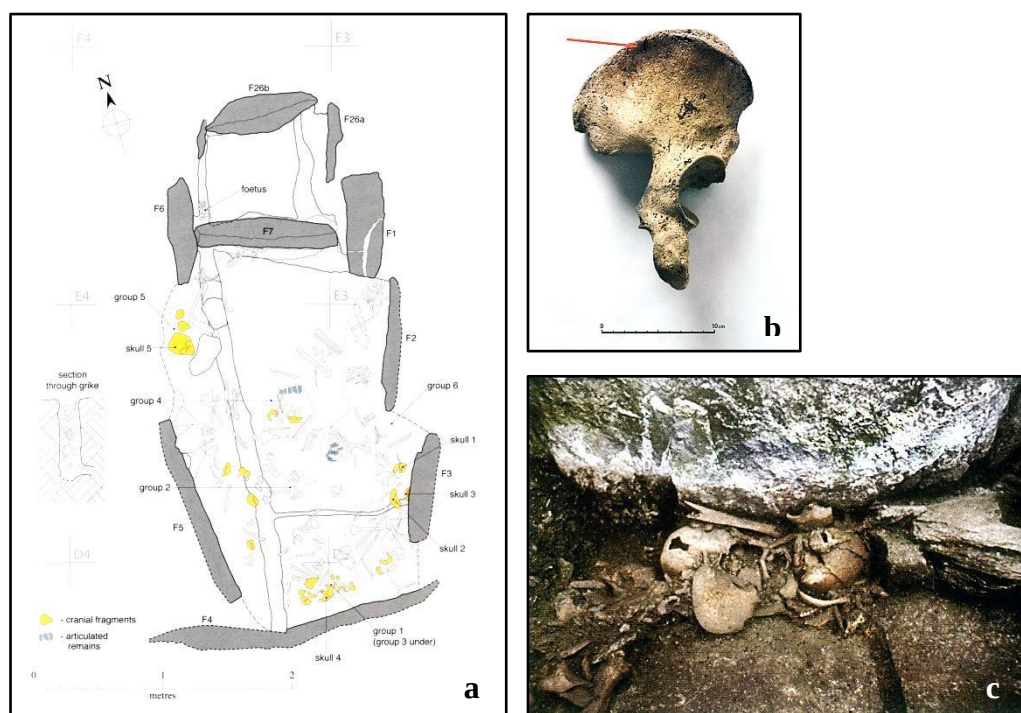


Figure 4.43a-c: **a)** Distribution of the larger skeletal features of the Poul nabrone chamber and portico (Lynch 2014); **b)** The right hip of an adult found in Poul nabrone with an embedded tip of a projectile point (Photographic Unit, NMS in Lynch 2014); **c)** Human skulls at the base of eastern sidestone during excavation (Lynch 2014)

Just as sites such as the skulls from cave site Annagh, Co. Limerick (Ó Floinn 2011; Ó Donnabháin 2011), the cache of skulls found in Poul nabrone, Co. Clare (Lynch 2014), a skull from the dual court cairn at Audleystown, Co. Down (Clarke 1998), and the fragmentary skull found at Cohaw, Co. Cavan (Kilbride-Jones and Keenan 1951/1952) illustrate a curation and intentional placement of the skull, the wedge tomb at Labbacallee,

Co. Cork (figure 4.15) also displays intentional manipulation of human remains which transitions into the public consciousness arising in the archaeological imagination of prehistoric Ireland. This purpose driven use of the skull also arises from the reverence and response derived from the face.

It must be noted when transitioning to this next site of Labbacallee, the monumental and human remains are from a different cultural context than previously discussed sites. Although dating from the late Neolithic/Chalcolithic period, it is included here because of the dominant combination of the archaeological imagination and the curation of the face in Labbacallee. The use of the face within the archaeological record as has been seen in mortuary contexts and the (bio)archaeological record prompts the formation of an archaeological imagination. This imagination pervades the collective consciousness of a population and stems from the materiality of various temporal and spatial contingencies. An ideal case study of the intersection of archaeology, the face, and the archaeological imagination originates in the wedge tomb of Labbacallee, Co. Cork.

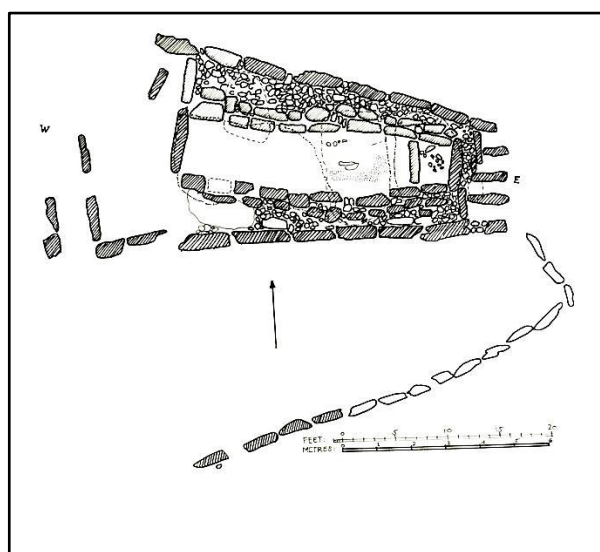


Figure 4.44: Labbacallee, Co. Cork wedge tomb (after Leask *et al.* 1936)

The place name of Labbacallee translates into “The Hag’s Bed” or “(Old) Woman’s Bed”, which is interesting due to the solitary disarticulated female cranium found in the centre of the wedge tomb’s first chamber. According to C.P. Martin, author of Labbacallee’s skeletal report, there are at least five individuals in skeletal form and an unknown amount in cremated bone (Leask *et al.* 1936). Long bone from the headless skeleton was

radiocarbon dated to 2456-2138BC while the other two individuals located in the main chamber were dated to 2458-2038 BC and 2202-1776BC (Waddell 2005). Martin postulated within his report that the skull and skeleton are from the same person (Leask *et al.* 1936). If indeed the skeletal material buried in the small chamber of Labacallee and the skull are from the same individual it is obvious that, “the skull of the female must have been kept separate for some purpose, presumably connected with burial rites” (Leask and Price 1936, 94). This site was used consistently throughout time which can be observed through the disruption of deposits as well as the remnants of individuals not fully illustrated in Labbacallee’s archaeological record (large portions of skeletal remains absent).

According to Jones (2007) the skull and associated female skeleton could possibly be that of a witch which correlates with the legend of the Cailleach Bhéarra (i.e. the place name’s translation to “The Hag’s Bed” or “(Old) Woman’s Bed”). This legendary tale was retold to Leask in 1934 by a local John Egan who had heard it from his father:

“She was annoyed with her husband because he took the dew off the grass before her. She was carrying a child and felt very bad and he told her go and see her sister on the hill above Gurtroche near Ballyhooly: and when she’d gone he put his coat on the big stone and went across the stream, and she came back and thought it was he was there, and she struck the stone with her sword. So she followed him then, and threw the stone, and he was crossing the river and she struck him and he was drowned there” (Leask *et al.* 1936).

A record from Aubrey (1693) detailed a similar tale of this ‘witch’ (Jones 2007, 2-3). In regards to the story’s structure of the ‘witch’s’ difficulties with the husband, there has been posed an interpretation that the marital conflict actually represents the period of ideological shift from the Neolithic to the Bronze Age (Zucchelli 2007). When Croker (1825) penned the collection of fairy tales from southern Ireland, he noted that the witch from Labbacallee prophesised that the Lord of Fermoy’s son would drown before he reached adulthood. Even at the site of the Labbacalle wedge tomb, there reads a sign about four men trying to dig for gold at the monument and being mortally rebuffed. Each narrative though varying in its storyline and structure concerns itself mainly with a woman in relation to the area surrounding or directly to the wedge tomb of Labbacallee. The direct relation to the remains uncovered is an interesting note in the proliferation of the archaeological imagination and the power of story connected to the landscape.

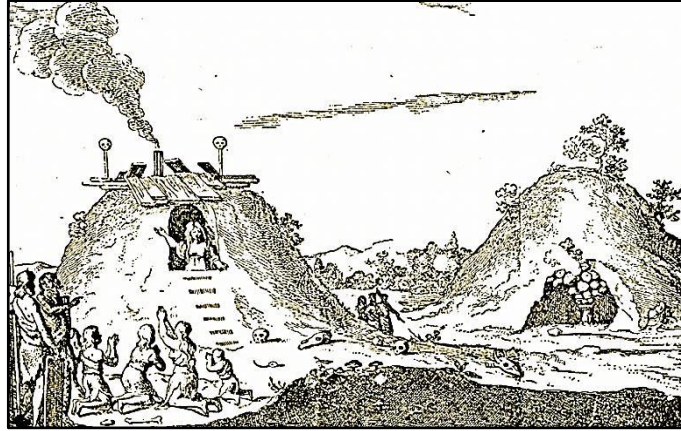


Figure 4.45: Depiction of a witch declaring prophesy from inside a dolmen (Borlase 1897)

The excavation of the wedge tomb at Labbacallee, Co. Cork was the first modern excavation of a megalithic tomb in Ireland (Brindley *et al.* 1987/1988). Discovery prompts imagination and therefore, in the case of Labbacallee, this statement can be altered to state: discovery maintains imagination. The fact that the human remains aligns with the folkloric tradition of the site furthermore motivates the punctuation of the archaeological imagination of prehistoric Ireland. The review of this wedge tomb site is a particularly notable addition to the investigation into the archaeological imagination within Ireland with its also important curation of the human remains of the facial skeleton.

Alongside the discourse which surrounds megalithic tombs is the increasing research into the prehistoric use of cave sites. Rather than a man-made construction, these natural sites are enclosed, dark, and possibly liminal spaces for Neolithic people's mortuary practices to unfold, "coincidentally, both are of closely related type which uses a natural feature such as a rock fissure or cave to entomb the remains" (Cahill 2011, 11). These cave sites resonate with megaliths (Jones 2007). Instead of beginning with megaliths like the majority of prehistoric scholars because of their prominent size and location, Dowd (2008) inverted the attention stating perhaps the construction of megaliths serve as a 'pseudo-cave' asserting the importance of these overlooked sites. A site such as Ashleypark, Co. Tipperary provides a counter-example, displaying a modified natural limestone feature to produce a pseudo-megalithic structure (Ó Floinn 2011), which illustrates the interplay between landscape (going back and forth between natural site and man-made construction) and the early Neolithic individual's consciousness in choosing and actively creating a place of burial and ritual. Dowd's (2008) comprehensive investigation of prehistoric usage of cave

sites yielded eighty known caves to have human remains, fourteen of which have material dateable to the Neolithic with a density of dating from 3600 to 3400 BC.

In the cave site at Annagh, evidence of at least five individuals all possibly male were excavated with associated co-mingled faunal remains. Each articulated skeleton found were oriented with the neighbouring skeleton at the former's feet, placed into the deep recess of the cave. Associated material culture includes pottery and the aforementioned (burnt) faunal remains. With the demography of the visible burials (adult males), it was concluded that this was not a burial site for an entire community (Ó Donnabháin 2011). Instead, it would be viewed as a place reserved for those who gained special treatment from societal status (age, sex, experience). However, this archaeological visibility should not be held as a certainty as remains were moved in and out due to secondary interment locations such as those seen at sites such as Annagh, Co. Limerick (Ó Donnabháin 2011) and Poul nabrone, Co. Clare (Lynch 2014).

Kilgreany Cave, Co. Waterford and Annagh, Co. Limerick are the only two examples of cave site burials with evidence of complete burials. The osteological material at Kilgreany demonstrates an incidence for interpersonal violence with the sharp force trauma found in a juvenile/adolescent skull fragment as well as a traumatic injury to an adult female's mandible. This site, "is important because few human remains of Neolithic date in this country have displayed direct evidence of interpersonal violence. In addition, the injury indicates that both women and men could have been victims of violence and conflict at this time" (Dowd *et al.* 2006, 18). This example has been joined by another piece of archaeological evidence of Neolithic violence found at Poul nabrone, Co. Clare (figure 4.14b) in a pelvic bone with an embedded flint arrow head (O'Donnabhain and Tesorieri 2014).

Diversity of burial contexts is consistently found throughout the prehistoric period. According to Raferty (1974), it would have been unavoidable that the established traditions were fused in a type of cultural overlap presenting such sites as Baunogenasraid, Co. Carlow (figures 4.17a and 4.17b). This burial type can be attributed to the Linkardstown type burials and is in company with other sites such as: Linkardstown, Co. Carlow (the namesake of the typology); Ashleypark, Co. Tipperary; Jerpoint West, Co. Kilkenny;

Norrismount, Co. Wexford; Ballintruer More, Co. Wicklow; Drimnagh, Co. Dublin and Baunogenasraid, Co. Carlow (Raferty 1974, 304). Compact distribution and structural similarities suggest uniformity amongst this type of site.

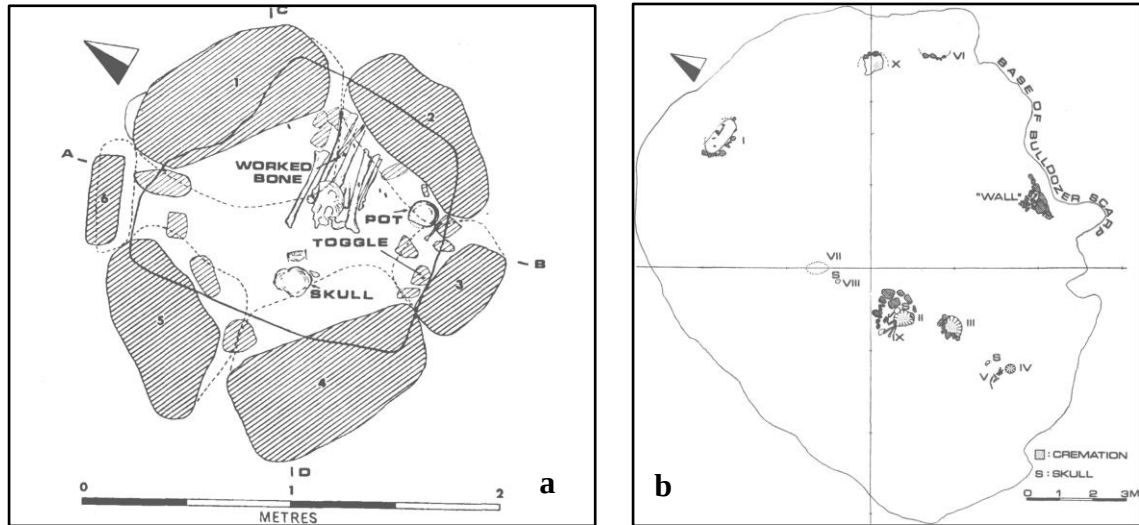


Figure 4.46a-b: **a)** The central burial (Phase I) at the Neolithic mound of Baunogenasraid, Co. Carlow (Raferty 1974); **b)** The secondary burials at Baunogenasraid, Co. Carlow (Raferty 1974)

The central burial within the mound at Baunogenasraid, Co. Carlow indicates the secondary burial of an adult male of large stature approximately 1.80m in height (Raferty 1974). The conclusion of a secondary burial or re-placement of this individual's remains arises due to absence of small bones such as the phalanges and metatarsals along with only a few surviving rib fragments. The long bones were unarticulated laying in parallel to one another in an east-west direction with the pelvis placed on top (Raferty 1974). The skull, excavated in previously fragmented condition, lay positioned south-west of the post-cranial remains. This central burial monument as well as the cairn was abandoned for a period of time before the secondary phase of activity began (Raferty 1974). This secondary activity of burials is a combination of five cremations and six inhumations with minimal associated grave goods. Even though there is a transition in typology of megalithic structure, the inclusion and careful deposition of the skull (and more importantly the qualities of the face which associate with this skeletal location) are still aspects seen to be of note in the prehistoric (bio)archaeological record of Ireland.

The prehistoric megalithic structures remained present in the realm of the archaeological imagination not only because of their visibility within the landscape, but also because of the

constant re-use of later generations for their own funerary rites (Shee Twohig 2004). It can be argued that the consciousness of the Irish psyche as well as the archaeological discipline situated within Ireland is very much associated and closely tied to the landscape of the country. This landscape offers identity as well as anchors the predominant endeavour of Irish archaeology at the university level. The strong tradition of archaeology focused on the landscape has contributed to the knowledge of the past inhabitants and has informed the collective awareness of Ireland's population. Therefore, the impact that prehistoric archaeology has upon uniting and contributing to the identity of a country, and specifically in this research Ireland, is attained through its interplay with the broad realm of the archaeological imagination.

The intentional relationship with the face (Levinasian presence of the other and skeletally) is evident in prehistory. When operating under this research's framework that reinvigorates the face from the dominating discourse of the head, this discussion of the skeletal face was shown to have been given prominent positions in a variety of mortuary contexts. The importance of this physiological and symbolic juncture (i.e. the face) has been acknowledged by illustrating the many diverse contexts and features of the early Neolithic period and the basis for the (bio)archaeological record hereafter. This presence and newly interpreted intention of the curation of the face has been shown here.

4.3 The Face in Neolithic Irish Material Culture

Examination of materiality allows for better understanding of past people (Cochrane and Jones 2012) because "visual arts are filled with significance and encode many levels of information about the identity of the artists and their sociocultural context" (Domingo Sanz *et al.* 2009, 15). There are very few objects that can be argued to re-present a human countenance from the Irish Neolithic archaeological record. In the traditional examination material culture of Ireland, the re-presented face typically becomes a prominent figure emerging in the historical period with the introduction of Christianity. The following section is brief due to this absence of artefacts and explores the rare and problematic examples of this period's re-presented face.

There is a wider Prehistoric context for the re-appearance of the face within archaeological materiality. Preceding an examination of the problematic faces of the Neolithic, a selection of instances of the most prominent and famous of prehistoric faces from a range of temporal and spatial periods are illustrated here (figures 4.18a-d). These examples have become synonymous with the endeavours of the discipline of archaeology and have captured the sense of imagination about the past. Produced earlier than any example yet discovered in Ireland, these other prehistoric material expressions have certain comparable abstracted qualities.



Figure 4.47a-d: **a)** Palaeolithic Venus of Brassempouy from France; **b)** Plastered skull from Jericho, 7000BC; **c)** Cycladic sculptures from the third millennia BCE; **d)** Mask of Agamemnon

The ability to stylise, to simplify and reduce to a minute set of meanings, is the origin of symbolism and representative devices in which a device (in this case, namely the face) can convey to people sets of meaning. This abstracted artistic style prompts a connection that persists throughout cultural history (Billingsley 1998). For instance, while noting the formal qualities of ‘Venus’ figures (such as figure 4.18a), Dixon and Dixon stated that the production of human figures during the harsh climactic glacial period played various roles in past culture but, “constitute[d] evidence that a shared cultural tradition existed in Palaeolithic Europe” (2011, 9). The creation of the human form of the Cycladic sculptures has also been interpreted as produced to reinforce and manifest cultural unity (Hendrix

2003). The faces of Jericho (figure 4.18b) have been discussed previously in chapter three in their importance of completion and restoration of the wholeness of the face for the living. The gaze of the Mask of Agamemnon has long provoked and even maintained interest in the past and fascination of archaeology (Dickinson 2005; Dudley *et al.* 2011).

The prehistoric period of Ireland is the foundation for the visibility of the (bio)archaeological record. This expansive era of time contributed multitudes of materiality (habitation sites, pottery sherds, flint blades, axes, carvings, megalithic structures, and so on) to the temporal narrative. Subsequent periods built upon this foundation with technological and formal alterations operating under their own contextual frameworks. However in Ireland, the re-presentation of material faces is absent, and only exists under certain assumptions regarding anthropomorphic features.

The formal qualities of materials from the Irish early Neolithic are varied in appearance, but what connects them is their punctuation of the archaeological record. It is the materiality – the things that have been created by people who have preceded us by millennia – that has created an attraction to this elusive period of time. The presence of the face is limited (or non-existent) in the early Neolithic to anthropomorphic re-presentations. Only if there is a consensus to assume that these human visages exist, then can we expand towards many of the philosophical fundamentals attributed to the face (command, power, authority, curiosity, to name a few; see chapter two). The possibility of facial visibility is particularly enriching within the prehistoric period space which lacks written texts.

In terms of visibility as a philosophical thread weaving this section of this thesis together, the faces that exist under certain assumptions of anthropomorphic form in this portion of the Irish archaeological narrative are the first expression of the comprehension of the other and its presence to the self. Cochrane and Jones argued that, “people are never distinct or separate from the world they inhabit, they are always involved in processes of inhabitation, therefore visual expression is probably better understood as a process of relating to the world” (2012, 4). It can be extrapolated that the notions of the self are solidified in the re-presentation of the other in this visual manner.

In examining the early Neolithic material culture, with significant consideration of archaeological context and socio-cultural recognition, we perceive an (archaeological) object at once as solely *a thing* and subsequently (or simultaneously) see *through* it towards its embodied symbolic systems. We also see a face this way; at once *at* it and *through* it. This makes artefacts and the rare prehistoric faces (re-presentations and skeletal) polysensuous. These systems are discovered as the people of the Irish Neolithic did not use the material world as a static substance and instead embedded their own dynamic, vibrant world of ideologies within their productions (Shee Twohig 2004). Embodied symbolic systems are an important portion of discourse into materiality because it is a particularly fascinating dialogue where the many realms humans live within intersect. The inherent *thingliness* of the archaeological material culture, its proposed functionality of an object, the socio-cultural commodity value, and a proposed economic value are all sub-sections to the general discussion of the role of objects within the human sphere of living and experiences (Thomas 1996).

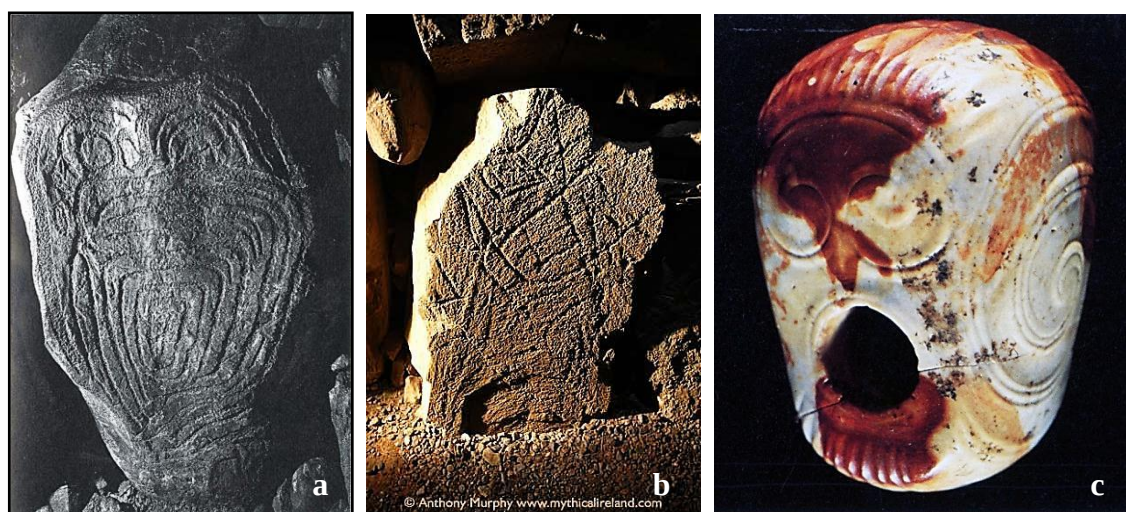


Figure 4.48a-c: **a)** Stone in Knowth, Co. Meath 3000-2500 (Kissane 1986); **b)** Fourknocks, Co. Meath; **c)** Knowth mace head found in 1982 in an excavation context of 3000-2500 BC (Kissane 1986)

The main manner in which the disputed re-produced face of the Neolithic appears is within the durable medium of stone. Carvings which archaeologists have interpreted as anthropomorphic appear at Fourknocks I, Co. Meath (figure 4.19b), Knowth (figures 4.19a and 4.19c) and Loughcrew Carn L (see Crawford 1955; Herity 1974; O'Sullivan 1993, 2010; Tilley 2008). Eogan (1973) posited the stone from Knowth potentially represented a 'guardian' role within the structure of the tomb. The extremely uncommon re-presentation

of the face and its correlation with burial contexts poses an interesting question: why are the scarce portrayals of the face seen related to mortuary contexts and would the association have anything to do with the power of the face itself? It could be as Wallis (2009) posited, that these carvings embedded the landscape with people and made the environment ‘come alive’. However, scholars such as Cochrane (2008) and Scarre (2010), even Tilley (2008), went further than this representational discussion of anthropomorphic traits. Scarre (2010) noted that it is important to accept there is a risk to see anthropomorphic forms within carvings which prehistoric observers did not recognise. He went on to state that this allure of anthropomorphism that animates inanimate objects is active in all human perception.

The construction of tombs in the Neolithic period not only exemplify the blossoming community cohesion and status of society but also provided a space for the symbolic to be manifested (Cody 2002; Bradley 2010). Passage tomb art and other artistic stylizing dynamically ornamented the structures (Wallis 2009). With agriculture and the settlement patterns transitioning to eventual settlement and the rise of the construction of tombs, the Neolithic saw the advent of ornamentation and the ability of populations to begin appropriating human and natural resources commencing in the act of *creation* (see Lewis-Williams and Dowson 1993; Cochrane 2006). Whether produced for religious/spiritual reasons, or perhaps a socio-cultural commodity, the work was particularly abstracted in formal qualities (Bradley 1991; Evans 2004). When we look to these problematically defined re-presentations of the face, we see that the rare carvings are almost exclusively found to be confined to the sites of megalithic tombs or associated with burial contexts of funerary rites (Ó Nualláin 1979, 10).

For instance, the passage tomb at Knowth, Co. Meath was interpreted as being built to convey authority and leadership of the landscape and its population. The construction of such sites is laden with meaning as Abrams (1989) even pointed to social inequality in these monumental structures. The creation of symbolic activity that occurred within the area must have had ritual practices and repercussions for the material found within. In consideration of material culture that could potentially depict anthropomorphic carvings, the Neolithic offers the iconic artefact that has become synonymous with prehistoric life in Ireland: the Knowth macehead.

Originally thought to have been mounted on a wooden handle through its large hole, the macehead at Knowth is flint carved with spirals and lozenge-shaped aspects. Eogan and Richardson (1982) have interpreted this object as a token of personal commemoration for an owner who had a high status within society or in the construction process of Knowth. They also saw this object in the broad prehistoric scope, symbolizing “physical incorruptability, unchangeability, and therefore constancy” (1982, 131). It has also been interpreted that when these elements are combined with the empty hole (from the absent wooden handle) an impression of a human face can be seen (Harbison 1976; Kissane 1986; O’Sullivan 1986, 70-71 for historical trajectory of this theoretical approach; Shee Twohig (1981) is the authoritative voice on megalithic tomb art). Controversial in this interpretation, the Knowth macehead is interpreted as reflecting wider cultural significance, but with no relation to human remains (Hensey 2014). Neither anthropomorphism nor separation from grave goods was asserted (or even mentioned) by Thomas (2005) in his investigation of the human figure in the Neolithic.

If we do entertain the problematic assumption of the macehead as a face, reading the imagery of the macehead through a Levinasian lens sees the appropriation of the critical features of the face for the purpose of leadership and obligation. It is asserted that this object of a macehead holds the power and authority due to its use of the face’s commanding presence as discussed by Levinas (1961). This marks an interesting intersection of the face’s attributes and its use in eliciting authority and leadership, similar to the landscape of the broad context of Knowth (Eogan 1984; 1986). Perhaps due to the great temporal distance of the past from which the previous artefacts originate, their existence and function has become encased within the sphere of archaeological imagination as well appearing in folkloric traditions. They become venerable as they are the oldest examples of artistic creation in Ireland and become a symbolic idol for many of the statutes of the archaeological discipline.

Having seen the only examples of the disputed face in early Neolithic Ireland, the next stage in the examination of the re-presentation of the face is to question its scarcity. This brings us to three threads of explanation:

Firstly, with regards to the prehistoric period the amount of materiality is less complete than later artefactual assemblages. The three (or four if including the Knowth macehead) problematic depictions of the face are in the durable medium of stone and found in sites of high regard. This could be an explanation for their survival, but there could have been a wider range of facial depictions not yet experienced. As stated previously, the concern over archaeological visibility should be acknowledged when considering the amount of material culture available for examination. This acknowledgement of archaeological visibility provides improved understanding of the role of the face throughout the archaeologically created narrative of Ireland. For instance, the end of the twentieth and the first decade of the twenty-first century saw an increase in excavations and more material and information of the past amassed (Smyth 2011).

Therefore, statements like those from scholars concerning the trajectory and appearance of the re-produced face in prehistory has become outdated. For instance, the statement by Kissane, “after this [the appearance of Knowth mace head] there are no more portrayals of the human face in Ireland until over two thousand years later when the practice was reintroduced in Celtic times” (1986, 8) is invalid with the recent discovery of the likes of such artefacts as the Bronze Age face pot found in Mitchelstown, Co. Cork in the twenty-first century (Kiley 2009). This leads one to consider that as the visibility of the prehistoric archaeological record grows (Smyth 2011) added depictions of the face could potentially appear.

Secondly, in the prehistoric eras the number of cremations in the burial record extending through prehistory may lead us to an answer about the prehistoric people’s desire for depiction of the human form and the lasting eternal nature of the countenance. It is possible that the overriding framework of embodiment was dominant rather than the Levinasian primacy of the face. To compile this chapter on the face, mortuary remains, and the prehistoric landscape it was found that discourse which dominates this period is very much associated with theories of embodiment (see Ingold 1993; Tilley 1994; Fraser 1998; Brophy 1999; Fleming 1999; Cummings 2002). These frameworks explored the manner in which prehistoric populations lived their lives and focused very much on their bodies. Embodiment discourse also examined how the contemporary discipline of archaeology and

its practitioners function and move within prehistoric sites. I propose that the focus on the body arose primarily from the absence and oversight of the face in Neolithic Ireland. While embodiment is a complex manner in perception and interaction between other bodies and the landscape, prehistory can be opened to the possibility of using Levinas's philosophy to understand prehistoric connections and socio-cultural structures.

Finally, if we look at this scarcity of the re-presented face through a Levinasian lens of visibility, we recall that optics is ethics and ethics is the asymmetrical obligation to the other by the self. The self is reinforced by the visage of the other and thrives to be responsible to this other being. Therefore, the self is never fully constructed without solidification of personal identity through the experience of reflection. We know the introduction of mirrors in the prehistoric archaeological record to be much later than the early Neolithic period, so was the absence of a reflection of the self a negation in the depiction of the other? Would this explain the distribution of prehistoric artefactual deposits near water, the only place where one's reflection would be seen?

Perhaps the most important strengthening support of this idea comes from Thomas (2005). He asserted that differing notions of bodily integrity and personal identity is what has stunted the presence of figures in Neolithic Britain. He stated that decorated objects were, "used in practices which commemorated the past and drew attention to remote places. This was possible because in the earlier Neolithic a partible notion of personal identity and a lack of emphasis on the representation of the whole human body had facilitated a practice of making absent persons and agencies present through the circulation of symbolic media" (2005, 173). Taken one step closer to the phenomena of the face, the use of reflection in has potential rationality in Levinasian terms for explaining the scarcity of Neolithic facial re-presentations.

This chapter has focused on the visibility of Ireland's Neolithic era. Both in the sense of perceiving the visual evidence of the Neolithic (bio)archaeological record as well as the Levinasian sense of the importance of visualising the face (in this case, the absent face). The visibility illustrated throughout the Irish Neolithic is entangled with "the process of engagement and interaction within a changing material environment...[which] becomes a process of attending to the changing way in which people relate in the world" (Cochrane

and Jones 2012, 8). Through time, the prehistoric abstracted symbols which are much more common became appropriated by later cultures to symbolise the past, at times as a pagan, non-Christian past before societies became structured in the early medieval period (Waddell 2005). These artistic motifs are also used as a legitimized claim to the land, justifying presence and the utilisation of the environment just as the Neolithic megalith builders etched their place in the Irish landscape (Wallis 2009). The impact of the early Neolithic landscape captivates the collective imagination of Ireland's archaeological record, even through a small amount of material culture.

This period is open to engagement with investigating the relationship between the self and the other within the Irish (bio)archaeological record, which is manifested in diverse spheres of funerary rites and material culture. I assert that from the above discussion, this fundamental time period with its monumental architecture and material remains have aided in creating the public psyche and sense of belonging – (to borrow a phrase from Levinas) “a starting point” – of the nation of Ireland. The gaze of the reconstruction from Annagh, Co. Limerick has opened this chapter. This manifested humanistic element of prehistory has personified the discussion of material culture in the Irish Neolithic. Perhaps in future prehistoric discourse, the face will become a more dominant portion of the Neolithic narrative. This leads us to early medieval period where two more reconstructions peer out to begin the next layer of discussion: intersubjectivity.

**CHAPTER FIVE – THE “ME-AND-OTHER” OR “THE OTHERNESS OF THE OTHER?”:
INTERSUBJECTIVITY AND EARLY MEDIEVAL IRELAND**

“If the existence of one Other already condemns me to an unlimited responsibility and dedication, how, then, can I cope with the fact that I, during my lifetime, am confronted not only with one or a few men, women, and children but with innumerable others?” (Peperzak 1993, 30).

This chapter seeks to examine the (bio)archaeological record and its objective qualities through the theme of intersubjectivity and early medieval Ireland. The philosophical concept of intersubjectivity is fundamental within all aspects of archaeology but, presently it prompts the question of how the face (skeletal and theoretical) manifested this philosophical concept in the Irish early medieval period. It will be argued that many phenomena such as: images, literacy and language, encounter of the past, and a communal sense of the ‘normal’, begin to appear parallel with this notion of intersubjectivity. This concept in particular is notable throughout the bioarchaeological record and has an extended applicability through time, although particularly relevant in the early medieval period. In order to recognize intersubjectivity within the bioarchaeological record, it is first beneficial to discuss the complex notion of intersubjectivity in regards to its phenomenological foundation.

To refresh this concept: intersubjectivity is a multilayered notion (Crossley 1996). It occurs as the connection of intentional acts to other beings or objects. Zlatev and colleagues simplified the term by representing intersubjectivity as, “the sharing of experiential content (e.g. feelings, perceptions, thoughts, and linguistic meanings) among a plurality of subjects” (2008, 1). Profoundly unique in their own right and scholarly scope, the authors (Heidegger, Sartre, Husserl, Habermas, Schutz, Mead, Wittgenstein, and Merleau-Ponty) who have chosen to tackle the issue of intersubjectivity all endeavored to reach common ground with ideas, while at times contrasting, overlap and grow from one another (Crossley 1996). Continuing into the contemporary philosophical and social science discourse, intersubjectivity remains a considerable topic in which many fields seek application towards their theory and practice (Hughes and Sharrock 1980; Sayer 1992; Finlay and Gough 2003; Scheff 2006).

In this chapter, intersubjectivity overcomes solipsism and recognises the debt towards the other in the shared, lived communal experience (see Coelho and Figueiredo 2003 for

extended characterizations as well as Sayer 1992 for sociological application of intersubjectivity). These definitions often resulted in what is referred to commonly, and mistakenly, as empathy. Intersubjectivity must be more complex than simply articulated as empathy. Connection to this term of empathy is problematic because it, “cannot be reduced to the concrete encounter with another subject” (Zahavi 2001, 156). This empathetic mode of being is not sufficient in terms of intersubjective related-ness with the other (whether they appear in a corporeal form or in the referenced nature appearing in material culture). This can be achieved by extending it further from this contemporarily defined perception/emotion, which as Tarlow (2000) stated is inseparable from cultural and social aspects that produce meaning.

Daily activities and their physicality within the archaeological record provide evidence that the early medieval population was a growing, socially conscious and community-aware group. The new ideas (and demographics) that accompanied Christianity altered the previous prehistoric landscape. When beings are in the world together exchanging objects and ideologies, the social relationship is formed. This can be identified as the intersubjectivity present within the (bio)archaeological record. Anthropologically and philosophically, it is through this community of others in which the situated self lies; that one becomes conscious of the normative (socio-cultural structures and frameworks dictating how we operate in certain given situations). These normative systems appearing in the early medieval period gained importance as homogeneity became more apparent and those artefactual contexts that did not conform gained more interest within contemporary archaeological investigation. It is a further solidification of the idea of infinity (Levinas 1961) and forms a ‘curvature of intersubjective space’ in the ethical relation towards an other (Critchley 2002, 15). This intersubjective space in this chapter is incited by the confrontation of early medieval faces appearing in the form of facial reconstructions.

Due to the status of facial reconstructions simultaneously as an other and the object of a re-constructed plastic image of the face (as Levinas would say), it is abundantly clear that the primacy of the face and its intersubjective qualities are the proper beginning point to this chapter. What follows the experience of these re-constructed faces is a discussion of the time period which they lived within and how the intersubjectivity they provoke in the

contemporary viewer is also present within the early medieval (bio)archaeological record. These re-constructions and their imminent intersubjective nature will be displayed in regards of the early medieval period through two sites: Dooey, Co. Donegal and Owenbristy, Co. Galway.

5.1 Dooey, Co. Donegal

The site of Dooey, Co. Donegal is a coastal cemetery/settlement dating from the early medieval period (Ó Ríordáin and Rynne 1961). As will be seen, this site was once sidelined throughout early medieval discourse in favour of more prominent or elite early medieval sites, but the wealth of information in Dooey's archaeological record informs us of a vibrant, small community potentially influential within the trade external and internal to Ireland.

5.1.1 Site information

Information on the site of Dooey (or Cloghastuckan on the Ordnance Survey map), Co. Donegal comes predominantly from the 1961 report by Ó Ríordáin and Rynne. Situated directly on the coast upon a large grassy dune, this site at one time had a large standing stone, later undermined and falling away due to environmental forces and erosion which also prompted the exposure of artifacts and skeletons (Ó Ríordáin and Rynne 1961). The early medieval coastal site was excavated and drawn into four phases of activity: the first three being the foundation for layers that include fireplaces, pits, and post-holes, also with habitation refuse (faunal remains and shells of molluscs) indicating a layer of occupation (Ó Ríordáin and Rynne 1961).

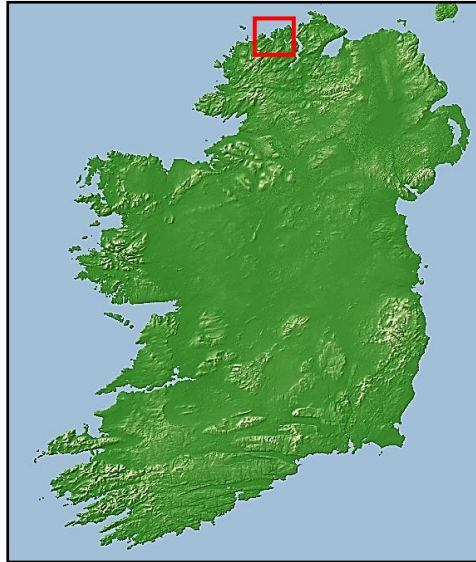


Figure 5.49: Location of the archaeological site of Dooley, Co. Donegal

The presence of iron slag, bronze, clay moulds, and crucibles alongside objects made of bone and antler indicates that intensive crafts activities took place within the site. Iron being the predominant material found, appeared in many object forms such as knives, chisels, pincers, and a hammer-head. All the aforementioned were thought to have been used in an industrial setting rather than for the domestic sphere (see figure 5.2). The use of these iron tools in the further production of bronze materials such as pins and ring-brooches, and a unique example of a bronze belt-buckle exist within the assemblage. This object along with others such as an iron pin and polished bone pins were postulated to be indicative of post-Roman Scotland influence (Ó Ríordáin and Rynne 1961) which considering the location of the coastal site of Dooley is entirely plausible.

In addition to the metallurgy that appeared within the archaeological assemblage for Dooley, the excavation revealed that the large portion of dog-whelk shells were collected for the purpose of harvesting crimson or purple dye (Ó Ríordáin and Rynne 1961). This activity of producing dye was common among coastal sites in prehistory and its continuity through later periods (Dupont 2011). Rubbish heaps of these shells can be found in comparable depositions on the coastal site of Inishkea, Co. Mayo (Henry 1952). Ó Ríordáin and Rynne (1961) state there are relatively few artefacts surviving that illustrate a booming farming economy indicating agriculture was secondary to the robustly present activity of producing craft at this site. The community of Dooley maintained terrestrial

livestock (cattle, sheep, and pigs) as well as utilising the coastal position for fishing and consuming other marine life such as oysters, mussels, clams, periwinkles, and limpets (Ó Ríordáin and Rynne 1961).

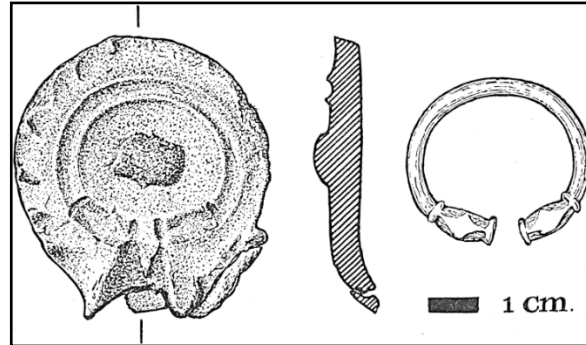


Figure 5.50: Left; clay mould for bronze ring and right; drawing of the ring from the mould (Ó Ríordáin and Rynne 1961)

The burials at Dooey were found in the central area of the site and portions of the inhumations had been uncovered by the elements over time. As very little information regarding the excavation of this site exists, it is difficult to ascertain any more detail on the burials and their stratigraphical relation to each other or to the archaeological material assemblage. The report by Ó Ríordáin and Rynne (1961) established that a minimum of seventy skeletons with a conservative estimation of a hundred or more. Impending analysis from Tesorieri (forthcoming) will further aid in the holistic knowledge of Dooey and the lifeways of coastal early medieval Ireland.

O'Sullivan & Breen (2007) have noted that there appears to be traditional interpretation of sites such as Dooey to claim they are locations for the landless and poor. During the early medieval period, the Irish landscape becomes marked with the appearance of high status sites: ringforts and crannogs, which a certain section of the population would have inhabited, possibly pushing the other strata of populations toward the coast (McCormick & Murray 2007, 98). This idea is a bit simplistic as the formation of sites, their distribution, and the populations within would be more dynamic than a strict elite versus non-elite hierarchy. However, with the archaeological assemblage discovered at this site, this interpretation of a 'poorer' people is not sustainable. From the archaeological assemblage at Dooey, we can see that there were intensive craft production occurring and with the coastal location, meaning this could have been a potentially vibrant and interactive site.

The past lifeways revealed at the site of Dooey, Co. Donegal, while on a small-scale, illustrate a self-sufficient community that was engaged in producing various crafts and whose trade interaction perhaps extended beyond just their local surroundings. The former discourse allocating sites such as these as ‘marginal’ is contradicted in projects such as the Early Medieval Archaeology Project (EMAP), in which we see Dooey is more than a disregarded portion of the early medieval Irish archaeological record. With that attitude towards this site, the facial reconstruction of a young adult female from Dooey gives a face to a place in Irish history which further uncovers its contribution towards the early medieval archaeological record.

5.1.2 Skeleton 41A

Osteobiography

Skeleton 41A from the site of Dooey, Co. Donegal was a female individual in good condition of preservation (figures 5.3a and 5.3b). This quality of the remains derives from the microenvironment in which the remains were interred. In the case of the location of Dooey, it stems from the sandy soil context and lack of exposure to the erosion found commonplace among the site.

The cranium is characteristically female, in that cranial morphology appears overly gracile in the many features denoting sex. Small mastoid processes, the subtle, yet noticeable nuchal lines upon the occipital bone, along with sharp orbital rims and smooth, vertical brow ridge are the most feminine qualities of skeleton 41A. The mental portion of the mandible has a sharp two points (albeit small in proportion) which typically is a masculine trait of the cranium. However, as we will see in the soft tissue prediction, this just appears as a small, pointed chin (figure 5.4).



Figure 5.51**a-b:** **a)** Frontal view of Dooley, Co. Donegal skeleton 41A; **b)** Lateral view of Dooley, Co. Donegal skeleton 41A

With the exception of a post-mortem loss of an upper central incisor, the individual possessed a full dentition during her life and when deceased. It was found in the examination of the health of the dentition that the individual possessed dental enamel hypoplasia (DEH). These lines or pits (depending on severity) that mark the tooth's enamel surface indicate a period, "of systemic physiological stress during early life" (Ogden 2008, 284; Suckling, 1989; Goodman and Rose, 1990; Guatelli-Steinberg and Lukacs, 1999). This malformation is created when periods of illness or malnutrition are detrimental to the formation of the enamel and repress the activity of ameloblasts to produce the appearance of, "a thin and poorly calcified enamel matrix" (Ogden 2008, 284). As enamel is an ideal record of the first ten to eleven years of an individual's life (Ogden 2008), this piece of osteological information provides an insight into the formative years of life this female from Dooley.



Figure 5.52: Frontal view of the mandible from skeleton 41A with purpose to demonstrate predicted pointed nature of the soft tissue chin

Through analysis of osteological material of this individual, it can be observed that several epiphyses had not completely fused such as those at the humeral head, the distal femur, and the unfused iliac crest. In conjunction with the aging based upon this female's dentition, this post-cranial evidence suggests a compatible age range for skeleton 41A at approximately 18-20 years of age at the time of death with a stature (Trotter and Gleser 1952) of 168.46cm (Tesorieri forthcoming). Tesorieri's analysis of the post-cranial skeletal material reveals possible scoliosis and a lesion in a lumbar vertebra (forthcoming). Other than this feature, there is no evidence for any pathological or traumatic condition within this individual's overall health status.

Soft tissue prediction

Attention to the orbital region and all details surrounding this area of the facial skeleton is key to producing an accurate appearance of the facial reconstruction's eyes (Gerasimov 1975). Beginning with the upper portion of the face, the information gleaned from the association between the orbits, nasal root, and frontal, illustrated in figure 5.5, skeleton 41A displays slightly weak brow ridges with a moderately high nasal root. According to Fedosyutkin and Nainys (1993) and Wilkinson (2004), this prompts the eyebrow pattern to be circular or softly curved in contour lying upon the supraorbital ridge border. From Dooley 41A, it was determined that the individual possessed a central fold of the eyelid. This prediction is based again upon Fedosyutkin and Nainys (1993; Wilkinson 2004) and associates with this female's supraorbital rim.

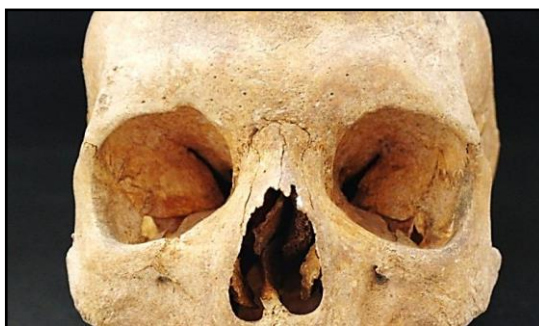


Figure 5.53: Frontal view of superior portion of skull 41A from Dooley, Co. Donegal

Based upon Wilder (1912), Whitnall (2000), Stewart (1983), and Wilkinson (2004) the positioning of the medial and lateral canthi of the eye is securely associated with the osteological features of the lacrimal crest and malar tubercle (see soft tissue prediction in

Appendix 1 for further explanation). From a closer examination of the orbit to conclude skeleton 41A's ocular region, the tangent appearing from these skeletal points of the lacrimal crest to malar tubercle within the borders of the orbits portrays a horizontal slant (figure 5.6). While the protrusion of the eyeball is based on the relationship between the outer rim of the cornea and the individual's own supra- and infraorbital rims, the diameter and placement of the eyeball within the orbit follows the reconstruction methodologies outlined in previous chapters.



Figure 5.54: Eye slant prediction of Dooley skeleton 41A dotted line from lacrimal crest to malar tubercle

Having distilled the information regarding the appearance of the upper face from skeletal features such as the supra- and infraorbital rims, the nasal root, the frontal, and features such as the lacrimal crest and malar tubercle for the eyes, the next feature to be predicted is the nose. This feature's methodologies developed over time from Gerasimov's (1955; Rynn and Wilkinson 2006) two tangent theory towards Rynn and colleagues (2010) formulaic quantification of nasal prediction (both applied in figure 5.7). This latter publication founded its basis upon the last century's discourse in nasal prediction within the field of facial reconstruction and is used here for guidelines in producing this individual's nasal feature. The quantitative information of these equations are found below in table 5.1.

Measurement for Prediction (mm)	Dooley 41A Measurements	Predicted Dimension	Simplified Equation	Dooley 41A Results
Nasion – Acanthion (x)	48.21mm	Pronasale anterior projection	$0.83Y - 3.5$	22.10mm
Rhinion – Subspinale (y)	30.84mm	Pronasale vertical height	$0.9X - 2$	41.40mm
Nasion – Subspinale (z)	51.79mm	Pronasale projection from subspinale in Frankfurt Horizontal Plane	$0.93Y - 6$	22.68mm

		Nasal length	$0.74Z + 3.5$	41.82mm
		Nasal height	$0.78Z + 9.5$	49.63mm
		Nasal depth	$0.4Y + 5$	16.92mm

Table 5.3: Dooley skeleton 41A measurements in regards to Rynn and colleagues (2010) and profile regression equations (Rynn *et al.* 2010) applied to Dooley skeleton 41A

Noting the archaeological nature of the skeleton 41A, taphonomic damage has been done to the state of the nasal aperture. The delicate material of this facial feature is often and easily damaged during interment as well as during excavation and post-excavation activities. This is the case with Dooley 41A as the damage to the rhinion and other nasal bones can cause a potential source of error when predicting this feature in this individual in particular. The predicted appearance of the tip of the nose is the inverted piriform aperture (Rynn *et al.* 2010) which in the case of this Dooley female is a pointed angular tip. With the information provided from the nasal spine, the nose has a horizontally with slight upward direction of protrusion (see lateral view of skull in figure 5.3b).

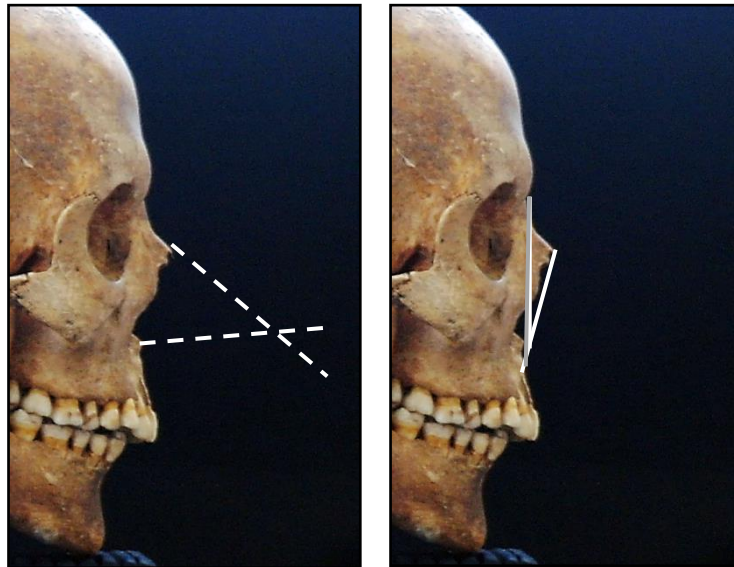


Figure 5.55: Two tangent nasal prediction theory (dashed lines) and Rynn's measurements (solid lines) applied to the skeletal material of skeleton 41A from Dooley, Co. Donegal

Dentition, as well as being an ideal health indicator, is the primary foundation for that appearance of the lower portion of the face. The thickness of lips can be determined from the measurement of maxillary and mandibular incisors, while the variable trait of the vermillion line is much more elusive to depict, as it does not correlate to any hard tissue feature. Wilkinson (2004) and Wilkinson and colleagues (2003) provide an equation for the estimation of lips in the formula:

Dooley 41A Measurements	Simplified Equation	Dooley 41A Results
10.66mm	$0.4 + 0.6 \times (\text{upper teeth height})$	Upper lip thickness = 6.80mm
7.31mm, 7.68mm (avg. 7.50mm)	$5.5 + 0.4 \times (\text{lower teeth height})$	Lower lip thickness = 8.5mm

Table 5.4: Predicted lip thickness of Dooley 41A based on formulae from Wilkinson (2003)

A feature that arises from the skeletal material of this individual from Dooley is the delicate dental overjet occurring in the lower portion of the face (visible in figure 5.8). Unlike an overbite which encompasses the mandibular dentition, this condition occurs when the maxillary teeth jut out over the lower row of teeth. It is possible instead of maxillary prognathism that this individual could also possess slight retrognathism apparent in the mandible, but the occlusal surface persuades towards the former. The soft tissue implication of this can be extreme in certain cases, however this traits seen in skeleton 41A is moderate and would therefore appear, in addition to the thickness of lips, as a slight separation of the lips while the individual was at rest.



Figure 5.56: Left lateral view of Dooley skeleton 41A in the Frankfurt Plane illustrating the prognathic maxilla and slight overjet of the dentition

In respect to the individual's mandible, there is an obtuse gonial angle with a high coronoid process (figure 5.9), leading to the prediction of a narrow lower face variant (Wilkinson 2004). This predicted feature in association with the gracile, yet pointed chin of the individual creates the narrowed lower face.



Figure 5.57: Left lateral view of the mandible from skeleton 41A with dashed lines representing gonial angle which further illustrates potential lower face shape

The feature of the ears are more difficult to predict than other traits because this body part does not correlate directly to the foundation of the hard tissue skeleton. There are however, certain osteological markers that can aid in the rendering of the ears to most justifiable manner appropriate for this individual. The angle of the articulated mandible in occlusion and in the Frankfurt Horizontal Plane (figure 5.10) details the angle of the ear as does the temporal's association with the protusion of this soft tissue feature (Wilkinson 2004). Discourse concerning the earlobes whether attached or lobed has changed in the past decade with a new study demonstrating the mastoid process has minimal impact upon this trait (Guyomarc'h and Stephan 2012). Therefore, Dooey skeleton 41A, possessing forward jutting mastoids, will appear in final reconstruction as having free-lobed ears.

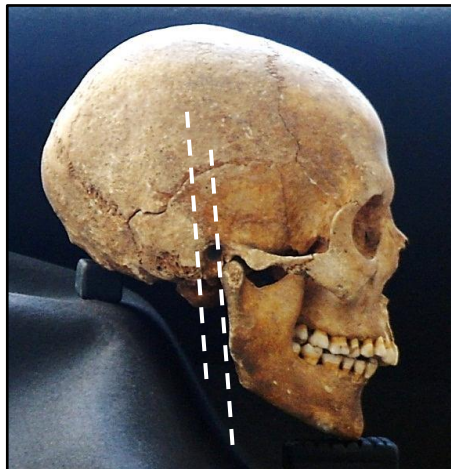


Figure 5.58: Utilising the jawline as an indicator for the angle of the ear of skeleton 41A

Facial Reconstruction

The facial reconstruction of skeleton 41A from Dooley, Co. Donegal was produced through the standards of the Manchester Method based on a plaster skull cast from the original skeletal material. Through comparisons of measurements of the cast of skeleton 41A, the craniometrics are directly proportional to the original remains (figure 5.11a). With the measurements in correct correlation to the individual's remains, the soft tissue depths were pegged and the anatomical portion of the reconstruction began with close inspection of the individualistic properties of anatomical origins and insertions of musculature and soft tissue layers.

After this first portion of the depiction of anatomical structures, the 'skin' is applied to the depth of the soft tissue depth pegs (figure 5.11d). The process of skinning is then continued, completing for the entire reconstruction. The soft tissue depths and their measurements are outlined within Appendix 1. In archaeological instances these act more so as guidelines to the process than rigorous definites. In the case of this particular reconstruction, certain soft tissue depths were undermined by a few millimeters as they made the appearance of the cheeks too full in the lower face for this young female.

As Dooley, Co. Donegal presents a young female, attempts were made to produce the youthful face of the individual at this period in time. The cheeks remain high and the formation of wrinkles or creases are not present, except for the nasiolabial fold which is presented due to the dictation of the presence of the canine fossae. As this is an archaeological reconstruction (as are all reconstructions here) a dimension of subjectivity comes into play in regards to hairstyle and accessories, which would not be included within the forensic realm of reconstructions unless absolutely associated with the individual. In this instance with skeleton 41A with Dooley, Co Donegal, a simple headscarf was added to the reconstruction.

This facial reconstruction of a young woman from the coastal site of Dooley, Co. Donegal illuminates brings the human face to a site in which very little study has been done. This woman was interred in a site known for its trade and intensive production of crafts for industrial means. It is very possible that she herself could have been embedded within this

dynamic. Impacting trade within and external to Ireland, the site of Dooey and its population, like skeleton 41A, were active in shaping a portion of early medieval life. With experiencing this face, we move to another individual which offers similar insights into another site of the growing part of the discourse of non-elite early medieval Ireland, Owenbristy, Co. Galway.

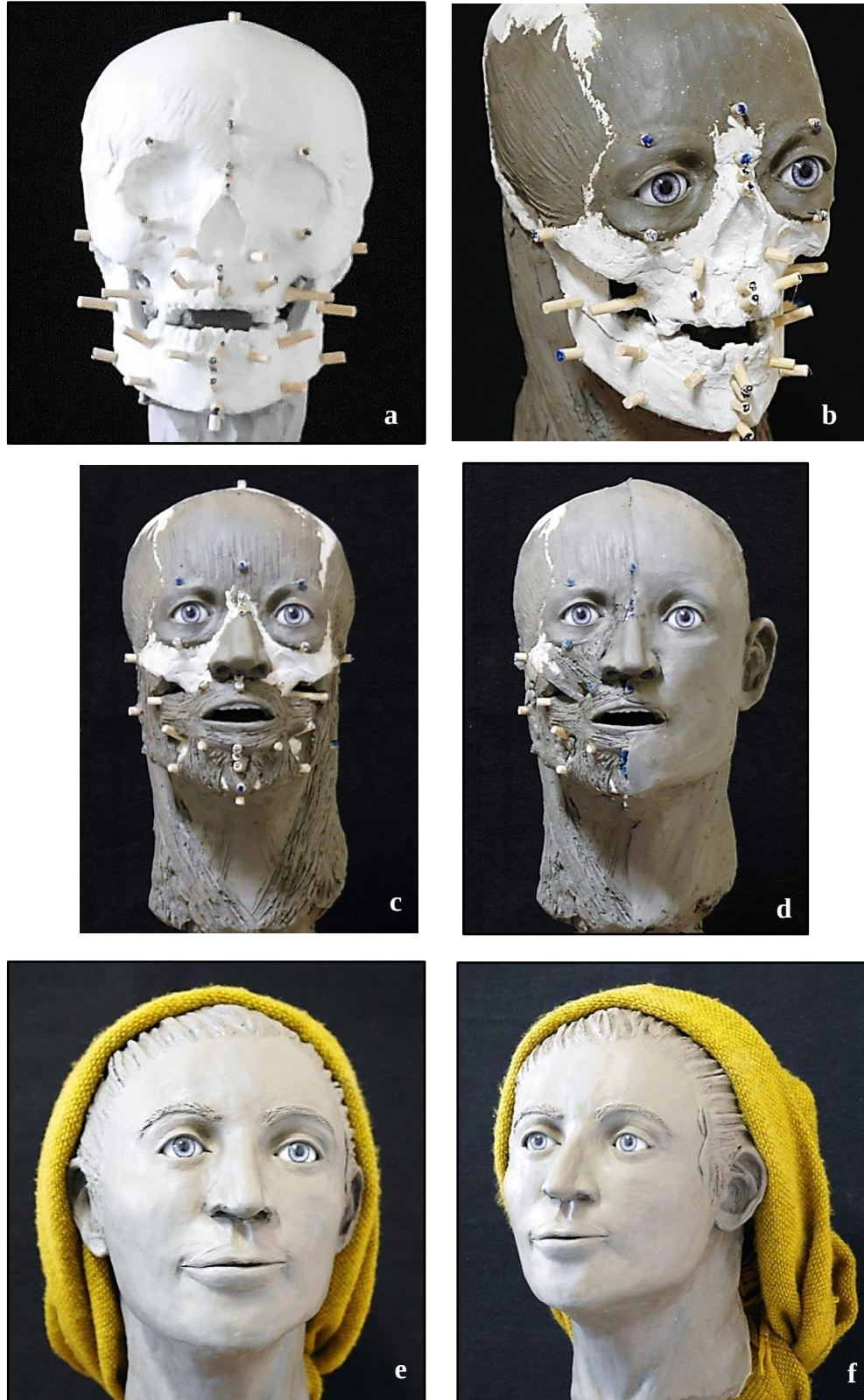


Figure 5.59a-f: **a)** cast of the Sk 41A skull with soft tissue depth markers; **b)** reconstruction of upper portion of the face; **c)** mid-way through the reconstruction of the anatomical portion of Sk 41A; **d)** face featuring complete anatomical reconstruction with the individual's left side skinned; **e)** completed frontal view of the final reconstruction of Dooley, Co Donegal Sk 41A; **f)** completed lateral view of the final reconstruction of Dooley Co Donegal Sk 41A

5.2 Owenbristy, Co. Galway

This section is devoted to the archaeological significance of the site and facial reconstruction of a late middle aged adult male from the early medieval site of Owenbristy, Co. Galway ranging from 400 – 1000 AD (figure 5.12a). Conforming to the structure of a cemetery settlement or settlement/cemetery (O’Brien 2011), this site provides the early medieval archaeology record with prime examples of the theme of this chapter in regards to Levinasian intersubjectivity. This thread appears in the instances of interpersonal violence in the early medieval era as well as in the development of mortuary contexts.

5.2.1 Site information

Not known prior to archaeological discovery and located on land used in recent centuries primarily for pasture of sheep and cattle (Lehane 2011), the archaeological excavation at the cemetery in Owenbristy, Co. Galway (excavation license: E3770) occurred from January to June 2008. Marked as a semi-circular (stone) field boundary on the second edition of the Ordnance Survey map, Lehane stated that however there was, “no local memory of the site and it was not a Recorded Monument (2011, 71). This is an interesting statement which aligns with the notion of discovery prompting archaeological imaginings.

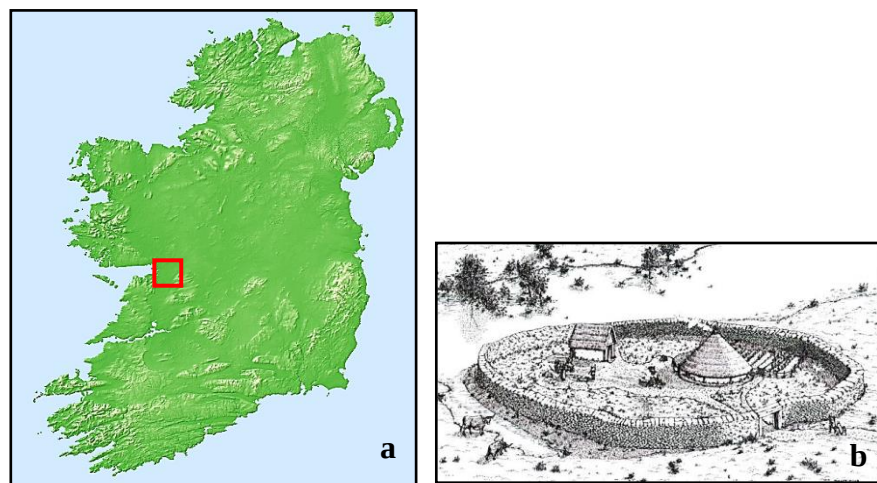


Figure 5.60a-b: a) Location of Owenbristy, Co. Galway; b) Drawing depicting a reconstruction of the enclosure at Owenbristy (Delaney *et al.* 2011)

Excavation revealed that prior to the construction of the enclosure Beaker period activity was present at the site as evidenced by the presence of artefacts such as a chert flake, flint knife, a roughout of an arrowhead, beads, and a fragment of a possible wrist guard (Lehane

2011, 73). Lehané also pointed to possible prehistoric deposits or early medieval clearance before the construction of the stone enclosure that do not yield a definitive date. There were few identifiable archaeological features within the stone enclosure, although pits, post-holes, and potential hearths did become apparent toward the centre of the site with associated finds, “forming a typical early medieval assemblage” consisting of bone and metal pins, knives, blades, beads, and fragments of several rotary querns (Lehané 2011, 75). In conjunction with the paucity of archaeological activity of Owenbristý, faunal analysis also demonstrates that this was not a settlement of frenzied occupation, “as it seems to have been based on cattle and a few sheep and pigs” with definite evidence of butchering and cooking (Lehané 2011, 75). This depicts a typical range of material from an early medieval site which depends on subsistence farming.

As this location is a cemetery-settlement (or settlement/cemetery), a mortuary context which emerged in the fifth century coinciding with the introduction of the supine extended burial type (O’Brien 2009), the burials at Owenbristý provided an important function for early medieval society as they served for deposition of deceased laity and became secular familial interments, while ecclesiastical sites were reserved for clerics, priests, church patrons, or other high-ranking individuals (O’Brien 2011). With these familial interment locations, ideological populations were heterogeneous with pagan and Christians represented as it was only after the eighth century that the Church began to create standards of burials with association with church cemeteries (O’Brien 2011).

The cemetery of Owenbristý occupied the eastern and south-eastern sector of the enclosure with a total of ninety-six individuals identified (Lehané 2011; Geber 2011) and excavated entirely allowing analysis (by Jonny Geber) of an assemblage that may represent an entire community or lineage of the same. The north/south rows of burials were interrupted by a series of pits and post-holes, possibly representing a wooden structure. Inhumations subsequent to the early medieval assemblage do appear as mainly infant and child burials, “confined to a small area within the southern half of the cemetery” (Lehané 2011, 79). The osteological analysis of this site and its human remains allowed an opportunity to investigate and examine, “a complete local population within a period from the third to the

16th century AD. The long chronological period of use of this cemetery suggest that only a rather small population would have used it” (Geber 2009, 59).



Figure 5.61a-b: **a)** South-west perspective of Owenbristy, Co Galway cemetery (Lehane 2011); **b)** Cemetery at Owenbristy, Co Galway illustrating presence of slab-lined and lintel graves (Delaney *et al.* 2011)

Active in two main phases: phase I encompassed the early medieval burials, dating from fourth/fifth – late eighth/ninth century (O’Brien 2011) with phase II commencing around the thirteenth century when it was reused as a cillín (Geber 2011). This cemetery contains thirty-nine simple pit graves and twenty-six slab-lined graves (lintels present or absent), all early medieval burials were presented in west/east orientation with all but one individual supine and extended (figure 5.13a and figures 5.13b). O’Brien (2011) postulated the span of time between occupations could be due to new incoming population’s lack of connection with previous peoples or that they knew of the burials and in a sense avoided the area, creating the absence of archaeological activity. One burial, skeleton 70, a possible male in late middle age appeared tightly flexed on their right side and dated to 548-651AD. This was a non-normative burial position in relation to the other burials at Owenbristy and when excavated, the individual also revealed an iron neck ring adding to the unique quality of the interment (Lehane 2011). Burials such as this will discussed in relation to intersubjectivity and the face in early medieval Ireland further within this chapter.

Geber’s analysis of the individuals interred at Owenbristy revealed a demographic profile of a normal population with highest mortality rates at young childhood, young adulthood, and after forty years of age (Geber 2011). Skeletal conditions and pathological changes were found among the population, which included dental afflictions (caries, periodontal disease, ante-mortem tooth loss, and periapical abscesses), degenerative joint diseases, and

few instances of the presence of infectious diseases (osteomyelitis, periostitis) (Geber 2011).

According to Geber (2011), a main characteristic of the Owenbristy population is the large number of individuals displaying evidence of interpersonal violence and perhaps traumatic deaths. Twelve individuals presented indications of sharp-force trauma, seven of which were robust males (aligning with the traditional thought of this demographic being the most likely to participate in conflict), two females, and two adolescents. These individuals with trauma represent “22% of the adolescents, 10% of the adult females and 31% of the adult males suffered violent deaths” (Geber 2011, 90). This corroborates information from elsewhere that violent attacks were not just limited to males in early medieval Irish society (Geber 2011).

There has been some debate over the wooden structure suggested by the presence of post-holes at the centre of the enclosure. O’Brien posited it is not a church, “perhaps a temporary mortuary structure or a very short-lived chapel” (2011, 95). She based this opinion on the following factors: the ceasing of burials in the ninth century indicating a move to an alternative ecclesiastical site; the radiocarbon dates provided by material from post-holes give a sixth/seventh century range which if it was a formal burial ground then would lead the expectation of more continual burial activity; if the wooden structure was a church it would mean that the location of inhumations would lie on the north side which would be very differential to the archaeological norm of burials lying to the south, east, or west; and finally, if the wooden structure was ecclesiastical in nature, the post-hole interruption of burials would illustrate that individuals were deposited within the building and highly unlikely practice for the early medieval period (O’Brien 2011). Delaney with Silke (2011) also mention that key characteristics of ecclesiastical sites such as a holy well, cross-marked stones, and bullaun stones are all absent. However, these are not necessary and are not always indicative of ecclesiastical sites.



Figure 5.62: Post-excavation plan of the cemetery at Owenbristy with skeleton 23 designated with a black circle (Lehane 2011)

However, those that posit the opposing conjecture in which the wooden structure of Owenbristy does constitute an ecclesiastical site cite that wooden churches would have definitively been present on sites prior to the tenth century (Hamlin 1985) and that this structure might not be visible due to preservation conditions. The inclusion of ecclesiastical features would indeed alter the nature of this site away from secular or familial settlement/cemetery, although this relationship with religious structures remains ambivalent.

5.2.2 Skeleton 23

Osteobiography

Skeleton 23 from Owenbristy, Co. Galway presents a (late) middle adult male in good preservation, interred within a slab-lined burial among the cemetery at Owenbristy (figure 5.14). Deposited in a west/east orientation and in a supine extended position, the mortuary context of this individual does not vastly stray from the ‘normative’ burial practices within the early medieval period. Sex assessment performed by Geber (2009; 2011) utilizing the cranium and the pelvis estimated that skeleton 23 was a male. This individual possesses a robust, upright mandible with gonial flare and a prominent chin. The skull of skeleton 23 has a moderately strong brow ridge, an extension of the zygomatic arch beyond the external acoustic meatus, and an overall rough surface because of the many muscle attachments still present (figure 5.15). The combination of these traits, with the additional information

derived from the analysis of the pelvis, coincide with the determination of these remains to be male.

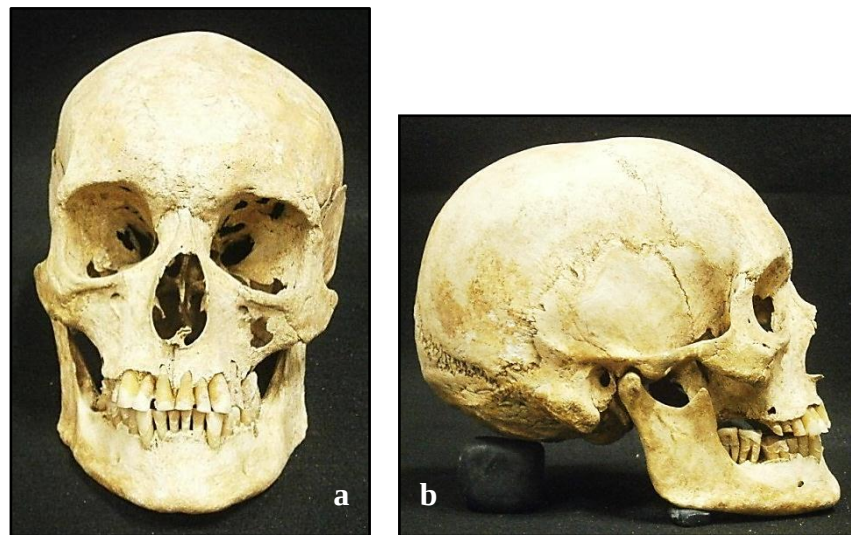


Figure 5.63a-b: **a)** Frontal view of Owenbristly, Co. Galway Sk 23; **b)** Lateral view of Owenbristly, Co. Galway Sk 23

Age assessment was provided by examining the pelvis and dentition. The pubic symphysis provided a broad age range of 34-86 and the auricular surface with alternative, more conservative range of 40-44 (Geber 2009). In further consideration, the dental wear (Brothwell 1989) illustrated a 33-35 year old individual, the final age at time of death can be posited as a (late) middle adult. Further metrics and measurement of the long bones of skeleton 23 suggest a stature of 169.76 ± 3.94 cm (Trotter and Glester 1952; Geber 2009).

The adult male of skeleton 23, 35-45 years of age, has an unusual dentition. The majority of teeth remained intact ante-mortem and shows this individual did suffer from several dental pathological conditions (considerable granulomas, caries) and a large amount of calculus (calcified plaque) accumulated (Geber 2009). In addition to the health of the dentition, this individual's teeth appear minute, with very little enamel present with particular evidence of this on the upper incisors. The appearance of these teeth is due to severe attrition that wore the teeth down from their original proportion.

In the post-cranial skeleton, this individual has transverse fractures on two left true ribs with no subsequent infection (Geber 2009). The nature of this injury is unknown, however it is possible that through the nature of transverse fractures, the individual sustained the fracture through a sharp, direct blow to this region or occurred due to a stress fracture from

occupational activity. The remaining post-cranial remains have many instances of degenerative joint disease and it is clear that this individual had an active lifestyle (see Geber 2009 for extended osteological analysis).

Soft tissue prediction

In the reconstruction process, the analysis and observation of skeletal material in isolation as well as in relation to the entire countenance is important for the prediction of soft tissue features. Beginning with the upper face of Owenbristy skeleton 23 (figure 5.16), we see the relation between the relationship between the orbits, nasal bones, and supraorbital ridge with a low nasal root and a moderately prominent brow ridge predicting an s-shaped or circular eyebrow pattern (Wilkinson 2004).

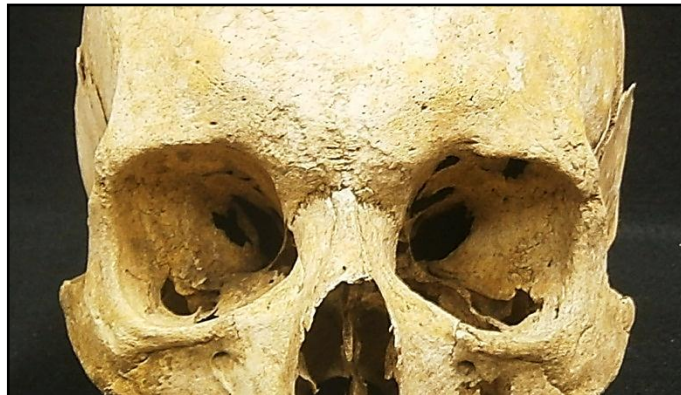


Figure 5.64: Upper portion of the face from skeleton 23, Owenbristy, Co. Galway

Predicting the line of the eye slant for Owenbristy skeleton 23, the trajectory appears as a horizontal line between the lacrimal crest and the malar tubercle (figure 5.17). The supraorbital rims, hangs down centrally. This trait, like many skeletal characteristics, possibly corrects itself to become again symmetrical in the appearance of the overlaying layers of soft tissue. The bony surface of the frontal is rough, consisting of possible sites for muscle attachment which would have enlarged the brow ridge or appeared as forehead creases and due to the individual's age, these wrinkles within the skin would have definitely been visible.

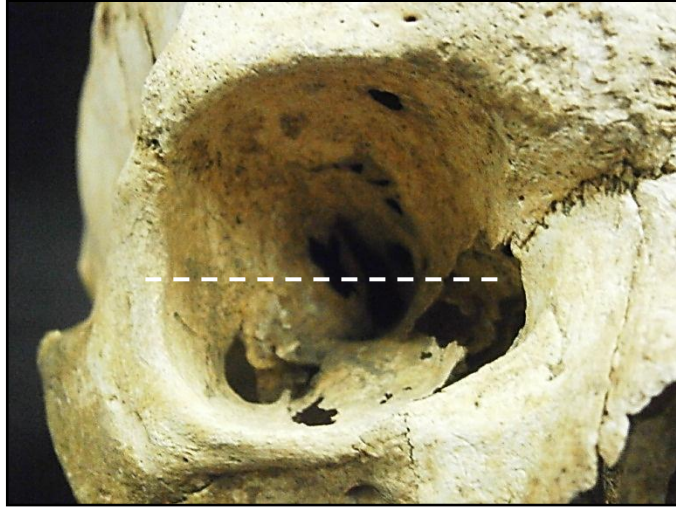


Figure 5.65: Right orbit of Owenbristly sk. 23 and the soft tissue prediction of the individual's eye slant

Focusing upon the nasal bones of this individual, we see a thin, oval aperture with a prominent lateral hook at the alare. This curved hook informs the appearance of the tip of the nose in the final reconstruction. The nasal spine, when in the Frankfurt Horizontal Plane, is straight denoting the horizontal direction of this columella (figure 5.18).

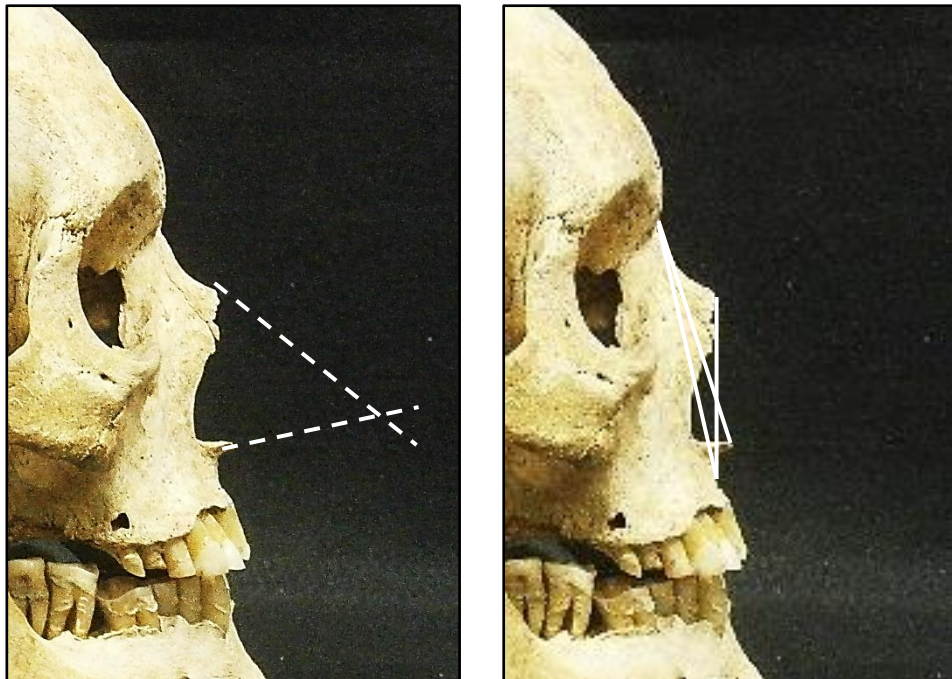


Figure 66: Gerasimov's two tangent theory (1975) and measurements by Rynn *et al.* (2010) when applied to sk. 23

The useful equations for this feature's prediction in reconstruction are illustrated in table 5.3. As with many instances of human remains in archaeology, the state of completion of

the skeletal remains for Owenbristly skeleton 23 is excellent with the exception of a few fragmented portions of the nasal aperture. This does affect the measurements and in predicting the overall appearance of the nose and should be noted as a potential source of error.

Measurement for Prediction (mm)	Dooley 41A Measurements	Predicted Dimension	Simplified Equation	Dooley 41A Results
Nasion – Acanthion (x)	49.53mm	Pronasale anterior projection	$0.83Y - 3.5$	24.42mm
Rhinion – Subspinale (y)	33.64mm	Pronasale vertical height	$0.9X - 2$	42.58mm
Nasion – Subspinale (z)	53.21mm	Pronasale projection from subspinale in Frankfurt Horizontal Plane	$0.93Y - 6$	25.29mm
		Nasal length	$0.74Z + 3.5$	42.88mm
		Nasal height	$0.78Z + 9.5$	51.00mm
		Nasal depth	$0.4Y + 5$	18.46mm

Table 5.5: Measurements and profile regression equations (Rynn *et al.* 2010) applied to Owenbristly sk. 23

The appearance of the lips of skeleton 23 was difficult to assess due to the attrition of the individual's dentition. The formula for the prediction of the thickness of the lips is based on the notion that the full upper and lower incisors will be present for measurement, but in the case of skeleton 23 and his lifestyle, these teeth in particular became worn down (figure 5.19). Most certainly, the individual had a larger proportion of enamel prior to the amount of attrition or activity that took place. As such, the equation based upon Wilkinson and colleagues (2006) offers a smaller version of how this feature originally appeared (table 5.4). For reconstructive purposes, the upper and lower incisors were measured (by callipers) from the existing extent of the enamel to the beginning of the root, which provides a very minimal dimension. This is a potential source of error for the appearance of the soft tissue lips, as the measurements taken were of the small amount of dental enamel.



Figure 5.67: Close-up of the dentition of Owenbristy sk. 23

Owenbristy 23 Measurements	Simplified Equation	Owenbristy 23 Results
4.07mm, 2.96mm (avg. 3.52mm)	$0.4 + 0.6 \times (\text{upper teeth height})$	Upper lip thickness = 2.51mm
5.98mm, 5.87mm (avg. 5.93mm)	$5.5 + 0.4 \times (\text{lower teeth height})$	Lower lip thickness = 7.87mm

Table 5.6: Predicted lip thickness of Owenbristy skeleton 23 based upon Wilkinson and colleagues (2006)

The dentition has a primary effect upon the structural appearance of an individual's lower face, as does the shape and form of the mandible. The frontal view of the mandible (figure 5.19) shows masculine traits with two points and a slight groove with the prediction of a slight cleft within the chin. While skeleton 23 has an obtuse gonial angle, the ramus is broad with a short, low coronoid process (figure 5.20) indicating perhaps a round or square jawline (Wilkinson 2004).



Figure 5.68: Illustration of the lower face variant of Owenbristy, Co Galway (sk 23)

The final feature to discuss for this late middle adult male from Owenbristy, Co. Galway are the appearance of the ears, which as we have discussed previously have very little

association with the bony landscape beneath. The appearance of the mastoid processes and the protrusion of the temporal aspects of the skull indicate the appearance of lobed ears with a possibly prominent helix with slight outward protrusion of the upper ear (figure 5.21).

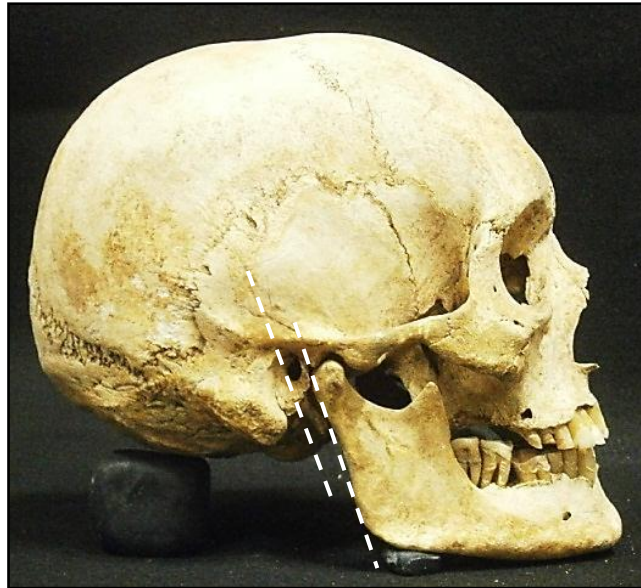


Figure 5.69: Angle of the ear based on angle of the mandible

Facial Reconstruction

Similar to the previous example in this chapter (skeleton 41A from Dooley, Co. Donegal), the individual from Owenbristy was reconstructed in the methodological standards put forward by the Manchester Method (figure 5.22a-f). The reconstruction of Skeleton 23 was produced with the same progression of systematic observation of the skeletal material and sculpting of anatomical features with final addition of skin and features as all reconstructions featured within this research.

A portion of the reconstruction process is to augment the re-construction with the observable physiological changes that occur with age. These are justifiable additions to the surface of the skin due to information gleaned from osteological material. Therefore, Owenbristy skeleton 23 was given infraorbital, lower lid creases as well as lateral canthi creases, forehead creases, and nasiolabial creases which all occur with advancing age. It is also possible that this male during his life in the early medieval period had facial hair, as has depicted in many of the images from this period. However, he is depicted here as

without this feature on subjective choice alone. Stylized version of the hair of this individual is also present in conjunction with (art)historical renderings of early medieval individuals.

From this final reconstruction, we see a man from a site in early medieval Galway who led a particularly active life with evidence of this habitation appearing on his skeletal remains. The site of Owenbristy experienced notable levels of violence and the appearance of emerging homogenization of mortuary contexts occurring within Ireland. Unlike the population that fell victim to the violence that occurred in this area, skeleton 23 from Owenbristy is an example of the many and numerous ordinary burials that constitute the (bio)archaeological record. Even with the deemed ‘normal’ interment (orientation, supine position, inclusions, skeletal remains), this individual’s face is now a presence within the larger narrative for this period in time and speaks to us through the sphere of time and space.

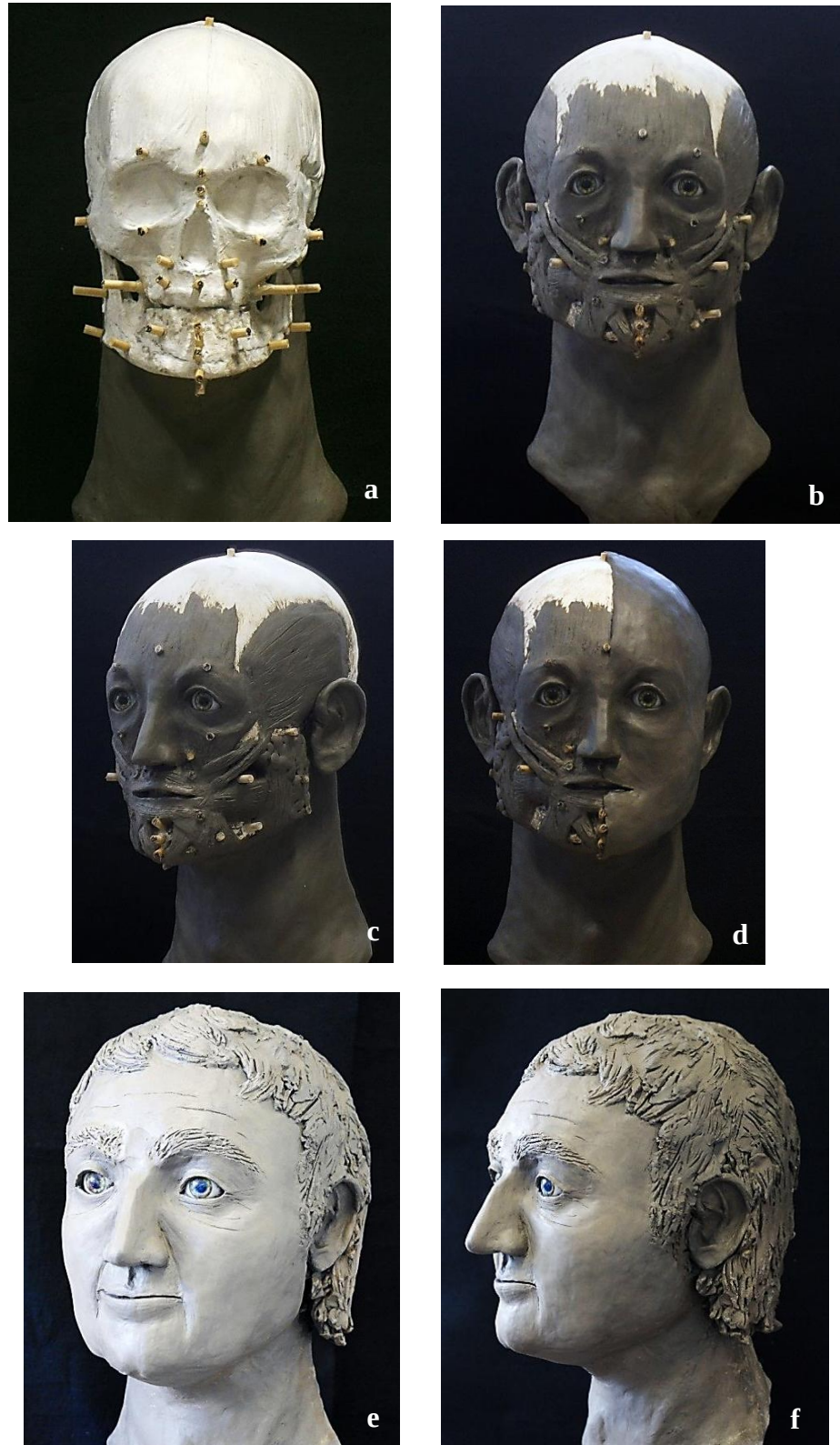


Figure 5.70a-f: **a)** Plaster skull with pegged soft tissue depths of Owenbristry, Sk. 23; **b)** Completed rendering of anatomical structures of the individual; **c)** Anterolateral view of anatomical structures of skeleton 23; **d)** The beginning of the skinning process; **e)** Skeleton 23 final and completed reconstruction; **f)** Lateral view of the final reconstruction of Owenbristry, Co. Galway skeleton 23

5.3 Intersubjectivity and early medieval mortuary practices

The individuals from Dooey, Co. Donegal and Owenbristly, Co. Galway re-constructed here (one male and one female, one younger adult and the other a late middle adult) were interred within the sociocultural norms that accompanied the early medieval period. These faces are also pertinent to the discussion to follow as they are our window into the gaze of humanity which populated this time period. As the definition of intersubjectivity and its presence in archaeology has previously been expressed at the beginning of this chapter, its consideration of the mortuary practices and burial record of early medieval Ireland is a forthright engagement with such a principle. The lived body or the embodiment of a being (in its communal sense) is the site for manifesting intersubjective sharing.

The body while situated in the physical shared realities of others is also shaped by a range of abstracted consensuses (at times adversities) towards collective, mutual understandings. Intersubjectively acknowledged traits become shared throughout a community and in a manner of speaking, become normalized. Notions of the lived body and its depositional interment became homogenous as the early medieval period continued and developed through to later periods. As burial practices change over time, they can be an indicator of social or ideological shifts in a population or community (Balter 2005). From mortuary practices of the prehistoric period which tended to be cremations, secondary deposits, or crouched inhumations (Waddell 2005) the early medieval mortuary practices provide a different way in which individuals were interred and the deposition of associated materials.

Predominantly attributed to the Christian religious structures, a mortuary context emerged which became embedded within the psyche of the Irish population. This increasingly rigid treatment of the dead and the afterlife meant those burials which deviated from the normative context would be interpreted as socio-culturally different from the remainder of the archeologically visible populations. This prompts the significance of how ‘deviant’ or non-normal burials can influence the archaeological imagination of these individuals and their place within past societal frameworks (Balter 2005; Reynolds 2009; Murphy 2010; Taylor 2010). The inherent problem with the discourse of burials in early medieval Ireland

is that the traditional interpretations of mortuary contexts impoverish the true nature of the other and their intersubjective role during interment.

Levinas stated that it is in the ethical relation towards one (an)other that the self creates its worth in social formation (1961; Peperzak 1993; Crossley 2002, 15). Crucial to intersubjectivity is the idea of radical otherness (discussed in chapter two). While many theories of this concept try to bridge the gap between the self and the other by pointing to similarities of interaction, this glosses over the real motivation of the intersubjective nature: that the other is other than me and coincidentally not as intertwined as would be previously posited. In Levinasian terms, intersubjectivity from the outside may seem like a symmetrical giving-and-taking between two equal parties, but in actuality the very beginning of the relation presupposes an obligation upon the self towards the other person, making them more than your equal (Critchley 2002). This concept is sometimes lost in the sea of empathetic or emotive quandaries that scholars place upon the mortuary practices that became so prevalent and normalized in early medieval Ireland. It seems like a natural response to the nature of death to be empathetic towards those it affects the most, however as Zahavi noted the Heideggerian conclusion that the resulting use of empathy is actually the breakdown of one's ability to understand the common world, so much so that when this event of mis-understanding takes place, only then is empathy used to attempt to understand others (2001, 155).

In the (bio)archaeological evidence of the early medieval Irish mortuary contexts, intersubjectivity can still be seen as the foundation and basis for the living's actions in interring the deceased. Therefore, the treatment of the dead is a vital intersubjective action and the (bio)archaeological evidence of this is greatly important to understanding the past consciousness. Past populations' interaction with this philosophical notion starts and ends with the face (both in physiological and theoretical terms). Its implications resonate through a facet of this study, namely the fascinations of the past that arise with the archaeological imagination.

The importance of intersubjectivity in mortuary practices is the explicit simplicity that it is the living that inter the deceased. Whether the mortuary practices were a community affair or one-on-one basis, this is a highly interaction-laden process with embodiment. At

once the body can be given status as either object or being, sometimes simultaneously, and the deposition – the physical deposit of the body into the subterranean grave (and how this act is manipulated) – elicits the ethical (asymmetrical) nature of intersubjectivity in which Levinas posited is the beginning of attempting to understand the other in their otherness.

5.3.1 ‘Normative’ early medieval burial practices

The theoretical thread of intersubjectivity is apparent in the mortuary practices that become prominent in the more archaeologically visible early medieval period. The varied interaction within mortuary contexts illustrates the plurality of the intersubjective nature that is apparent in the archaeological narrative. The role the face plays within the intersubjective nature of mortuary practices is that it prompts the connection and obligation of the self to the other. When this gaze is disrupted, as in non-normative burials, a new type of intersubjective relation is manifested.

In the recent decade, scholarship concerning the mortuary practices in the early medieval period has increased. Through synthesized examinations of the early medieval landscape (O’Brien 2009a; Corlett and Potterton 2010; Cahill and Sikora 2011) burial practices and mortuary contexts have been shown to vary from fifth/sixth century to later early medieval ecclesiastical sites. In the early medieval period, deposition of the dead appears in a range of contexts. This variance appears in features such as location, body position, or grave good inclusions. However, the most common burial context for early medieval interments are inhumations; whether they are supine, prone, crouched, or flexed. These inhumations can take on a range of appearances from earmuff burials, stone lined graves, wood lined graves, or simple earth cut graves (O’Brien 1992; 2009a). While O’Brien (1992) mentioned that the majority of supine inhumations are generally unfurnished and can be either slab-lined, outlined in stones or simple earth-cut graves (figure 5.23a and 5.23b), there are deviations of this pattern in the appearance of cremations at sites like Forenaughts Great, Co. Kildare (Grogan 1984); Furness, Co. Kildare (Grogan 1984); Carrickmines Great, Co. Dublin; Prumplestown Lower, Co. Kildare (Clarke and Long 2010); Ask, Co. Wicklow (Stevens 2012); Knoxspark, Co. Sligo (Mount 2010) and further examples of pronouncedly ‘deviant’ burials (see the following section 5.3.2).

The range of (bio)archaeological contexts has led scholars to develop chronological dating of graves. For instance, O'Brien (2003; 2009b) has proposed that stone lined slabs date towards the fifth/sixth century while later inhumations appear in a lintel fashion. Although this interpretation has been altered due to recent radiocarbon dates which demonstrate that lintel graves can be dated earlier than stone lined graves (Cahill and Sikora 2011; Prendergast 2011). Along with this attempt in dating according to grave context, the artefacts associated with burial are also thought to be indicative of chronological and ideological transitions. Variances within mortuary contexts are important to note and could alter subsequent interpretations of the archaeology.

The deemed 'normal' supine, extended burials of this period, demonstrate that the power of the face though dead still commands an acknowledgment of the other's presence. With the face exposed towards the viewing individual(s) performing funerary rites, the deceased is still acknowledged as the other. It is asserted here that when inhumations shifted towards burials in a shroud, which was common in the early medieval period (O'Sullivan *et al.* 2013), the gaze upon the face and the ultimate confrontation of death was diminished and transposed into an increased emphasis on the funerary rite. This increased emphasis on funerary rite manifested cathartic releases which religious superstructures offered. This emphasizes the importance in the deposition of the body during interment. The treatment of the face (previously the 'head' before the theoretical detachment in section 2.2.2) should be noted in the overall analysis of the individual or community's mortuary treatment.



Figure 5.71a-b: **a)** A lintelled grave from Collierstown 1, Co.Meath (O’Sullivan *et al.* 2013); **b)** Supine extended burials within the Johnstown, Co. Meath enclosure (Clarke 2002)

Sites that furnished our faces for this chapter from Dooley, Co. Donegal and Owenbristy, Co. Galway would be in company with the many other settlement-cemeteries (also termed ‘secular cemetery’ (Stout and Stout 2008), ‘cemetery settlement’ (Ó Carragáin 2010), ‘settlement/cemetery’ (Kinsella 2010)) of the early medieval period. These communal burial grounds in association with a habitation site rather than with an ecclesiastical site are also found in Raystown, Co. Meath; Corbally, Co. Kildare; Johnstown, Co. Meath; Mount Offaly, Co. Dublin; Cherrywood, Co. Dublin; Balriggeran, Co. Louth, with many more examples available (O’Sullivan 2013). Ardsallagh 1, Co. Meath which provides extremely early radiocarbon dates from the first to seventh centuries AD has a grave type distribution comparable to Owenbristy, Co. Galway with both simple grave cuts and a few stone-lined graves being excavated (Channing and Randolph-Quinney 2006). Both of the reconstructed individuals give a face to this type of site and its larger emphasis to the communal, non-ecclesiastical qualities of early medieval Irish society.

In a broad embodied sense, the early medieval burials were heavily utilized bodies in an ancestral, politicized nature as boundary markers in that the distribution of interments was noted to coincide with the edges of particular topographical locations (Kelly 2006; O’Brien 2009a). Therefore the body in this era of time, and especially in its placement in the archaeological record, is a site for embodied symbolic purposes that make the body, and by

extent, the face, viable to discuss in an intersubjective nature. Through the overview of normative burial practices this feature of theoretical inquiry illuminates the face as an important motivator for prompting intersubjectivity and understanding the past consciousness of interpersonal relationships.

There is an increasing amount of human osteological material from the early medieval period that provides insight to life and death of this population through a diverse set of assemblages in grave location, body position, and associated material depositions (O'Sullivan *et al.* 2013). This leads to the supposition that perhaps there is no way of discussing the 'normal' burial of early medieval Ireland. Burials diverse in both ritual and content (O'Sullivan *et al.* 2013) that compose the 'normative' burial record of Ireland (and the interaction with the face which prompts intersubjectivity) establish the discourse for subsequent deviant burials.

5.3.2 Deviancy or non-normal mortuary contexts

Though there was a varied and diverse range of mortuary rites in early medieval Ireland, inhumations that completely diverged from these codified manners of burial are readily considered 'deviant' or 'idiosyncratic' burials (O'Sullivan *et al.* 2013). As the people of the Christianized early medieval period had already categorized the prehistoric burials as pagan and their cist-lined, crouched inhumations as the formal qualities for such, a consciously embedded motivation appeared amongst the people to standardize burials so as to separate themselves from the prehistoric burials they encountered in the landscape.

Fully aware of the implications when burying their dead, the people of the early medieval period used these mortuary practices to build an identity for themselves. Therefore, 'deviant' or 'idiosyncratic' burials also constructed a type of identity for deceased peoples. These divergent inhumations are included because they offer a glimpse into the past populations' interaction with those who were marginalised within early medieval society. These are not rigid categories but demonstrate that there is a spectrum of burials illustrating dynamic ideologies toward the treatment of the dead.

Prone burials are an interesting topic in Ireland and in a broader context of Western Europe (O'Brien 1999; Reynolds 2009; Murphy 2010). Fear of the dead (Caciola 1996; Tsaliki 2008), the dead returning to haunt the living (Simpson 2003), punishment for suicide (Fry 1999; Arcini 2008), disability (Metzler 2010; Taylor 2010) are all common theoretical explanations for deviancy in burial. O'Sullivan and colleagues posited that these deviant burials of the early medieval period could be, "ritual executions or political acts; or they may relate to the treatment of strangers, the victims of plague or violence, or other socially marginalised people; or the hasty burial of a person at a time of stress or danger" (2013, 285).

These face-down burials are not uncommon in the early medieval Ireland appearing at a range of sites, such as: Ardnagross, Co. Westmeath; two prone burials (128 and 133) from Johnstown, Co. Meath (mappingdeathdb.ie); Faughart Lower, Co. Louth (Bowen and Dawkes 2007); Ardreich, Co. Kildare (Troy 2010); Killeany, Co. Laois with thirty-nine cut marks denoting severe trauma (Wiggins and Kane 2009); Mount Offaly, Dublin (Simpson 2007); and Marlinstown, Co. Westmeath (Keeley 1991).

All of the aforementioned literature concerning prone burials has neglected to discuss the role of the Levinasian face in the interment of the deceased and the power it holds in relation to the other and the important ramifications of it being denied in these circumstances. However, it is here that the supposition is put forth that the inhumations such as prone burials where the face is positioned in an impoverished context meaning it is disconnected from the gaze of the living. This has severe implications for the connection towards the relationship between the two parties. The downturned face eradicates any responsibility the living has for the individual because with the face turned down the body can be objectified and therefore de-humanised. Even further suppression of the other's presence is evident when the prone burial is augmented with additional trauma to the osteological material such as that example from Augherskea, Co. Meath who demonstrated evidence of execution (Baker 2004) and the above mentioned from Killeany.

Critchley captured this dimension of Levinas's philosophy affirming, "Levinas's point is that unless our social interactions are underpinned by ethical relations to other persons, then

the worst might happen, that is, the failure to acknowledge the humanity of the other...where the other person becomes a faceless face in the crowd, someone whom the passer-by simply passes by, someone whose life or death is for me a matter of indifference” (2002, 13). As detailed above, there are various other interpretations of prone burials, but ultimately in the Levinasian interpretation of this burial context, this is what prone burials accomplish – indifference to an individual’s status as the powerful other.

The cemetery at Knoxspark, Co. Sligo offers interesting illustrations of burials which are unusual for the early medieval period. For instance, a double burial of two adult males, both decapitated, with arms linked. One of the men’s (burial 75) decapitated head had been placed separately into the grave, while the other male (burial 4, dated to the eighth to tenth century (mappingdeathdb.ie)) had a rearticulation of the decapitated head and is associated with a socketed spearhead (Mount 1995). Another multiple burial (burials 34, 38, 39, 49) at Knoxspark consisted of a headless adult (potentially female) and three children. One child had no head present, one had a head present but disarticulated, and the third was articulated with complete skeletal material. The burials in Knoxspark could have been due to the tight space of the multi-period site which would lead to intercutting grave patterns and then possibly explains the absent skeletal material. In similar fashion, three double burials were found at Ardsallagh 1, and in each instance consisted on an adult interred with a juvenile (Channing and Randolph-Quinney 2006).

Another notion of ‘deviancy’ arises from use of location. Perhaps perpetuated due to the implemented Christian frameworks of ‘clean and unclean’ in addition to the pagan fear of the dead (Reynolds 2009; Balter 2005), the use of non-cemetery locations to inter individuals would also create a marginalised burial which impinges upon the deceased’s full sense of intersubjectivity by not being interred with the rest of their worldly community. This is seen in such examples as remains found in the floors of early medieval houses in Newton, Co. Limerick (Coyne 2006); in cave sites such as Cloghermore, Co. Kerry (Connolly 2000; Connolly and Coyne 2000) and Kilgreany, Co. Waterford (Dowd 2001, 2002; Movius 1935); those discarded in ditches such as Dowdstown 2, Co Meath (Cagney and O’Hara 2009); or in pits such as Lismullin 1, Co. Meath (O’Connell 2009); or more interestingly a context such as a previously used cereal-drying kiln at Raystown

(Seaver 2005) and Colp West, Co. Meath (Murphy and Clarke 2001). Remains that have been deposited in a ‘careless’ or in a manner evident of hasty burial speaks to the diminished ethical asymmetrical relationship towards that other.

The inhumations of individuals with pathological changes or chronic ailments are part of the discourse concerning the treatment of the ‘handicapped’ (Metzler 2011). A crouched inhumation at Mount Gamble, Co. Dublin when analysed was discovered to display severe spinal degeneration (O’Donovan and Geber 2010). This burial is not as ‘deviant’ as for instance, the remains deposited within the cereal-drying kiln of Raystown or Colp West, however in consideration of how the individual was buried and the type of pathology she presented, it is an interesting remark on the individuals performing the interment.



Figure 5.72: Burial CXXV showing an exemplary example of the use of disturbed skulls as ear-muffs which was a feature of the cemetery at Golden Lane, Dublin (O’Donovan 2008)

Parknahown, Co. Laois (Ó Néill 2010); Cherrywood, Co. Dublin (Ó Néill 2006); Mount Offaly, Co. Dublin are sites with examples of ear muff burials with an interesting deviating example of pseudo-ear muffs composed of disarticulated skulls seen in Golden Lane, Dublin (figure 5.24). This interesting example of the curation of the skull is a fascinating example in its use not as the presence of the face but instead an insistence on its object-ivity – the curation of bodily material as purely a thingly replacement for the tradition of earmuff burials. Additionally, the attempt to create an earmuff burial which has been discussed as ‘normative’ in the previous section is a unique note of appropriate and creativity in the interment of an individual. This simultaneous interplay between the context of human remains as human and support for human remains as a mimic to the tradition of burials is an example worth value in the broad spectrum of the face in the (bio)archaeological record.



Figure 5.73: Mount Gamble, Co. Dublin skeleton CXCI with re-attachment of decapitated skull (Geber 2012)

Skeleton CXCI from Mount Gamble, Co. Dublin (figure 5.25) is an appropriate example to transition from non-normative burials towards the next section of interpersonal violence within the early medieval period. This 18-25 year old male has been radiocarbon dated to 782-982AD (Geber 2012). His non-normative burial regards the re-articulation of his decapitated skull and bodily trauma. This placement of the decapitated head theoretically ignores the violence which this individual endured and his ‘wholeness’ was restored. The face being re-positioned in the natural attitude resonates to the Levinasian qualities of the face and its importance for human connection. However, other individuals who have died because of violent injuries are not always given a non-normative burial context. The link between skeletal trauma of the early medieval period and intersubjectivity will be examined next.

5.3.3 Interpersonal violence

The absence of concern for the other is an important interlocutor in the social underpinning of violence. This results in the deprivation of the self’s full obligation to and reduction of the other. The other is not fully realized in instances of violent trauma and according to Levinas, this is the foundation of why violent disasters occur (Schroeder 1996). Contemporary archaeologists can experience these instances within the visible archaeological record. There are many instances of interpersonal violence in the Irish (bio)archaeological record, but presently these are discussed in particular relation to intersubjectivity within the early medieval period with supporting case studies.

Early medieval Ireland (400 –1170 AD) experienced the beginnings of the influx of populations from the east. This entrance of external demographics into a population which would have seen several previous phases of incoming populations, “resulted in a plurality of ethnic and cultural identities that resulted in interactions that were often antagonistic but also characterized by processes of hybridity and syncretism” (O’Donnabhain 2011, 122; Graham 2000). While existing in Ireland before the presence of the Vikings (with appearances in the literary tradition of the annals and heroic tales penned by clerics from the sixth century onwards), decapitations are traditionally interpreted to have increased with the more frequent interactions between Christian Irish and Pagan Vikings. This view has been revised by research from Carty (forthcoming) which provided bioarchaeological evidence throughout early medieval Ireland that trauma and decapitations were in practice before the entrance of Viking populations (figure 5.26). It was in the later early medieval period when these occurrences were recorded in either law tracts, Annals, or poetry. According to O’Donnabhain (2011) the collection and curation of skulls evolved to be a recorded context from the end of the eighth century onwards.



Figure 5.74: Viking skull from Fishamble Street (Kissane 1986)

The nature of decapitations and its further documentation as a performative and cultural phenomenon within this period’s records illustrates that it was deemed in fact a societal tool used either for judicial or vengeful reasons (O’Donnabhain 2011). Found at elite sites such as Lagore, Co. Meath, Ballinderry 1 and Ballinderry 2, or the Viking site of Wood Quay, Dublin decapitated skulls were positioned for purposes of display (O’Donnabhain 2011). Written sources from this time correlate to the archaeological evidence. Found in sources such as the *Fragmentary Annals of Ireland*, *Annals of the Four Masters*, and the *Annals of*

Ulster, there is a long tradition of heads being taken as trophies to signify defeat in battle (O'Donnabhain 2011, 126 for excerpts). However, perhaps the most fascinating excerpt comes from a story regarding the power of the head after it has been decapitated:

“Then the warrior heard mournful piping and song; and he heard then in the clump of rushes next to him a war chanting that was sweeter than any music. The youth went towards it. “Do not come to me,” said the head to him.”
Fragmentary Annals of Ireland, AD 722 (FA178) (Radner 1978).

It is put forth that the act of authority in displaying decapitated heads does not stem solely from the violent act of severing the head from the body, but instead from the curation of the face that the public looks upon. It is the additional consideration of the commanding imposition of recognising a decapitated face that would be displayed in a prominent location instead of just the traditional interpretation of severing the treacherous, individual head with the body which belongs to the state (or political body) (Bongofsky and Larsen 2011).



Figure 5.75a-e: **a)** Charted disbursement of violent trauma to Owenbristy skeleton 42; **b)** Knife marks and stabbing on the right femur; **c)** Medial view of pubic bone and trauma; **d)** Lateral view of pubic bone and indications of trauma (Geber 2012); **e)** Interment of skeleton 42 from Owenbristy, Co. Galway (Geber 2012)

Looking toward examples which correspond to the origins of the facial re-constructions at the outset of this chapter, skeleton 42 from Owenbristy, Co. Galway (figure 5.27a-e) possesses an individual with severe traumatic injuries. Containing one hundred and twenty seven cut marks, this male was interred in a completely dismembered state with the skull decapitated and absent (Geber 2012). According to Geber (2012), skeleton 42 was victim of genital mutilation (figure 5.27c-d) which poses significant consequences to the

biological and symbolic manner in which this individual was treated. While indicative of extreme violence, the deposition of this burial differs vastly from the ‘restored’ burial of a decapitation with a normalised context like CXCI from Mount Gamble, Co. Dublin (figure 5.25). The heterogeneity of the violence and the forms of burial of these individuals is again part of the plurality of intersubjectivity that appears within the (bio)archaeological record.

Comparable burials of violence and incomplete deposition comes from Ratoath, Co. Meath and Knoxspark, Co. Sligo. Burial 12 from Ratoath is a tightly flexed inhumation that is missing the head, hands, and feet (Fibiger 2010). Radiocarbon dated to 426-601AD (2sigma Beta-198504; mappingdeathdb.ie) this dismembered male is another illustration of the violence and deposition of the true breakdown of the ethical relationship and intersubjective encounter. This is similar to other interments at Knoxspark, where nine burials had no skulls and sixteen were of skulls only (Mount 2010). It is posited that these individuals’ sense of ‘wholeness’ of being was entirely obliterated and shattered with the most vital identifier of the skull and face absent. Making the deposition of this male in complete disorder which would have been an affront to the potential transference from his earthly situation to the heavenly as completeness of an individual in death would be echoed for that in eternity.

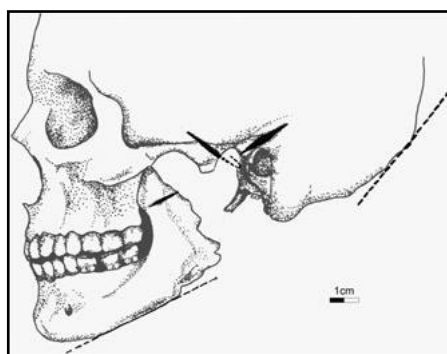


Figure 5.76: Lines indicating cut marks on skeleton CCLX from Mount Gamble, Co. Dublin on his left external acoustic meatus, temporal, and mandibular ramus (Geber 2012)

As decapitations did occur throughout the early medieval period, there also occurs other types of facial interference to the site important for the creation of intersubjective experience. Early medieval 26-35 year old male skeleton CCLX from Mount Gamble, Co. Dublin had an array of injuries upon the entire post-cranial remains, even with knife cut

marks to his feet (Geber 2012). With the appearance of skeleton CCLX's cranial injuries, it is possible that the left ear was cut completely off but that he was not beheaded (figure 5.28). This trauma would be indicative of a facial mutilation, perhaps even the ear as a trophy/signifier that the whole of the face had been corrupted by dismembering its parts.

Aligning with the hypothesis that it would be typically adult males involved within interpersonal violence, or if at a state level warfare, the osteological evidence concurs with this statement and can be illustrated in multiple sites (in extreme example, Raystown, Co. Meath provides a male individual with one hundred and ten cut marks (Fibiger in Geber 2012)). However, there must have been instances of violence against other non-combatant demographics which prompted the appearance of laws such as *Cáin Adomnán* (also known as *Lex Innocentium* or Law of the Innocents) which were created and entered into early medieval documentation to protect these non-warring societal stratifications (O'Brien 2011). The fact that these laws were necessary indicates there were a significant number of traumatic instances to women, juveniles, clerics, and other persons not of a warring social class who needed the protection of legal consequence.

The gendered binary previously articulated within this research (section 2.2.3), stated that through the separation of entities of head from face there can be seen a masculine notion towards the treatment of the head within the overwhelming confines of craniometrics from the past few centuries and the newly discovered and overlooked feminine qualities of the fleeting, ephemeral (and infinite, according to Levinas) of the face and its multiplicity of traits. Therefore, it is not surprising to find violence upon the female face as this location would be a much more sacred location to interfere with, scar, or mutilate.

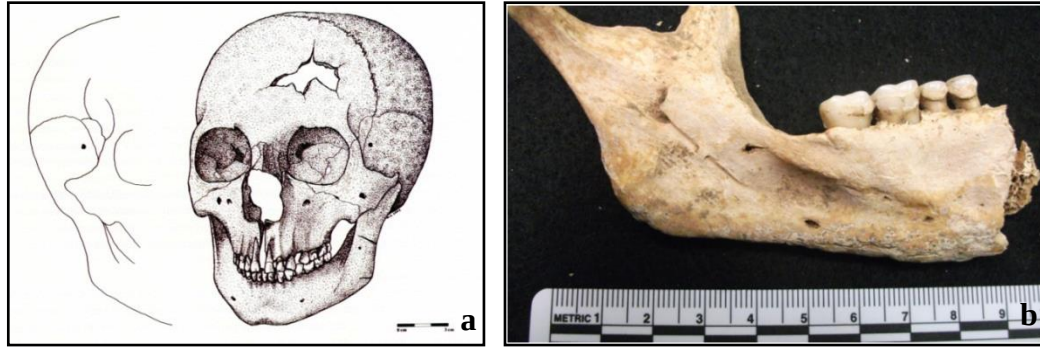


Figure 5.77a-b: **a)** Evidence of facial trauma and mutilation of an adult female (skeleton 73) from Owenbristly, Co. Galway (Geber 2011); **b)** Skeletal trauma seen on the mandible of skeleton 484 from Parknahown, Co. Laois (Carty, forthcoming)

An example of such aforementioned trauma in terms of violent experience towards women comes from skeleton 73 from Owenbristly, Co. Galway. This female dated to the seventh century, aged 25-35 years, suffered multiple stab wounds on the face, a sharp-force blow through the stomach, and eventual decapitation (Geber, 2011; figure 5.29a). Skeleton 73 is the first recorded evidence of eye gouging in the Irish archaeological record (Geber 2012) and forms a narrative of violence throughout all demographics of society that is becoming more apparent as material and interpretation arises. An additional example of female facial mutilation appears in Parknahown, Co. Laois (figure 5.29b). Skeleton 484, aged 18-25 years, displays evidence of stab wounds similar to Owenbristly skeleton 73, with additional wounds to the internal and external surface of the mandible interpreted as possibly having the tongue cut out (Carty forthcoming).

The evidence of violence upon these females' countenances is a complete breakdown of the site that forms the otherness. The act of intersubjectivity that took place during this traumatic occurrence is indeed reflective of a disturbing contempt to the humanity of these individuals. The radiocarbon date of both women with traumatic injuries predate 697AD when the Law of the Innocents was enacted (Geber 2012) and although skeleton 484 from Parknahown has not been radiocarbon dated, it is still dated to the early medieval period (Keating 2008; Ó Néill 2010).

It is essential to note that individuals with ante-mortem and peri-mortem trauma predominantly acquire 'normative' burials or interments in ecclesiastical sites. This illustrates that the lives of these people were not deemed to be deviant from the non-combative population, and thus were integrated into the interment of the general populous.

At times, these individuals are even re-constituted as ‘whole’ such as the previous example of skeleton CXCI from Mount Gamble, Co. Dublin (figure 5.25) in which the decapitated head is reattached as it was an attempt to rectify the worldly trauma. This has further repercussions when not only considering the re-instilled whole-ness of skeleton CXCI, but also with the power of the face constituted once more in its restored position of the site of obligation and imposing presence of the other’s asymmetry.

The interpersonal violence of the archaeological record, and here more specifically in the early medieval period, is a prime example of juncture between the relevance of Levinas’s theoretical writings and the anchor of skeletal material providing the evidence of trauma. The power of the face in instances of traumatic interaction illustrates a type of responsibility and consent towards the otherness of the other has been denied and instead is manifested as a totality, allowing for the violent interference with a being’s welfare. This section appeals to the manner in which intersubjectivity is broken down and incomplete in a manner that led towards the violence toward an other and in some instances is restored after death.

As we have seen the manner in which the theme of intersubjectivity connects with a range of funerary and mortuary contexts, it can also be associated with the intentional acts towards objects in the past archaeological individual’s horizon. This is not restricted to the objects associated with mortuary contexts, but is also detectable in the plethora of artefacts manufactured in the archaeological past. Representative of the socio-cultural atmosphere within which they are produced, individuals and communities embedded the constructed meanings of these things and actively gave meaning to the objects whose lives continue through the interpretation of the archaeological narrative.

5.4 Early Christian Ireland and its facial identity in material culture

We know materiality to be extremely important for the discipline of archaeology as is apparent through an extensive discourse (Graves-Brown 2000; Meskell 2005; Taylor 2008; Abramuik 2012; Olsen *et al.* 2012; Carlile *et al.* 2013). Objects made by others are always there for others to perceive, which inherently makes them applicable for the examination of intersubjectivity (Zahavi 2001). In this section, early medieval Irish material culture will

be examined in consideration of the construction of meaning that the past archaeological population embedded within these objects with and the ramifications the re-presented face poses. Coinciding with the early medieval period, the phenomena of the descriptive, illustrated face selectively began to appear within the archaeological material and historical record.

The social and the material are not just mutually influential upon each other, but most ardently intertwined (Jones 2013). This significant assumption for the discipline of archaeology allows for the examination of past human populations through that which they created and are visible in the archaeological record. An intrinsic theory within this allowance is the plurality of the past other and the realisation that this material object is not just an object but it is a sign of the former presence of the other. The philosophical understanding of intersubjectivity can be anchored in the tradition of investigating narrowly in things and their intrinsic social character of signaling towards the other as creator or possessor as seen in Heidegger, proliferated in archaeological discourse by Thomas (1996). It can also be viewed in the public sphere as things experienced by multiple consciousness and in their plurality of meaning (Zahavi 2001).

Material culture is an important portion of the archaeological record, but most notably in the scope of this research is the inclusion of the re-presentation of the face. Mentioned before that the Levinasian face is not the corporeal face, but the overflowing of its plastic form (Levinas 1961), the re-presented faces here are again utilised as the theoretical basis for the intersubjective presence of the other. The images use the face to evoke a connection through the outward gaze and to subsequently use this connection to implore a sense of intersubjective responsibility when experiencing images in a religious context which exploits the countenance for origins story or narratives. As heavily weighted as community involvement is in shaping the behavior of individuals, images that would have pervaded the collective consciousness have a similar effect. These were so incredibly significant especially in this period of time because these objects held a power over the viewer which ultimately shaped their reality. Indeed, according to Husserl, a predecessor of Levinas, if an object the self is currently experiencing is also being perceived by an other, my relationship with that object is changed (Zahavi 2001). The institution or individuals who create images

meant for viewing promote certainties and ideologies – clearly seen within early medieval Ireland.



Figure 5.78a-i: **a**) St. Mark in manuscript 51 in the Abbey Library at St. Gall in Switzerland (Harbison 1998); **b**) St. Matthew in *The Book of Macdurnan* (Harbison 1998); **c**) A horseman in *The Book of Kells* (Harbison 1998) **d**) A detail of an angel watching over the Virgin in *The Book of Kells* (Harbison 1998); **e**) Decorated initials within a manuscript of *The Book of Kells* (Harbison 1998); **f**) John the Evangelist in *The Stowe Missal* (Harbison 1998); **g**) St. John the Evangelist in *The Book of Kells* (Harbison 1999); **h**) Christ enthroned in St. Matthew's Gospel in *The Book of Kells* (Harbison 1998); **i**) Heads of Evangelists depicted within early Irish scriptoria (Smyth 1982)

The entrance of Christianity into the Irish psyche and archaeological record was a powerful impact to the formation of the landscape and the people (Sharpe 1984; Etchingham 1999 as key texts for Church organisation within Ireland). As vital as this socio-cultural appearance was, it can provide a distorted image of early medieval Ireland because, “the majority of art which survives from early medieval Ireland is religious” and excludes the other range of material that could have existed (Edwards 1990, 132). What Edwards mentions would be the artefacts (architectural and personal) associated with ecclesiastical sites and the plethora of scriptures that were created by Irish clerics.

Faces appear in early medieval culture as decorative features and formal portraits of religious personalities (figure 5.30a-i). Though relatively few faces from the prehistoric period exist, those we have seen previously are abstracted. However, in this period they have become far more figurative than the past with well-defined features of the countenance. Embellishing artefacts, these faces do not speak to the individual but to the plurality of consciousness that would be consuming this visual material. We, as did the early medieval populations of Ireland, live in a public and communal world in which the objects we encounter tend to be manufactured, rather than their natural origins, “and it is a fundamental feature of these entities that they all contain references to other persons” (Zahavi 2001, 154). Regardless of the actual presence of the other persons, the “world contains essential references to [embodied] others” (Zahavi 2001, 154) which when examining the archaeological material record is what we encounter and experience of these past peoples. This is indeed the main, basic and fundamental undercurrent to the importance of studying archaeological material culture.



Figure 5.79a-c: **a)** Bronze crucifixion plaque from Clonmacnoise, Co. Offaly (Harbison 1998); **b)** Gilded (bronze) Crucifixion Plaque from Rinnagan Co. Roscommon (NMI, Dublin); **c)** Figures on the St. Manchan's Shrine (Harbison 1998)

In the record of early medieval materiality, metalwork became a popular sight and feature within the early medieval Irish archaeological narrative. Metalwork appearing in this era takes the form of brooches, reliquary shrines, and crucifixion plaques (Harbison 1998). Each object illustrates the craftsmanship and the multimodality the face presents within the many mediums of archaeological materiality (figure 5.31a-c). The faces re-presented in early medieval metalwork are ornamental and narrative in function; however this does not deter the face from provoking an experience of the other in an intersubjective space.

The faces in metalwork do overflow the 'plastic image' (as Levinas asserted) and reminds the individual encountering said metalwork examples that ecclesiastical life is full of other beings which also inhabit this religious sphere. Additionally there is also the thought-provoking Levinasian parallel of the transformation of Christ's suffering throughout the medieval period (Ryan 2014). This depiction of the other suffering further solidifies the intersubjectivity seen throughout the early medieval period. These static and rigidly aesthetic countenances provide substance for the viewer when approaching material culture of their contemporary time and as archaeologists' investigation into this era. Predominantly viewed as functioning in the sphere of ecclesiastical Ireland, metal objects extend beyond religious lifeways and are an inclusion in secular life as well. One example comes from commercial Ireland, namely the Woodstown 6 lead weight.

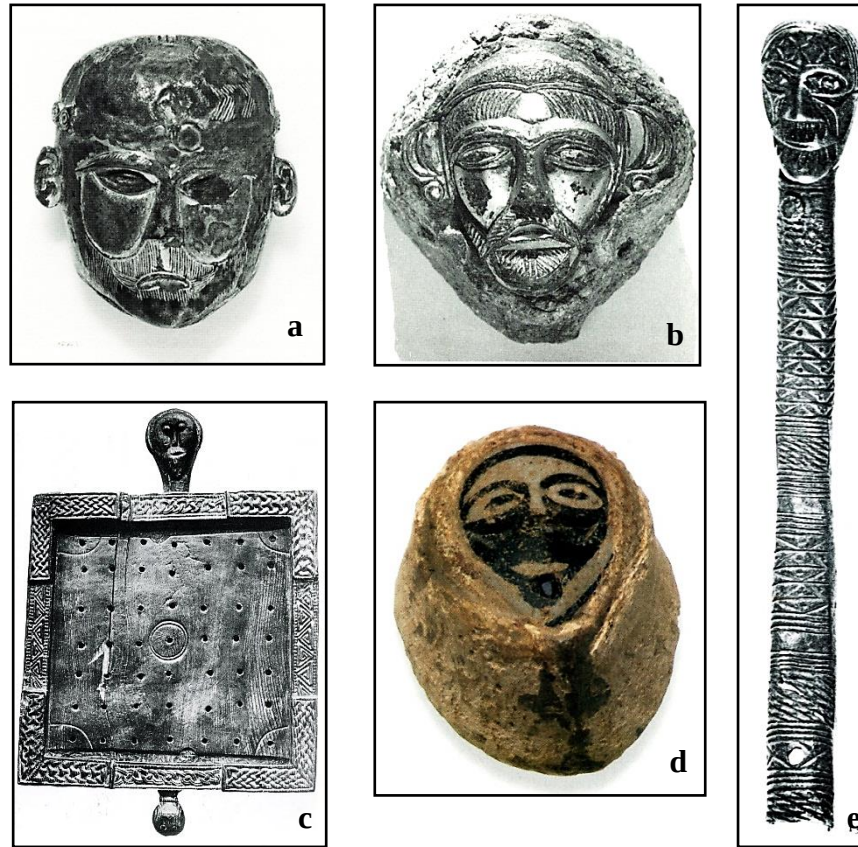


Figure 5.80a-e: **a)** A weight (weighing 126.3g) possibly Irish or Northumbrian (Ryan 1989); **b)** A weight (weighing 100.825g) from Suffolk (Ryan 1989); **c)** Yew-wood gaming board (Edwards, 1990); **d)** Lead weight with depicted face in applied glass or enamel from Woodstown 6 (Find no. 600:505) (Eogan and Shee Twohig 2011); **e)** Decorative mount found in the River Shannon near Athlone, Co. Westmeath, 6th-7th century (Youngs 1989)

The Woodstown 6 lead weight (figure 5.32d) which depicts the human countenance of a bearded man in the medium of either applied glass or enamel panel. At least 200 of these weights constituted the large artefact assemblage at Woodstown 6 (over six thousand finds at the end of the 2007 excavations). Similar to other Viking Age weights (figures 5.32a and 5.32b), the Woodstown 6 collection was possibly used in the measurement and exchange of silver (Eogan and Shee Twohig 2011, 64). This singular faced weight poses interesting questions of the use of the face in decoration or re-presentation upon artefacts such as these because, just as Ryan noted in his catalogue, “the face must have added authority to the weight and epitomises the dispersal of the fine Irish metal work through the trading networks of the Viking world” (1989, 143). However, these objects are notable among others in their respective collections as the depiction of the face has a primal response ignited from its re-presentation.

Although only one weight from the two hundred excavated at Woodstown demonstrated a face, it was common for these items to have anthro- or zoomorphic illustrations or coinage imprinted within the lead on the top surface of the weight. Two weights that have the similar facial appearances as Woodstown were found in Furness, Lancashire and Ixworth, Suffolk (figures 5.32a and 5.32b). According to Ryan, each of these examples of weights illustrated above were potentially once part of a larger piece of ecclesiastical furniture due to their form which indicates an original purpose which has become appropriated for later re-use (1989, 142-3). Artefacts such as these not only allow us insight into the economic process and quantification of these people, but also illustrate the interaction Vikings had within Ireland and Britain. What we can glean from these anthropomorphic representations is that while they are a personification of the trade that is occurring, adding authority to the economy.

Examples above have illustrated that materiality associates with the theme of intersubjectivity. Also relevant to intersubjectivity and archaeological discourse is the realm of linguistic encounter. Because while objects surround us and we “live in a world which is permeated by references to others, and which others have already furnished with meaning, [and] I typically understand the world (and myself) through a tradition of linguistic conventionality” (Zahavi 2001, 155). Attention to language systems from Sayer (1992) in a sociological situation was also an important note into how beings relate in an intersubjective space.

The statement from Prus, “language acquisition and use is at the core of human intersubjectivity” (1996, 11) aligned considerably with the Levinasian mode of beings. This is of utmost importance to the early medieval period because for the first time in Ireland’s history there appears the plethora of written documents originating from Ireland. The manuscripts and the level of skill placed upon the law tracts and histories written is a vital insight into understanding interactions and inter-relations between early medieval populations.

5.5 The “beginning” of the archaeological imagination

As Buber is quoted as saying, “ideas are no more enthroned above our heads than resident in them; they wander amongst us and accost us” (in Crossley 1996, 12). When discussing intersubjectivity it is beneficial to speak of linguistics, perceptions, and imaginings (Levinas 1961; Crossley 1996) as to not arrive at a limited notion of the past human life. It is because speech is a pure form of interaction and the manner in which “we participate with others in mutually meaningful situations” (Crossley 1996, 8) that it applies so well to the discussion of archaeological intersubjectivity. Detailed in the theoretical chapter concerning Levinas, language is significant in prompting the intersubjective experience.

Early medieval Ireland is formative in a much broader perspective than solely as archaeological materials or the appearance of the landscape. In this foundational period of time, the (past and present) imaginings and narrative of a people developed. As the archaeological record has grown and evolved, so have the correlating interpretations and narratives. But it is in this period where we as modern readers discover the first encounters and fascinations of the past through written documentation. It was through this innovative use of writing and pervasive, detailed recording that we see the experience of the archaeological material become a shared reality of the past.

The documents from the early medieval period are put forth as the beginning of the archaeological imagination because it is in these texts that the fascination with past people first arises. This is not to say that this fascination did not exist prior to written documents, nor is it by any means placing primacy on these documents above the concrete materiality of archaeology. More importantly to the Levinasian scope which is fundamental to this research, these early medieval texts detailing encounters and attraction with the past illustrate language and therefore intersubjectivity – the crux of this chapter and a crucial aspect to understanding the face within the discipline of archaeology. This can be seen in the multitude of written documents about the past originating in the archaeological past or in the modern period which frame the manner in how archaeology is discussed and consumed in by the public.

That dissemination to the public occurred in the first half of the twentieth century which saw the first major excavations of the early medieval settlements. Beginning in the 1930s with the Harvard Mission to Ireland, Hencken investigated the sites of the stone fort of Cahercommaun, Co. Clare and a series of crannogs including Lagore, Co. Meath (Edwards 1990). Irish archaeologists such as S.P. Ó Ríordáin worked on more southern sites as those ringforts in Co. Cork and Co. Limerick. This period of time saw an expansion in the knowledge of early medieval settlement patterns as rescue archaeology became popular due to on-going agricultural improvements of particular areas (Edwards 1990, 9). As we know: discovery prompts the imagination, and in the early twentieth century the archaeological imagination of Ireland's past gained new ground with many new encounters of the past.

The first written imaginings of encountered archaeological phenomena appear in the documents of the early medieval period. Waddell (2005) discussed these medieval encounters of the past through texts that detailed prehistoric monuments, burials, and weapons. For instance, the late seventh century account by Tirechan (Waddell 2005, 9-10; Bieler 1979, 155) and the later eleventh and twelfth century Life of Saint Cronan (Strijbosch 1999) described the experience of large megalithic structures and the graves of giants. In the late twelfth or thirteenth century, *Acallamh na Senórach* also mentioned 'green surfaced mounds' where hoards of rings and bracelets, human remains, weapons, shields, and a chain were excavated (Waddell 2005, 15; O'Grady 1892; Dooley and Roe 1999).

The discovery of ancient weapons recorded in medieval texts such as *Chronicum Scottorum* told of the sword found at Navan, Co. Armagh in 1115AD (Waddell 2005, 13); the Annals of Lough Cé which in 1191 recorded weapons taken from the Galway River (Waddell 2005, 13; Hennessy 1871; Forbes 1990); and also a record of a "broad green spears" in the *Táin Bó Cúalnge*, which "may reflect an antiquarian familiarity with well patinated bronze specimens and a desire to attribute them to a heroic past" (Waddell 2005, 14; O'Rahilly 1970). While these texts only punctuate the literature of (exaggerated) medieval texts, these examples highlight the theme of intersubjectivity (through language) and archaeological imaginings highlighted in this chapter.

While Christianity was introduced to Ireland, the archaeological remains from the previous prehistoric period were encountered and reimagined. Waddell noted that through this concurrence, a curiosity that extended beyond the literary endeavours of recording and conjecture of the past towards, “the deliberate exploration of ancient remains” (2005, 9). Certain prehistoric sites were awarded mythological status due to this encounter with the residual remains of the prehistoric peoples. The life of certain sites continued in a newly constructed sense of meaning and purpose in the early medieval period.

This occurred by reusing sites for burials and the creation of new imitations of prehistoric monuments in their early medieval context. From site excavations such as Cloncowan II, Co. Meath (Baker 2007), imposing locations such as Knowth, Co. Meath housed graves from this period (O’Brien 2009), ring-ditches or ring-barrows in a place like Lough Gur, Site J, Co. Limerick or in sites such as a Bronze Age cairn at Ballymacaward, Co. Donegal (O’Brien 1999), by standing stones such as those at Kilgowan, Co. Kildare (Keeley 1989), Ballykeel South, Co. Clare (Cahill 2011), and Kiltullagh, Co. Roscommon (McCormick 1995) illustrated in figures 5.33a and 5.33b.

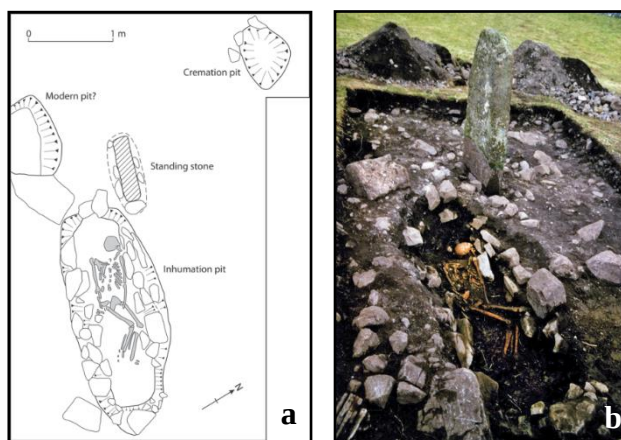


Figure 5.81a-b: a) Plan and b) photograph of an early medieval burial at Kiltullagh, Co. Roscommon illustrating the re-use of prehistoric features such as an Iron Age cremation pit, a ring barrow, and a possible standing stone (O’Sullivan *et al.* 2013)

The early medieval populations had their own connotations of the prehistoric past and how it was recorded and reused. The type of objective historical recording that is mandatory in contemporary historical narratives was not instilled within the early medieval period as:

“far greater liberties were taken with the past than are permissible now. The sort of manipulation, selection, and even invention, to which the past was

subjected in the middle ages shows that, even if some medieval historians accepted the notion of God's plan at work in history, they did not scruple to revise that plan in the light of their own needs" (Vaughan 1986, 11).

The method of writing history in the early medieval period spawned not only a consideration to an origin story for the Irish population, but it also revealed the early medieval psyche towards the past.

Just as in contemporary scholastic discourse whereby historians, anthropologists, and archaeologists interpret the past and create an overarching narrative with construction through materiality, the authors of the medieval ages beginning in the textual evidence of the early medieval period were actively creating a pseudo-history of their very recent past and present. The unquestioning and assuming nature of the active nature of the medieval period's creativity caused "the fabrication of the past [to be] a major industry in the Middle Ages" (Vaughan 1986, 11; also see Waddell 2005). This point cannot go unheeded as this is a pinnacle for the understanding and encounter of early medieval documents. They did not regard the past as exceptionally different than their own time period and, "lived in a constant anachronism...attributing to ancient people medieval costumes, feelings, and modes of behaviour" (Burke 1969 in Le Goff 1996, ix). Early medieval historians created a fabricated past for the past and modern reader to delve through the layers of manipulation and selection that existed in the penning of these past places. This is not a continuative archaeological narrative as each reading changes due to situational context.

Christianity was an incredibly important motivator for many of the outcomes of the early medieval period in terms of literacy and the newly introduced material culture of the church appearing in manuscripts and overly descriptive records. These aid in familiarising oneself with the early medieval consciousness, as "this was a time when Christian sacred texts provided an irrefutably reliable explanation for the human story" (Waddell 2005, 9). Not only is it the intersubjective nature of language at play in these early documents, but on a larger scale the weaving and creation of a people began outside of the ecclesiastical realm. As Waddell stated, the communal sense of family and kin became united through the written documents pervasive through certain levels of society, "perhaps on a more positive note the invasion myths of the *Lebor Gabála* and the vision they offered of a common

origin for the people of Ireland probably provided a basis for an early collective sense of national identity and racial distinctiveness” (2005, 21).

Also found intertwined with these concepts of intersubjectivity, myth, and identity of early medieval documents like those of the *Lebor Gabála* is the importance of the face and its larger position within the mythological power of kings. The discussion of this aspect of the medieval is included here in terms of archaeological imagination because it reveals the past and even now a contemporary interest in the way the countenance dictated the role of medieval rulers (McManus 2009).

It was of vital importance to the kingships of early medieval Ireland that the men acting as King be completely unblemished and bodily sound, “physical perfection was an absolute essential for a king or prospective king in early Irish saga. Together with marital prowess and mental agility, a beautifully formed, perfectly balanced, unblemished body distinguished the king and set him apart from others” (McManus 2009, 58). As the state of perfection is a qualifier for kingship, conversely any imperfection would deem the candidate unable to perform these duties (from McManus (2009) we see the case of a king blinded in one-eye by bees which left him facially disfigured).

This politicised notion of the face and the importance of the completeness which is deemed the powerful and obligation-driven phenomenon is at the foundation of what this early medieval tradition is exposing. Removing kings from power by blemishing their face included practices such as blinding (McManus 2009) which usurped legitimacy without killing the individual. Examples of such trauma are illustrated in sites such as Owenbristy where this coincides with treatment of osteological material. In Levinasian terms the trauma to the corporeal face harms the intersubjective space of the other. Therefore in theoretical terms with this physical manifestation of the reduction of the other, they can no longer reside alongside other beings in their world. The theme underlying the narratives of the treatment of the face for political or social status is at the core of the Levinasian philosophy which we have seen before. The face, not solely in its physical state of being, but rather in the significance of an always already existing presence of an other to a self. This consistency (or wholeness) of the physical face extended to a deeper intersubjective

nature of the leader, and for the individual, deemed complete and whole in their ability to be a whole member of the intersubjective community.

The fascination of the past which constitutes the archaeological imagination is proliferated through the endeavours of those who discuss the past and bring it alive once more. Most notable as an example here for the Irish archaeological consciousness is the work of Seamus Heaney. The earthy descriptions of the landscape which Heaney chose to represent the consciousness of the Irish people creates a corpus of images revealing the unconscious past which conceals and then reveals its history (King 1986; Foster 1989; Meredith 1999).

Bog Queen

I lay waiting
between turf-face and demesne wall,
between heathery levels
and glass-toothed stone.

My body was braille
for the creeping influences.
Dawn suns groped over my head
and cooled at my fee,

through my fabrics and skins
the seeps of winter
digested me,
the illiterate roots

pondered and died
in the cavings of stomach and socket.
I lay waiting

...
and I rose from the dark,
hacked bone, skull-ware,
frayed stitches, tufts,
small gleams of the bank.
(Heaney 1974).

Heaney as well as other Irish poets like Yeats, Kavanagh (Finn 2004) and artists such as T.P. Flanagan (figure 5.34) re-animated the landscape and lent a living voice through their work, perhaps more so than the written work of (bio)archaeologists. This large contribution towards the perception of the archaeological imagination within generations of

Irish individuals originates not only from the (bio)archaeological record, but is still being created in our constant relation with our intersubjectively laden past.



Figure 5.82: Boglands by T.P. Flanagan (1929-2011)

Framing this chapter as it began, we remember the faces of the early medieval individuals reconstructed at the beginning of this discussion (figure 5.35a and 5.35b) of intersubjectivity and its applicability to this period. The presence of these faces are now indelibly linked to the archaeological imagination of a place and period of time. These faces frame our discussion and provide the humanistic anchor of the imaginings and theoretical discussion of this chapter.

Skeleton 41A from Dooley, Co. Donegal and skeleton 23 from Owenbristy, Co. Galway are each illustrations of the notable topics of this chapter. Putting you, the reader, in a confrontation with these faces can also be deemed a self-reflexive exercise in making the intersubjective space explicit through that notion which these archaeological countenances prompt. Both had normative burial practices which became a standardized model throughout the medieval period, and in the cases of Owenbristy and Dooley, were scenes to instances of violence. In turn, through past traditions of interpretations, these archaeological locations were mistakenly marginalised in favour of more culturally prominent 'elite' sites. However, with the facial reconstructions produced of these individuals, the sites are given their human prominence and once again become part of the archaeological record through a new visual narrative.



Figure 5.83a-b: **a)** Facial reconstruction of skeleton 41A from Dooey, Co. Donegal; **b)** Facial reconstruction of skeleton 23 from Owenbristy, Co. Galway

The most important element of this section is the repercussion for the broader archaeological imaginings. It is in our situation as self-reflexive contemporary practitioners that we see the tradition of narrative building based upon the discovery and encounter of archaeological human and material remains. This is enhanced by our experience of facial reconstructions. The creation of a twenty-first century imagination of the archaeological past still begins and ends with the face, whether it appears as the face of a particular individual or material culture (which, as we have seen alludes to the already always present other who produced said object) or perhaps the face of the archaeological landscape in a broad notion of the term.

At the conclusion of this chapter it has been seen that the Levinasian notion of intersubjectivity is a relevant portion of the artefactual and mortuary material of early medieval Ireland. The dynamic experience of other beings in the world is solidified through the investigation of mortuary practices. This is where we see the concrete evidence for the realm where the living interacts with the dead. The diverse range of approaches to the deposition of the dead which later ‘normalises’ demonstrates the multitude of modalities in which intersubjectivity appears. The manner in which material culture has been re-presented and its transformation through early medieval and contemporary gaze

provides information about the sociocultural norms of this period. This is applicable towards understanding how the early medieval population experienced their world and the beings around them through the production of material culture.

Intersubjectivity is also a key point for contemporary archaeologists. As self-reflexive practitioners, we experience intersubjectivity through the archaeological material consistently. The main connection for this intersubjectivity of past peoples and present archaeologists is through the holistic perception of the (bio)archaeological record and also at the juncture of the facial reconstructions which begin this chapter. It is through their gaze which prompts the discussion of early medieval intersubjectivity. Progressing towards the next chapter concerning the face in the late medieval Irish (bio)archaeological record, we layer this notion of intersubjectivity and the information acquired with alterity, the pinnacle of Levinasian theory by looking into the face of the other.

CHAPTER SIX – “THE OTHER IS OTHER THAN ME” – A PRIMORDIAL RELATIONSHIP: LATE MEDIEVAL IRELAND AND ALTERITY

“At the core of Levinas’s mature thought...are descriptions of the encounter with another person. That encounter evinces a particular feature: the other impacts me unlike any worldly object or force” (Bergo 2014).

The face is the signifier for the presence of the always already present other (Levinas 1961). This is evident to us by the encounter of skeletal remains of individuals and the objects that we experience which are made by (the) others. Therefore, alterity is a fundamental aspect of the discipline of archaeology and will always be concerned with confronting the other person. Whether through the remnants of material artefacts or their skeletal material, the presence of the other is rife throughout the archaeological record. The experience of the (past) other person is detailed in the narratives which archaeologists actively create about the past. This chapter uses the pivotal notion of alterity and the face with consideration to late medieval Ireland. These theoretical aspects placed in relation to this temporal context are beneficial to discussing the impact the entrance of external populations had upon Irish society.

The transition from Hiberno-Norse to Norman influences in Ireland from the twelfth century onwards altered the standing social and cultural landscapes. Although the discourse surrounding the late medieval period has become murky with historical bias, the majority of scholars would agree that the entrance of Anglo-Normans into Irish society is “the most important development in Irish secular affairs during the Middle Ages (having an impact far greater than that of the earlier Viking invasion” (Duffy 1997, 2), but must be studied in a wide context (Richter 1985, 292). The beginning of this foreign intervention produced changes in the landscape such as: the building of castles, increased urban centres, and the importation of new judicial systems (Klingelhofer 2010; O’Keefe 2001). Lilley (2000) discusses the notion of ‘the other’ in terms of Anglo-Norman urbanisation within Ireland. Initially the populations were heterogeneous, and divided by the diverging customs and cultural backgrounds. However, as the Norman occupation remained, the two groups blended in a dynamic, hybridity to create an integrated and yet diverse society (see Flanagan 1989). It is in the beginning portion of this multifaceted cross-inhabitation that this chapter examines the role of the other within the Irish (bio)archaeological record.

Previously, differences between Viking and Irish contexts have been a form of alterity within the island of Ireland (Sheehan 1987; Edwards 1990; Wallace 2008a, 2008b; Amlé 2014; Boyd 2014). The beginning of the late medieval period was prompted by the Norman invasion and acted as the watershed moment defining our contemporary conceptions of early medieval and late medieval periods (Duffy 2005, 500). The differences were seen in the physicality of things such as architecture but most became increasingly more invisible as they focused on the difference in socio-cultural models. This understanding that the strife between groups of people after the Norman invasion of the twelfth century created a divergence in society has been a popular theme in late medieval discourse which will be discussed presently. However, what this chapter seeks to illustrate is that previous dialogue has not considered how the face of the other is re-presented to further strengthen or weaken the divide but also examines that the other is already a consistent encountered event in our horizon of experience.

Instead of approaching the topic of alterity in late medieval Ireland through the common political gaze of colonialism (using the often cited ‘other’ from Said 1978 or hybridity from Bhabha 1994), this research looks at a Levinasian conception of the other which reaches back to the foundation of humanity and the basic self/other relationship. It should be noted that as archaeologists, we operate under periods of time segmented into eras during modernity (Naginski 2001). This does not account for transference of socio-cultural or religious ideologies that defy borders. Therefore, between the early and late medieval periods there are exceptional amounts of material culture and societal occurrence which ebb and flow throughout time. Few examples of mortuary contexts and material do appear from the early medieval period within this chapter, but they are here to illustrate the theoretical notion of alterity within the face and the (bio)archaeological record of Ireland. From the perspective of this thesis looking at the Irish and Anglo-Normans as fluctuating selves and others we are able to engage clearly with a form of archaeological alterity without origins in political discourse. From there, the construction of such overarching partisan conversations can then begin.

The face-to-face is a primordial relationship (Levinas 1961). It is the first time when we recognize an other. Levinas set the precedent for postulating that the other is actually not

the same. Too much emphasis has previously been placed on sameness, whereas we should be recognizing that an other is indeed a separate being from our self (also established and explained previously in chapter two). A face is not so much a mode of appearing of the other, as it is a “trace” where alterity (otherness) passes (Lingis 1981, xv). The face is at once before us, concrete and in the flesh, but is distant and absent because it can never be totalised. In a sense, there is an opportunity for concealment (perhaps articulated as social masks). This deceptiveness is in part the reason for the demand and inequality in the face (Bernasconi 2000, 62). The face is demanding because we cannot disregard it. We know it is manifestation of the other and thus cannot deny its call to respond. It is unequal because we as the self are unsure of the other’s true nature. We can only interact and dare to open ourselves up to learn the other’s true intentions. All of these features are relevant to the archaeological encounter with faces depicted in material culture. Pertinent especially to the reason why and how they appear within the medieval material culture record.

Just as archaeology has a problem with the use of analogy, the same difficulty arrives with consideration of the other because, “the problem of the other person is a problem of analogy. The other person is sufficiently ‘like a person’ to be responded to, but not enough ‘like’ yet other persons to be understood as nothing but a person” (Hutchens 2004, 21). This essential point of alterity in the lens of Levinas and in this dissertation is that while the self is unique from other persons and objects, the other person is completely other in regards to being different than anything experienced. All of these philosophical notions come together when populations united by place of habitations through layers of cultures and their diverse ideas of socio-cultural institutions as they did in the late medieval period.

The many layers, or spheres, of cultural distinction in this context are seen in the multitude of internal boundaries within late medieval Ireland (O’Keefe 1992; Barry 1993; Frame 1998; Morrissey 2005). These boundaries become further complicated by ethnic, linguistic, and cultural differences (Maginn 2010, 174-175 has an in depth bibliography of this boundary discourse). While this was a feature of the early medieval period and the entrance of Viking populations into the (bio)archaeological narrative (Wallace 2008a), the Anglo-Norman settlements are much more intense and geographically widespread (Graham 2000; Aughey and Oakland 2013, 70). The notion of the other becomes increasingly

present in archaeological materiality in certain stylized depictions and the historical documentation that deem one group superior over the other inferior.

To many the late medieval period in Ireland constitutes the beginning of a colonial period (Carroll and King 2003). This is an accurate assessment as colonialism typically involves exchange of materiality in economic and/or militaristic conquest, exploitation of natural resources, and the importation of foreign socio-cultural structures (Frame 2012). However, Connolly argued, “the idea of Ireland as a colony, however attractive as an analytical tool, will never be wholly convincing” (1992, 114; see also Morrissey 2004). Blunt and McEwan (2002) and Morrissey (2004) argued that colonialism (or alterity and the other-ing in this body of research) is firmly based in material acts, but according to Duncan has been removed from this encounter of materiality by over theorising (1999, 127). That so being, a large portion of the late medieval period in Ireland is instead partially removed from the available visible materiality of the archaeological record and instead lies in the politically driven historiography of the discipline. How the history was written with particular attention to documents used, and the bias in the writer producing the narrative are combined to alter the perspective of the past in light of modern agendas. Concentration on how the late medieval period is appropriated by temporally removed communities has overshadowed the significant archaeological events and artefacts that constitute the era of late medieval Ireland.

It has to be noted that more importantly, the concept of the other is presented in the primary documents of the twelfth and thirteenth centuries (in documents such as the *Annals of Ulster* (Mac Airt and Mac Niocaill 1983) and earlier records concerning alterity with Norse populations in the *Fragmentary Annals of Ireland* (Radner 1978)). As the connection of self and the other in a shared reality is a fundamental relationship, the appearance of the acknowledgement of an other is not an uncommon phenomenon before the modern era. In fact it might have been a more amplified encounter without the blurring feel of globalisation. Focusing on the English and Irish relationship, Frame critically evaluated that recent scholarship has been driven by the exploration of twelfth and thirteen century documents which depict the ‘Celtic’ inhabitants of (Britain and) Ireland as barbarous which

differed drastically from before 1100AD in which these people were not regarded as “culturally inferior” (2012, 4).

The narratives written in the twentieth century, like those such as Goddard Orpen (1911-1920) and Otway-Ruthven (1980) were influenced by overarching political positions (Horning 2012; McNeill 1997). Their comparisons of Gaelic Irish to the Anglo-Normans concluded that the former population was “backward and inferior” to the deemed positive, progressive advancements of the latter (Horning 2012, 175). Early scholars of medieval Ireland and in particular the late medieval era, readily saw this period’s research areas as non-complex events with a drastically binary approach with the Irish/English being pitted against one another. Connotations of good and bad were assigned as well as a worth-value upon the lingering archaeological and historical evidence.

In regards to the decision of *which* history to write, there is a tendency for Irish archaeologists to naturally drift towards areas such as the prehistoric and the early Christian periods before the arrivals of the Scandinavians and the Anglo-Normans. Barry stated this is an understandable academic state of being as the Irish state only recently gained its political freedom from Britain in the early twentieth century and it was understandable that this new state, “finding its way among the community of nations in the troubled early years of this century, wish to emphasize its own unique cultural identity free from the impact of later invaders and colonizers” (1987, 1). Rather than focusing on the neglect of Irish academics of the late medieval period, there is also a similar alignment with the fascination of late medieval period appearing in the scholarship in Northern Ireland (Stout 1996).

These themes were picked up by Horning (2012) who asserted that due to Nationalist imperatives, sites such as castles were deemed a product of English hegemonic domination and were a reason that medieval studies took hold faster in Northern Ireland than the Republic. Klingelhofer (2010) also noted that the study of the ‘Plantation’ period was discouraged by twentieth century political sentiments which leaked into academic discourse. Along with the awareness of historical scholars to bias, individuals investigating this time period in question have consented to the complexity in which the Gaelic Irish and Anglo-Norman cultures proliferated. Neither a binary nor an obliteration of one culture over another, the dynamics between groups are a vibrant example of cultures meeting.

This critique in the late twentieth century was astutely aware of the discursive nature of archaeology and its trajectory. This is a rigid evaluation of this discipline, but historians and archaeologists who study the early medieval period rarely cross over to the late medieval period, while the same can be said for those who examine the later medieval period and rarely refer back to a time pre-Anglo-Norman (Flanagan 1989). This can be said to be additional evidence of the other in the study of this period of time. The later middle ages are considered other, foreign, to the preceding eras.

How did this new paradigm concerning a population of people come into being? We know that in the twelfth and thirteenth centuries vast religious reform was underway bringing with it its own ideological structures and systems. The “new codes of conduct ushered in through the welfare and social conventions of the crusades illustrated these people of Ireland, already on the peripheries, as different and uncivilised” (Frame 2012, 4). From the previous chapter and its discussion of complex ideological systems, we know that Ireland (only geographically peripheral) was demonised in past discourse as Frame has shown. This alteration of the historical past with supplementation of archaeological materiality and other evidence has come under great scrutiny in the late twentieth and early twenty-first century as writers of history and archaeology become more aware and self-reflexive of the role of an author.

Horning has stated that the past decade, “has made it clear that simplistic understandings of the Anglo-Norman invasions of the twelfth and thirteenth centuries as a monolithic process of cultural conquest deny the evident social and political complexity evident on the island” (2012, 182). This type of historical examination is symptomatic of twenty-first century scholastic frameworks in which past society is as complex a subject as the contemporaneous one in which the authors are situated. Critical historiographies of late medieval Ireland have arisen and changed the ideological landscape of this period and its consequences for the contemporary reader. For instance, instead of seeing the beginning of a long period of colonization, Frame suggested that the entrance of the Anglo-Normans into the Irish archaeo-historical record can be seen in another way: that of an episode of European history (2012, 1). This fluctuating view of the past and the events of the late

medieval period in relation to the modern nation state and the overall psyche of Ireland has transformed in the twenty-first century.

Maginn (2010) penned a reconsideration of the other-ness that occurs within late medieval Ireland between the Irish and the English in terms of the discourse of borders and frontier land. The use of landscape in the reinforcement of the discourse of the other in contemporary late medieval Ireland is just another example of the activity of alterity which needed reinforcement in another realm of physicality. Although if we return to the anchor of this current research, the face, its imaging creates a dilemma for our relationship in experiencing the other as each image and face of the other and self gain and lose something while in association (because as we remember, the imaged face overflows the plastic form and refuses to be totalised, but through the plastic image we experience an impoverished other).

The face of the other transcends the distinction between form and content because it reveals the idea of infinity to the separated being (Levinas 1961, 196). As mentioned previously, the face is elusive because of its “refusal to be contained. In this sense it cannot be comprehended, that is, encompassed. It is neither seen nor touched – for in visual or tactile sensation the identity of the I envelops the alterity of the object” (Levinas 1961, 194). However, this research uses the imaged and corporeal face as a foundation for discussing further abstracted archaeological conceptions. From the next two facial reconstructions, let us view the starting point: the faces from the contentious and landscape altering late medieval period surface here.

6.1 Ballinderry, Co. Kildare

Excavated in 2005 and 2006, the multi-period site of Ballinderry, Co. Kildare contributed vastly towards the rural late medieval bioarchaeological record of Ireland. The following discussion concerning the site of Ballinderry and its late medieval context concerns itself solely with the cemetery. Providing many insights into the status of health for the late medieval period, this site and its large assemblage of human remains offers a particularly important perspective to the understanding of medieval and early modern Ireland.

6.1.1 Site information

There is an unfortunate paucity of information concerning the site of Ballinderry. Therefore, only the information concerning the cemetery published by Tesorieri (2012-2013) can be utilised. A ditch associated with domestic material surrounds the cemetery. Additional natural borders that form of a drop off define the seventy metre area of the site. The placement of Ballinderry within the archaeological record is difficult as the dating could not rely on material culture. Therefore, the use of radiocarbon dating as an absolute dating technique of three individuals from this cemetery provides the date range of 1439-1524AD (Tesorieri 2012-2013, 132). However, the mixture of burial types and the various levels would suggest that this cemetery was used over several periods (Tesorieri 2012-2013). The site of Ballinderry cemetery yielded a total of two hundred and forty skeletons containing thirty-four males, forty-one females, eighteen unsexed adults, and one hundred and forty seven non-adults (Tesorieri 2012-2013).



Figure 6.84: Location of Ballinderry, Co. Kildare within Ireland

At Ballinderry, all interments were simple grave cuts with no coffins or stone-lined graves discovered. A range in burial position appears from supine extended, prone extended, flexed, and crouched. All but three burials were oriented in an east-west orientation with the head to the west. The three with the head to the east include one child between the ages of four and six, a young adult female, and a mature adult male (Tesorieri 2012-13). Combined with the high levels of stress upon skeletal material indicative of a strenuous

lifestyle, the poor overall level of health, and the significant mortality rate of juveniles, it could be postulated that life in this late medieval/early modern community was harsh.

6.1.2 Skeleton 208

Ostetobiography

Skeleton 208 from Ballinderry, Co. Kildare was an old middle adult female. This well-preserved individual was found in the supine/extended position oriented northeast-southwest (figure 6.2a). There was no associated material culture found with these remains. Examining cranial and post-cranial remains in the assessment of sex illustrate the definite identification of a female. With the very well-preserved nature of the skeleton, examination of the pelvis provides material for a reliable estimation of sex. The facial features associate also all suggest female. Estimation of age at death for this individual was determined to be thirty-five to forty-five years determining this female as the old middle adult (Tesorieri pers. comm).



Figure 6.85a-b: **a)** In situ view of sk. 208 in a simple grave cut (Tesorieri, pers. comm); **b)** Button osteomas on sk. 208

Observed pathological conditions of the individual's cranium include button osteomata found on the frontal (figure 6.2b) as well as dental caries, calculus, and mild to moderate periodontal disease. The small size of the osteomata that appear on the individual's frontal would not affect the overlaying soft tissue and likely do not appear upon the cutaneous surface at all. Post-cranially, the pathological changes noted include enthesophytes on the right calcaneus and right femur, periostitis on the right fibula, os acromiale, and evidence of

Schmorl's nodes on several vertebrae. These are skeletal markers which designate a level of physiological stress, perhaps occupational, in the life of this older female which was incredibly common throughout the medieval period. No skeletal trauma ante- or peri-mortem was observed upon this individual.

Soft tissue prediction

The feminine features of this individual include the gracile slope of the forehead and mildly robust brow ridge. Based on the cranial skeletal material, the small, pointed chin, sharp supraorbital ridges, and an overall smooth surface from muscular markers aligns with the estimation of the sex of this individual as female (figures 6.3a and 6.3b).



Figure 6.86a-b: **a)** Frontal view of skeleton 208; **b)** Lateral view of skeleton 208 from Ballinderry, Co. Kildare

The upper portion of the face relies on the relationship between many intersections of skeletal material. Examining the upper portion of the face, the outline of the orbits of skeleton 208 is square or rhombic in character and have a narrow intercanthic distance from one another. The features of the eyes illustrate that the individual has lateral eye folds due to the examination of the supraorbital rim and its general direction upwards and posteriorly. The eyefold appearance in soft tissue follows the hard structure beneath thus creating this particular individual's facial features.

To predict the appearance of the eyes of an individual let us begin with the appearance of the eye slit. The tangent between the lacrimal crest and malar tubercle demonstrates the

eye slit of this individual will be of horizontal in nature (figure 6.4). However, there is a possibility of a slightly downturned appearance on the left orbit due to a lower malar tubercle, but this feature would be diminished in the appearance of soft tissue. As for the shape of the eyebrow, it is predicted that skeleton 208 will appear with s-shaped brows. This is due to the low nasal root and moderately strong brow musculature of the procerus and corrugator supercilii (Fedosyutkin and Nainys 1993; Wilkinson 2004).



Figure 6.87: The prediction of the eye tangent for skeleton 208 from Ballinderry, Co. Kildare

The nasal aperture of skeleton 208 is wide with a maximum nasal width (MNW) of 45.98mm calculated by the formula from Rynn and colleagues (2010). This was investigated as the possible effects of the taphonomic process. However it seems that this is in fact the original extent of the nasal aperture, which has further implications for the width of the soft tissue prediction of the nose. Due to the archaeological nature of these remains, an assumption of complete nasal bones is being undertaken. Upon close examination, there appears to be no resorption of the nasal aperture. While they are in virtually complete form, there is the possibility of minute portions of this section missing making this a source of potential error when utilizing the two tangent prediction method as a precursor to postulating the appearance of the nose.

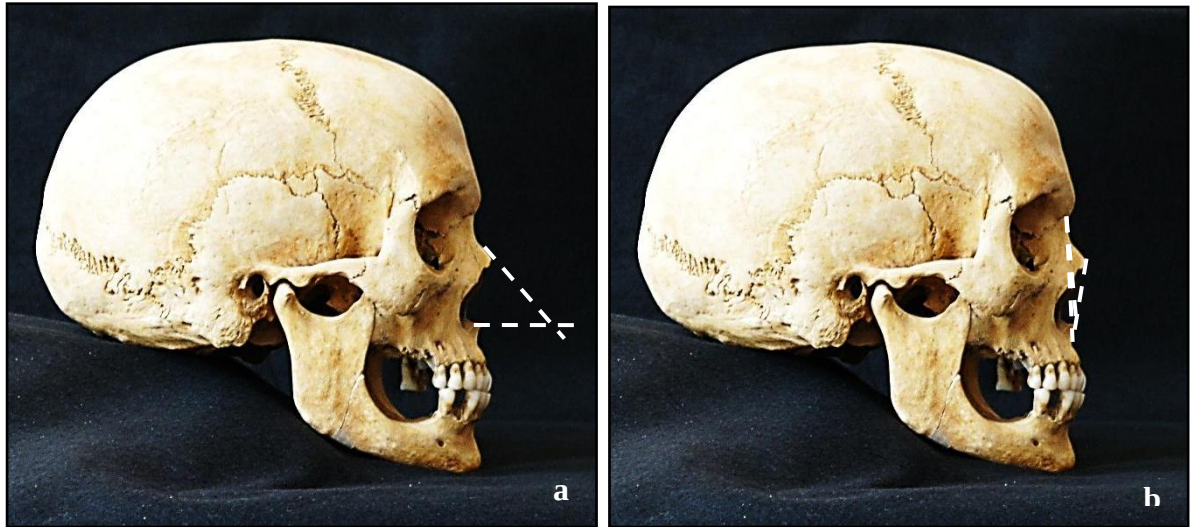


Figure 6.88a-b: **a)** Two tangent theory (Gerasimov 1975) applied to skeleton 208 from Ballinderry, Co. Kildare; **b)** Nasal prediction by Rynn *et al.* (2010) applied to skeleton 208 from Ballinderry, Co. Kildare

The vomer has a slight deviation toward the individual's right; however this deviation is slight and would not appear in the soft tissue appearance of the reconstructed individual. The nasal spine is straight which suggests that the columella and projection of the base of the nose is straight as well. Due to the fact that this is an archaeological specimen and there could be damage to the full extent of the nasal spine, the line of the intact palette was also considered in this examination and supports this appearance. The tip of the nose is predicted through the appearance of the curve of the lateral nasal aperture. In this case, the tip of skeleton 208's nose is slightly hooked with a pointed tip. Rynn and colleagues' (2010) method for the prediction of the appearance of the nose was utilised (table 6.1)

Measurement for Prediction (mm)	Ballinderry 208 Measurements	Predicted Dimension	Simplified Equation	Ballinderry 208 Results
Nasion – Acanthion (x)	49.53mm	Pronasale anterior projection	$0.83Y - 3.5$	25.19mm
Rhinion – Subspinale (y)	34.57mm	Pronasale vertical height	$0.9X - 2$	42.58mm
Nasion – Subspinale (z)	52.63 mm	Pronasale projection from subspinale in Frankfurt Horizontal Plane	$0.93Y - 6$	26.15mm
		Nasal length	$0.74Z + 3.5$	42.45mm
		Nasal height	$0.78Z + 9.5$	50.55mm
		Nasal depth	$0.4Y + 5$	18.83mm

Table 6.7: Nasal measurements of skeleton 208 and application nasal prediction by Rynn *et al.* (2010)

The individual is orthognathic in character, having very slight prognathism of the lower face. Dentition is in good condition apart from the dental attrition such as cavities and periodontal disease. This allows for an accurate observation of the individual's occlusion, which is normal having neither an over- nor underbite. The shape of the lip (vermillion line) is not a fixed trait and does not correlate to any skeletal structure and is difficult to obtain. The corners of the lips were found by following the dental tangent outwards from the canines in a radiating line. Taking the measurements of both upper and lower incisors provide us with information on a suggestion of the lip thickness (table 6.2).

Ballinderry 208 Measurements	Simplified Equation	Ballinderry 208 Results
8.46mm, 8.60mm (avg. 8.53mm)	$0.4 + 0.6 \times (\text{upper teeth height})$	Upper lip thickness = 5.52mm
7.53mm, 7.61mm (avg. 7.57mm)	$5.5 + 0.4 \times (\text{lower teeth height})$	Lower lip thickness = 8.53mm

Table 6.8: Prediction of the thickness of lip thickness for skeleton 208 using Wilkinson *et al.* (2003)

The possession of dentition and the manner in which it is formed affects the appearance of the lower face. In the case of skeleton 208, there are teeth missing due to ante-mortem tooth loss. However, these are isolated to the molar region of the individual's mandibular dentition and would not alter the outward appearance of the lower face of this individual. The canine fossa of this Ballinderry female indicates the presence of a nasiolabial fold. In association with the age-at-death as an older female, skeleton 208 will display this particular feature.

Consistent with a female appearance, the chin comes to one point and is gracile in build. Additionally, this lower section is in smaller proportion to the upper section of the face. Observation of the angle of the ramus indicates the shape of the lower part of the face is likely to be a narrow variant such as oval or triangular (figure 6.6). The high coronoid process on the mandible in association with the angle also suggests this overall facial shape. A groove appears on mental eminence, but this is of such a slight nature it is doubtful to appear upon the surface of the soft tissue reconstruction.

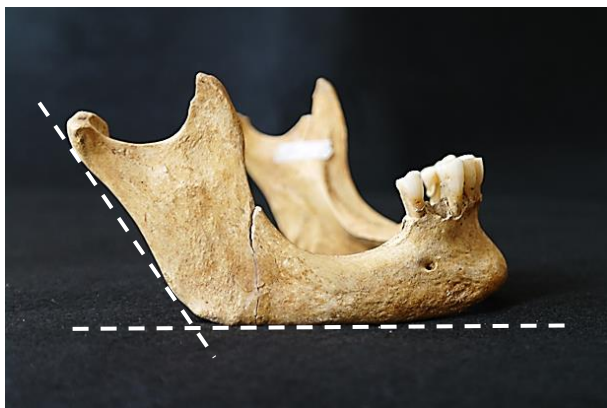


Figure 6.89: The angle of the ascending mandibular ramus indicative of lower face shape

Consideration of the main features of the face has been predicted, but to approximate the appearance of the ears we must look at the mastoid processes. The decision for the reconstruction of this feature is performed with consideration of the mastoid processes and their relation with the lateral portions of the cranium. The mastoids of this individual are in proportion with the rest of the cranium and appear to be forward projecting which demonstrates that skeleton 208 has lobed ears. The length of the ear is normally predicted to be the length of the nose (nasion – acanthion). Figure 6.7 illustrates the prediction of the angle the ear of this individual in accordance to the relation with the articulated mandible.



Figure 6.90: Angle of ear based on ascending mandibular ramus of skeleton 208 from Ballinderry, Co. Kildare

Facial Reconstruction

The reconstruction of skeleton 208 presents the old middle adult female who lived in late medieval or early modern rural Ireland (figure 6.8). The face that has been produced through the standards and justifiable choices outlined above can be seen in figures 6.9a-c. The choice to include a head covering for this female derives from the clothing of the respective periods found through historical documentation. The decision to include certain surface textures of the individual was in conjunction with the age, sex, and overall health of the population from which she was drawn. These decisions include the appearance of someone older than her thirty-five to forty years of age, such as a gaunt appearance and the inclusion of wrinkles, due to the harsh conditions of life in the archaeological past.

A quote to reflect upon before experiencing the facial reconstruction of this late medieval/early modern female comes from a sixteenth century Englishman travelling through Ireland:

“...very comely creatures, tall slender and uprights, of complexion very fayre and clear skinned but freckled with tresses of bright yellow hayre, which they chayne up in curious knots and devises. They are not strait laced or not plated in theyr youth, but suffered to grow at liberty so that you shall hardly see one crooked or defored, but yet as the proverb is, soone ripe soone rotten. Theyr propensity to generagation causeth that they cannot endure. They are women at thirteen and old wives at thirty” (Chambers 1979, 52).

Although humorous in an utterly uncouth manner, this sincere attempt at an ethnographic exploration concerning a group of people articulates a visual insight into the effects of the hard late medieval lifestyle individuals endured.



Figure 6.91: Final facial reconstruction of skeleton 208 from Ballindery, Co. Kildare



Figure 6.92: **a-c:** **a)** The anatomical stage of the reconstruction process upon Ballinderry, Co. Kildare skeleton 208; **b)** The addition of skin to the surface of the face; **c)** The final reconstructed face of skeleton 208 from Ballinderry, Co. Kildare

6.2 Gallen Priory, Co. Offaly

The site of Gallen Priory (figure 6.10a) flourished from the ninth to sixteenth century. The long period of use in burial ground illustrates the central role of Christianity within Ireland over both early and late medieval periods of time and onwards. The human remains from this area were of particular importance for the broader landscape of osteometrics that shaped the archaeological discipline in the early twentieth century. The results from the excavation contributed to the archaeological record and knowledge of this time period and its populations as well as the formation of a sense of identity by the larger anthropological agenda by Harvard University.

The Harvard Mission to Ireland engineered by Hooton (1955) racialized Irish populations mainly through living subjects. The main endeavour came from the attempt to understand individuals with Irish extraction which populated and even governed America (Hooton and Dupertuis 1995, v). Through the ‘proof’ that Hooton’s scientific method provided, Hooton accepted prior colonial discourse about the Irish people. In the case of Gallen Priory, the craniometrics of an archaeological population was added to the racial conception of the Irish and compared to other skeletal collections. These remains were added to this overarching discourse of the head and its racial qualities rather than focusing on individual potentialities and critically evaluating prior archaeological, historical, and anthropological discourse.

6.2.1 Site information

The 1935 excavation was undertaken as part of the influential Harvard Anthropological Mission to Ireland. This socio-cultural, archaeological, and physical anthropological survey served as a foundation for this sector of research throughout the twentieth century. Overall direction of the excavation was undertaken by T.D. Kendrick and the osteological analysis was published in 1941 by W.W. Howells. The data set established therein was used for comparison to other collections with the intention to investigate morphological drift. Though many grave slabs were discovered, only traces of early ecclesiastical foundations were found with probable dating to the thirteenth century (Howells 1941). While historical notes within the study by Duignan (1941) manoeuvred between the paucity

of primary source information in attempts to provide contextual information and dating, no credible dates were given to this site or the remains within Howells's study.

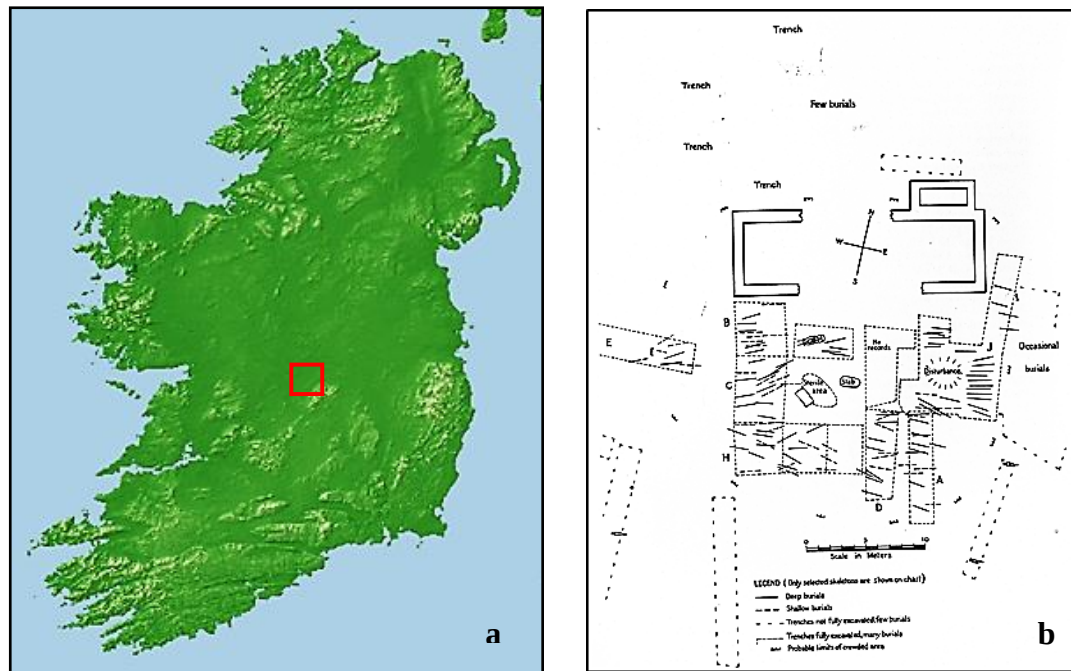


Figure 6.93a-b: **a)** The location of Gallen, Co. Offaly within Ireland; **b)** Site plan of Gallen Priory and the inhumations (Howells 1941)

The 1941 publication of Howells' work at Gallen Priory is traditional in its osteometric approach beginning with historical contextualization, transitioning towards quantification of Gallen Priory skeletons and then, ultimately at the expansion towards comparison with chosen collections. Akin to many of the early physical anthropologists of his time, Howells's concern lies with creating measurable data useful for eventual comparable material and interest lies in population studies whereas the trend in the later twentieth century of bioarchaeology favored individual case studies. One hundred and twenty seven males from Gallen Priory constitute Howells's data. Only the metric data of males was utilised in this study with females and juveniles outside the limitations of his study. This is evidence that indicates the bias of the investigation. Disregarding the population as a whole, for a certain section of the demography the excavation has situated itself with preconceptions of the past which have under no circumstances been re-evaluated.

All burials excavated lie on the perimeters of the church, mostly to the south (figure 6.10b). All but two individuals were buried in simple graves with no presence of coffins. The two

other interments include one stone-lined cist and one earmuff burial (Howells 1941). Extensive excavation by Kendrick outside the dense area of burials illustrates the dense frequency of burials on site. With the large number of interments on site, the burials overlap and intercut one another.

Due to the reinterred nature of these remains, the 1941 report of Gallen Priory is the only publication on this assemblage of human remains. The information along with the analysis of the large assemblage from Castleknock, Co. Dublin has been considered as the beginning of anthropological studies and the academic interest in human remains in Ireland (Buckley 2011). When the Harvard Mission to Ireland was ultimately published in 1955, this publication appeared upon the emerging scholarly landscape of New Archaeology. Interest in physical types and cranial morphology had been replaced by research tropes that focused instead on the social aspects of the archaeological past. However, there is a crucial need for the information gained from the excavation at Gallen Priory to obtain further attention and critical assessment of the work. As it stands, the frameworks applied to the excavation and subsequent craniometric interpretations, have been similar to the overarching project of the Harvard Mission to Ireland and its racializing agenda determined to link physicality with intellectual and behavioural propensity.

6.2.2 The Males of Gallen

All burials were in an extended, supine position with an east-west orientation with the head to the west. These burial features conform to the normative view of Christian burials. However, the different levels of burials did vary in their orientation. The dating of the individuals which are part of the facial reconstructions to follow is unknown. Therefore, their position within this research is as the transitional phase between early and late medieval periods with more probable emphasis on the latter half of the medieval era. Howells felt comfortable in his investigation of this site and the human material that these lower levels of male skeletons should be considered monks and part of the church community, unlike the possible lay community resting above.

The creation of these faces is an important aspect for the excavations at Gallen Priory. As this site was excavated in the early twentieth century and the remains are reinterred, the

humanistic nature which was forthrightly suppressed during excavation and subsequent interpretation, has been revived with the presence of these reconstructions. Although undated, these faces illustrate a portion of the ecclesiastical past and the early tradition of archaeology in Ireland.

Osteobiographies

The only images and data that were available for this collection took the form of eight photographic plates of individual skulls from five different angles (figure 6.11). The osteological analysis which the facial reconstruction process begins with was also undertaken in the case of the Gallen Priory males. The information was in a sense impoverished because of the photographic medium of these skulls. This problem of absent individual measurements absent in the Gallen Priory report itself, was overcome by a table of average measurements for each group of crania (table 6.3).

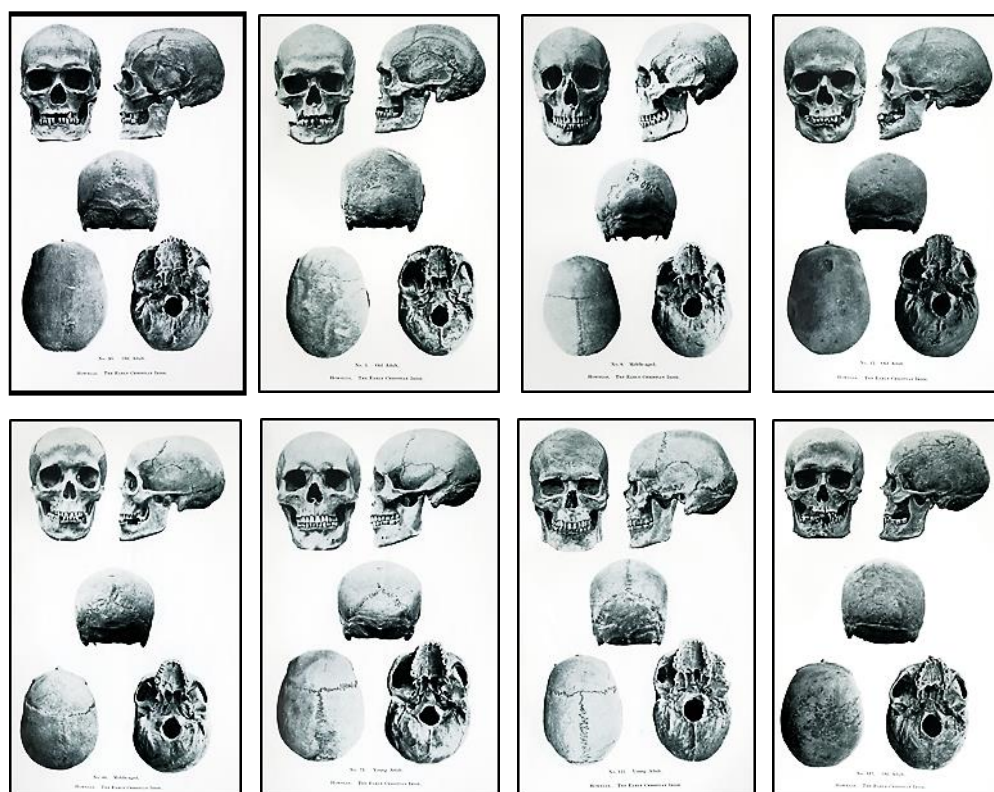


Figure 6.94: The manner in which skeletal material provided in the excavation report of Gallen Priory appeared (Howells 1941)

This use of averages becomes a known source of error within the set of reconstructions. These averages are divided by age group: young adult, middle-aged adult, and old adult.

The photographs of the skulls were isolated to their frontal and lateral images, which were then scaled to the respective age category average measurement.

Craniometric measurement	n	Young Adults Mean P.E.	n	Middle-aged Mean P.E.	n	Old Mean P.E.
Glabella-occipital length	14	188.43 ± 1.06	68	191.09 ± .49	33	189.03 ± .84
Maximum width...	14	145.07 ± 1.06	64	145.97 ± .41	32	144.34 ± .53
Basion-bregma height	12	137.92 ± 1.73	61	133.75 ± .38	27	134.78 ± .41
Minimum frontal	15	99.40 ± .79	69	98.31 ± .35	32	98.62 ± .51
Bizygomatic diameter	4	133.00	32	136.66 ± .53	21	134.52 ± .68
Nasion-menton height	9	116.67 ± 1.60	37	119.41 ± .90	13	114.15 ± 1.27
Nasion-prosthion height	9	70.22 ± .92	44	73.05 ± .64	17	71.47 ± .67
Basion-nasion height	12	102.75 ± 1.02	52	102.73 ± .42	24	102.17 ± .51
Basion-prosthion length	8	96.38 ± .95	34	97.24 ± .68	13	95.85 ± .99
Nasal height	8	48.25 ± .72	47	51.85 ± .35	20	51.50 ± .41
Nasal breadth	10	23.40 ± .35	46	24.50 ± .16	18	24.28 ± .31
Orbit height, left	7	32.00 ± .93	41	33.12 ± .27	19	33.16 ± .27
Orbit width, left	7	39.14 ± .44	37	40.00 ± .20	19	40.11 ± .30
Palate length	11	55.00 ± .48	41	54.51 ± .26	15	55.13 ± .43
Palate width	11	62.46 ± .60	31	62.77 ± .38	8	62.38 ± .70
Height of symphysis	13	34.92 ± .76	52	33.94 ± .27	19	33.05 ± .41
Thickness of corpus	13	14.54 ± .25	63	13.71 ± .19	23	13.78 ± .20
Minimum breadth of ramus	13	31.15 ± .80	61	32.43 ± .23	24	32.21 ± .39
Bigonial diameter	11	98.00 ± 1.67	55	103.07 ± .65	24	103.54 ± .80
Cranial index	14	77.00 ± .47	65	76.34 ± .27	31	76.61 ± .45
Facial index	4	84.50	24	86.04 ± 1.03	12	84.83 ± 1.20
Upper facial index	4	51.25	24	51.88 ± .57	14	52.43 ± .48
Nasal index	7	49.00 ± .41	44	47.30 ± .43	17	47.47 ± .71
Palatal index	11	113.73 ± 1.16	30	114.43 ± .65	8	112.38 ± 1.68

Table 6.9: Craniometric averages from Howells (1941) used to scale skeletal images for two dimensional reconstruction

Soft tissue prediction

The deficiency of individual metrics for each particular skull meant mainly relying upon the data for *orbital height* (left), *orbital width* (left), *nasal breadth*, and *nasal height* for scaling the skulls to an average 1:1 scale. Soft tissue depth measurements from Stephan and Simpson (2008) were utilized at those points that were able to be determined from a 90° angle of the flattened two dimensional image. These mainly came from points on the mandible, the zygoma, points on the cranial vault (*bregma* and *ocp*). This aided in the drawing of facial features which when layered with transparent paper served to reference the skeletal material beneath.

The soft tissue prediction of the seven men reconstructed in a two dimensional manner were done in compliance with the standards outlined in Appendix 1. Each individual was reconstructed in a frontal and lateral manner to achieve a true idea of each facial feature. This is all done in a flattened two dimensional manner with calipers used for the measurements such as lip thickness, eyeball dimension, nasal width, and so on. Due to this two dimensional nature of reconstruction, there is more subjective nature towards the creation of these faces.

Two-Dimensional Facial Reconstructions

The men of Gallen represent a mysterious collection. Their identities and relationship with the ecclesiastical surroundings are unknown. With the deficiency of information from historical documentation, the outward staring faces of these probable monks add to the elusive narrative of Gallen Priory and its role in ecclesiastical Ireland.

The skulls which were reconstructed from Gallen Priory, Co. Offaly were chosen due to the availability of photographs of these reinterred remains (figure 6.11). Photographs from multiple views allows for a substantial analysis of skeletal features albeit in a two dimensional plane. With each plate for an individual, the age group ('young adults', 'middle-aged adults', and 'old adults') assigned is noted by Howells. These age groups correspond to the table of averages (table 6.3) given in lieu of individual craniometric indices. These averages were used in the two dimensional methodology of bringing the

image to 1:1 scale with regards to the respective category. A definite source of error, these averages of the material excavated will affect the appearance of certain features of the particular skeletons. The age groups are particularly important for the reconstruction in regards to the surface textures and physiological changes that effect the appearance of the individual. Hair styles were chosen arbitrarily as this cannot be noted from skeletal material. (figures 6.12a-g).

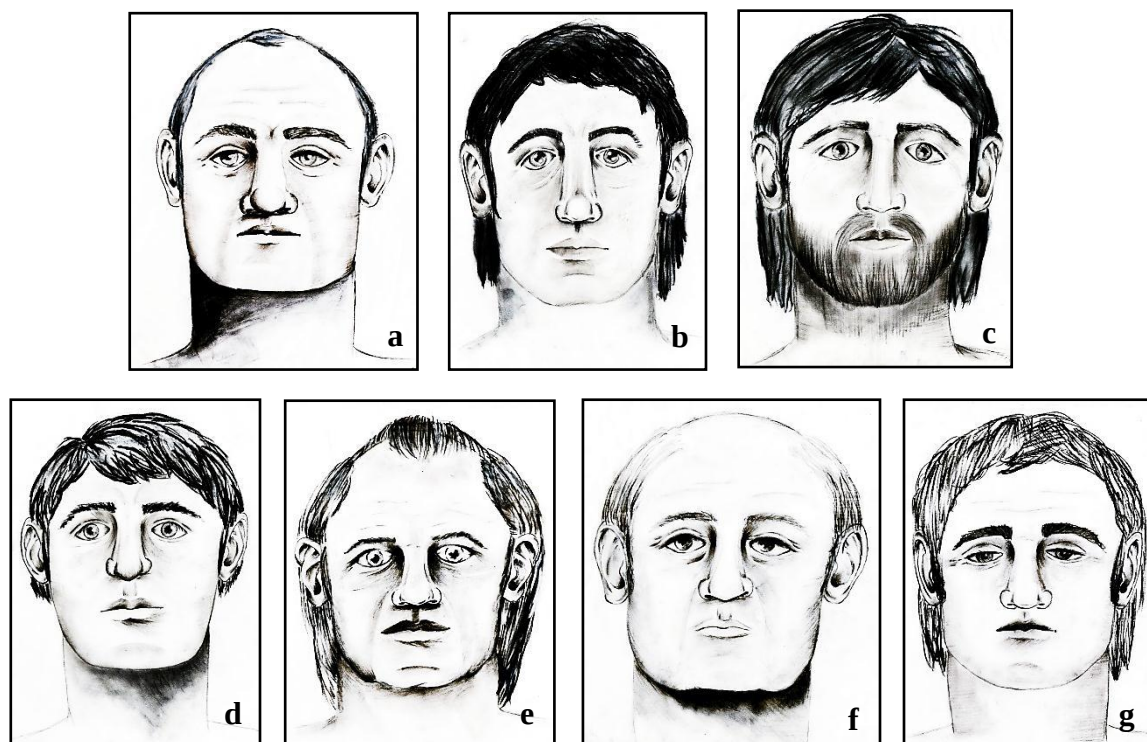


Figure 6.95a-g: Two dimensional reconstructions from Gallen Priory, Co. Offaly a) skeleton 95; b) skeleton 8; c) skeleton 60; d) skeleton 73; e) skeleton 1; f) skeleton 137; g) skeleton 12

The two-dimensional medium of the re-constructions from Gallen Priory are different from the preceding face from Ballinderry. Albeit novice from the practitioner, the flattened image of two-dimensional drawings create a different sense of encounter and evokes a different response from the depth and character created in the clay three-dimensional countenance of the re-construction from Ballinderry. Even through the photograph of this three-dimensional bust there is a different manner of approach when compared to a two-dimensional re-construction. The bust of Ballinderry can be approached and interjects into the space of the viewer and takes up space – just as the past individual would have done in the past. A correspondence between these re-constructions and the discussion concerning

alterity is produced by the two re-constructed others, both beings but presented in divergent manners – just as the cultural groups of the late medieval period have been discussed in historical and archaeological discourse.

6.3 Late medieval burials

The transition from the early medieval period within Ireland to the late medieval period saw immediate changes in the social and physical landscape of the island. The strong customs attached to new burial and funerary practices continue from this early medieval period onwards and are most definitely present in the later period. It is through this section in which the notion of alterity and the late medieval bioarchaeological record shall be revealed and investigated. As discussed previously in this chapter, the conception of the other became a powerful theme running throughout late medieval Ireland and the modern archaeological discourse concerning the period. The traditional interpretation of later medieval burials is to demonstrate that, “the tendency was strong in medieval Ireland to bury ‘like with like’...members of the same kin-group were buried together” (Fry 1999, 194; this thesis is also echoed by Tait 2002). Within its archaeology the funerary practices of this era can illustrate the difference between groups of people and clearly demonstrate Levinas’s theme of alterity.

The social role of the cemetery in late medieval Ireland continues to be integral to events and the sustaining of cultural realities. The cemetery played a role of communal meeting ground, or commercial setting, even a site for fairs. In England and France these would have occurred in the cemeteries themselves (Gilchrist and Morris 1993; Ariès 1977) but would have most likely been adjacent in Irish medieval contexts (Fry 1999). The public space of the cemetery and the late medieval burials are a significant motivator for the proliferation of the other. In these areas, those who are deemed ‘similar’ and those who are outsiders could be identified and maintained in relation to the resounding otherness of late medieval Ireland.

If we assume in the late medieval period that the funerary practices reflect the social structures of a community, and therefore whatever variety (i.e. inequalities) in the burial record illustrates the ranges of the respective society (Grauer 1989). Although we must be

aware of the effect ideology has upon the mortuary practices perhaps misconstruing an archaeologist's conception of a past community's social reality. If the guiding conceptions acting as frameworks for late medieval mortuary practices are to be considered in the norms established by Christianity, then one would expect a certain promotion of equality and universality of humanity. Therefore, mortuary contexts should appear with more similarities than what the bioarchaeological record demonstrates, which is a range of burial forms maintain emphasis on the individual and their role in society. The social reality that is available to contemporary scholars is one of difference and the presence of the other. This Levinasian theme running through this chapter is apparent not only in the difference in social structures and cultural inclusion to a particular demographic group, but also in their burial customs and funerary practice.

Burial contexts range in the late medieval period from simple earthen grave cuts, stone-lined interments, pillow-stone burials, and inhumations found within large sarcophagi or tombs (figure 6.13a-c). Sites such as St. Peter's Church, Waterford (Fewer 1998), Ballyhanna, Co. Donegal (McKenzie 2008), Temple Lane in Dublin (Ó Donnabháin & Cosgrave 1994), and Ardfert, Co. Kerry (Brosnan 1993; Moore 2007) are typical late medieval sites which consist of large amounts of late medieval human remains. Attention to class context appears in the late medieval period with the differentiation between a lower-class simple earthen cut grave to the upper-class stone memorials found inside churches. Elite Anglo-Normans introduced grave memorials in the form of effigies or sarcophagi (Halpin and Buckley 1995, 197). A rare context outside of the Anglo-Norman context, they have a distribution mainly located in the south-western portion of the country (Bradley 1988; Brosnan 1993). These would have been originally attributed to the wealthy Anglo-Norman population in the thirteenth and fourteenth centuries with appropriation by later Anglo-Irish populations following its introduction. In the early medieval period there were the elite sites noted by landscape and the materiality of grave goods. In the late medieval period, the differentiation between the status of individuals is visible in the spatial orientation within locations such as St. Mary of the Isle, Cork (Hurley and Sheehan 1995) and St. Mary's Cathedral, Limerick City with the high status families were buried within the Priory while the poorer classes were interred within the cemetery.

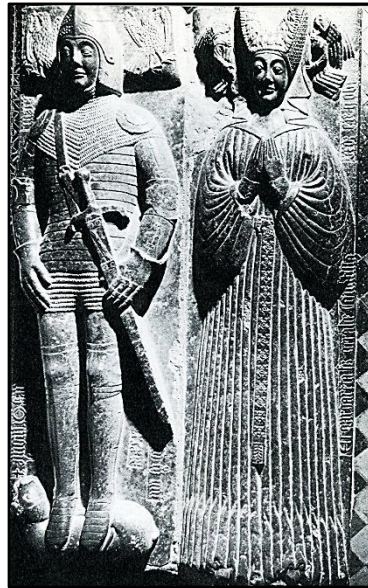


Figure 6.96a-c: **a)** Simple earthen grave from Ballyhanna, Co. Donegal (McKenzie 2008); **b)** effigies of Piers Butler and Margaret Fitzgerald c1539 (Kissane 1986); **c)** Medieval female (skeleton 36) in a stone-lined grave from Tintern, Co. Wexford (Power 1994)

The usage of space in and around the church and grave type are indicators of the social value an individual had within a community while material goods no longer display status as Christian values espoused humility and ascetic lifestyles (Brosnan 1993). The north side of the church would be for certain individuals reserved for, “the bodies of murderers, suicides or unbaptized children” (Johnson 1912, 351). It was through the presence of the Anglo-Normans on a site that burial within the church became a common occurrence rather than solely reserved for clergy (Brosnan 1993). At the commencement of this practice, it strengthened the divide between societal groups with the Anglo-Normans being interred within their ecclesiastical setting and native populations remaining outside the church until the tradition picked up further into the late medieval period.

Along with the changing social landscape of late medieval Ireland due to the arrival of Anglo-Normans a couple of generations previously, the fourteenth century (which will be discussed toward the end of this chapter) was a period of high mortality for the island of Ireland. This is all found in the documentary sources from Ireland that are incredibly detailed in their writing. Punctuations of famine, poverty, and the Black Plague not only saw the rising death tolls of the population, but also led to the fragmentation of the colonial settlement and a revival of the Gaelic Irish power (Cosgrove 1981).

In regards to mortuary practices and the arduous conditions of the fourteenth century, Kroeber's (1927) argument for emphasized emotional responses to death becomes extremely pertinent. However, while his acknowledgment of emotion is well-founded, his detachment from social relations was later overturned by Binford (1971) who stated that funerary practices should be analysed with the level of complexity which they sustain from the multifaceted social relations surrounding them. In the twenty-first century, Tarlow (2000) reiterated assertions such as Kroeber's and examines the role of emotion throughout the examination of mortuary and funerary contexts.

In addition to the disastrous effects of poverty and illness in the late medieval Irish skeletal record, trauma and interpersonal violence is a continuously observed feature on skeletal material in this period. Discussed in its early medieval context in the previous chapter, late medieval trauma is not as prevalent as the instances found in the early medieval bioarchaeological record (Carty forthcoming). However evidence of trauma in late medieval Ireland has been found at sites such as: Johnstown, Co. Meath, Claregalway, Co. Galway, Ardreigh, Co. Kildare, South Main Street, Cork, Saint John's Gate, Co. Wexford, Hughes' Lot East, Co. Tipperary, Lorrha, Co. Tipperary, Mackney, Co. Galway, Oranmore, Co. Galway, Dominic St., Tralee, Co. Kerry, Bakehouse Lane, Waterford City, Tintern Abbey, Co. Wexford, Christchurch Place; The Green Building, Temple Lane; No. 16 Eustace St; Patrick St; Castle St in Dublin City (Carty forthcoming). The archaeological discovery of interpersonal trauma exposes a past dynamic between populations. In Levinasian terms, violence against the other is due to a disturbance in the relation with the other. A creation of totality between the self and the other corrupts the self's obligation to the other and provokes violence against their being.

In connection to violence and the face, the archaeological phenomenon of discovering pits of skulls is a feature of the late medieval period. This context is predominantly found outside the walls or embankments of fortified sites. The pits of skulls are indicative of the display of decapitated individuals. The skulls would have been publically displayed and then taken down and deposited together accounting for the multiple individuals present in the interment. Seen in sites like Oranmore, Co. Galway (Delaney 2009); Trim Castle, Co. Meath (Hayden 2011); or No. 16 Eustace Street (Simpson 1998); Essex Street West (O'Donnabhain 2011) and Christchurch Place in Dublin have found these cache of skulls ranging in demography. This illustrates a consistent importance of the face as well as the heterogeneous nature of the funerary practices of medieval Ireland.

The traditional interpretation for this find would coincide with the context in which it was found. O'Brien (1996) gave several traditional reasons for decapitation: for spirits who were believed to haunt the living; execution; ritual killing; and the separate burial of an individual who was interred in a different location. The skulls found in the pits were most likely displayed on the fortifications being the subject of decapitation for some social or judicial reason (Tait 2002; O'Donnabhain 2011). In the discourse of decapitation, it is the severing of the treacherous head symbolizing individuality from the body which belongs to the land and the laws therein which makes this a practice of punishment physically and symbolically.



Figure 6.97: A close-up of a depiction of the display of decapitated heads of “Irish rebels” (circled) on the façade of Dublin Castle by John Derricke in 1581

“The Image of Ireland” by Derricke in 1581 (figure 6.14) depicts the campaign of Sir Henry Sidney against the Irish resistance to the English governance (O’Donnabhain 2011). While being an important visual historical document for the structure of Dublin Castle and the narrative of Sidney’s campaign, the justification for the inclusion of this image is seen in the upper portion of the larger image. It is these faces of the decapitated heads that are staked and put on display on the fortress wall which are evidence for past conflict. Events such as the display of skulls are described in the *Annals of Ulster* in 1172, a year after Dublin had been seized by English king Henry II (O’Donnabhain 2011, 127):

Tigernan Ua Ruairc, king of Breifni...was killed by the...Saxons. He was beheaded also by them and...the head was raised over the door of the fortress, a sore, miserable sight for the Irish. The body was hung in another place, with its feet upwards (Mac Airt and Mac Niocaill 1983).

The inclusion of faces within visual and written documentation coincide with the bioarchaeological evidence of pits of skulls and give meaning to their late medieval function.

If we apply this research’s theoretical model upon these pits of skulls, it is not the head that is the powerful unit of display in this medieval context. It is the exposure of the face and the response that it triggers which makes the consideration of the decapitation that much worse. While response from viewing the face of a traumatically deceased individual can evoke a varying range of emotions dependent on who they were and why they were punished so, the response from the face is the important feature. The construction of the self and other divide is amplified in this instance. The self viewing the decapitated individual will process the face as an other which had gone against socio-cultural norms and therefore been punished. Internalizing this scenario, the self thus refuses to be like the other and remains absolutely other.

The faces that line the outside of Dublin Castle for instance, are used both in the sense of ‘this is who we *are* – we are violent and we punish on violent terms’, but also more importantly, ‘this who we are *not*’. The faces of the ‘Irish rebels’ act as authoritative witnesses to the violent terms operating in late medieval Ireland. The faces of the deceased Irish personify what the conflict has been about and promote others to be less like them or

to suffer the same fate. This is a commanding use of the face's power and presence to the other. The dead had paid their debt, whatever side of the political and cultural spectrum they reside, but the display of the decapitated faces are very much for the living. The viewing experience of seeing the deceased (and perhaps their grotesque decay) evokes a response which the display-er has carefully curated and manipulated to control this response. The viewer is in continual responsible obligation towards the decapitated face as it beckons through its presence to be acknowledged. It is this system which the English at Dublin Castle have carefully measured with fine-tuned population control.

However, it is the point of this research and a necessity to re-state that the face has been overlooked in these interpretations and should constitute a portion of the research into such an act. The face is the presence of the other to the self. Levinas would argue that the killing of an individual is the loss of this alterity and the reduction to the same. In decapitation, the other is not allowed to truly be the other. The face and its power of ontological weight is silenced in a manner of speaking through this act and re-formed in a new manner of response when displayed as a decapitated head.

In addition to the archaeological feature of pits of skulls, there exists burial contexts in which individuals who have been decapitated are interred with the re-articulation of the severed body part. These burials are found amongst the general populous of the medieval cemeteries instead of being separated from their contemporary counterparts. This act of re-capitulation is a manner in which the trauma in which the structural violence of the late medieval period on its subjects (i.e. the Anglo-Norman conquest) can be appeased. If decapitation is the separation of what makes a being an other, then the re-articulation of the severed head with its body is the re-establishment of the power of the other. The face returned to its original position completes the other and the self which inters the individual returns to the relationship of alterity and that of full intersubjective space.

While the predominant demographic of those involved in interpersonal violence and even perhaps warfare between groups would have been male, there does exist within the osteological record violence upon women. Discussed in detail previously (section 5.3.3) the use of violence upon a woman's face could be said to be a far more heinous crime than that against the opposing sex. The mutilation of one's face is a disturbance of its

significance as the purveyor of the beginning of the other's presence to the self and the imposing weight of power that it possesses. The early medieval period had instances of female facial mutilation and can also be observed in late medieval contexts such as those at Ardreigh, Co. Kildare with four females displaying various strages of trauma in a healed or healing process, No. 16 Eustace St. has an female individual with trauma and facial mutilation (skull 9a), as well as another female from St. Peter's Church, Bakehouse Lane, Waterford City (sk. 7160) and St. Brenden's Cathedral, Ardfert, Co. Kerry (sk. 1650). (Moore 2007) Early medieval laws stated that these acts against women were to be deemed unlawful, yet in the (bio)archaeological record, they are still visible.

An example of a burial that seeks to perhaps shame the other is found in Kevin Street, Dublin. This features the skull of a seventeen to twenty-five year old male that was found in a pit accompanied with the remains of a dog (Simpson 2004). The two remains were deposited at the same time with archaeological association. Placing this burial in late medieval context however, "it seems that the ultimate insult was to bury a corpse with an animal, and an enemy's head and body were sometimes buried separately as a way of preventing recovery of the remains – an act which was also thought to preclude participation in the Resurrection" (Fry 1999, 191). Although Fry goes on to point out that there are celebrated (ecclesiastical) individuals whose remains have been separated. This appeased the medieval appetite for relics. For example, Hugh de Lacy's head and body were buried separately in 1198 and Caithréim Thordhealbhaigh reports that in 1312 Melachlainn MacNamara was beheaded, and his head and body were not left together, "for the fear lest his friends might recover him, he also was not left both head and body in one place" (Fry 1999, 46).

The other is an essential characteristic for the discipline of archaeology, but presently this theme is highlighted in terms of the late medieval period funerary culture. As Tait asserted, "the dead leave themselves in the hands of the living, who have to deal with disposing of the corpse (before it begins to decay), while acknowledging (or denying) the personal and social identities of the deceased person through the provision of appropriate ritual activity" (2002, 30). What Tait labelled as "acknowledging (or denying) the personal and social identities" is precisely what has been discussed here. The acknowledgment of an

individual's interment with their kin and evidence of trauma have distinguished the population groups in late medieval Ireland and emphasised the other. What this illustrates in the archaeological record is that the other is in constant force during medieval Ireland.

A thought-provoking extension considering the two re-constructions from Ballinderry and Gallen Priory would be to speculate where these individuals would have fallen on the political and cultural spectrum of late medieval Ireland. Ballinderry was located in the Earldom of Kildare which were lands held by Anglo-Irish lords. The FitzGeralds had connections with the English crown and would have governed a territory diverse with both Anglo-Norman and Irish traditions (Ellis 1986, 6). Therefore, the woman whose face peers out to us could have potentially been of mixed decent in a landscape of fluctuating identity. The ecclesiastical site of Gallen Priory and its activity during the transition between early and late medieval Ireland as well as its continuation of Catholicism throughout the Reformation, it is quite possible these individuals would have been particularly Gaelic-Irish in socio-cultural ideological structures. There are of course possibilities that these individuals travelled to the location they were interred. The individuals who have been reconstructed are those that lived during the periods of dynamic change throughout the late medieval period and encountered and experienced the late medieval other.

6.4 The face of late medieval Ireland

The purpose of this section is to examine the use and appearance of the face in the late medieval period in its re-production, characterization, and utilization to proliferate the other (either Gaelic Irish or Anglo-Norman). The depictions of the face in the archaeological record for late medieval Ireland can demonstrate to a contemporary reader how a group of people saw themselves or their perspective concerning outsiders. It is necessary to point out that the agency of the author/artist who creates the countenance firmly controls the appearance and reception of their artwork. The theoretical conception of the other and the face are readily incorporated into ecclesiastical features as an avenue for each population to describe and further 'other' their other. The dominance of religion in late medieval Ireland increased with Church reforms and the evolution of ecclesiastical organisation (Flanagan 2010) encouraged establishment of religious architecture throughout Ireland.

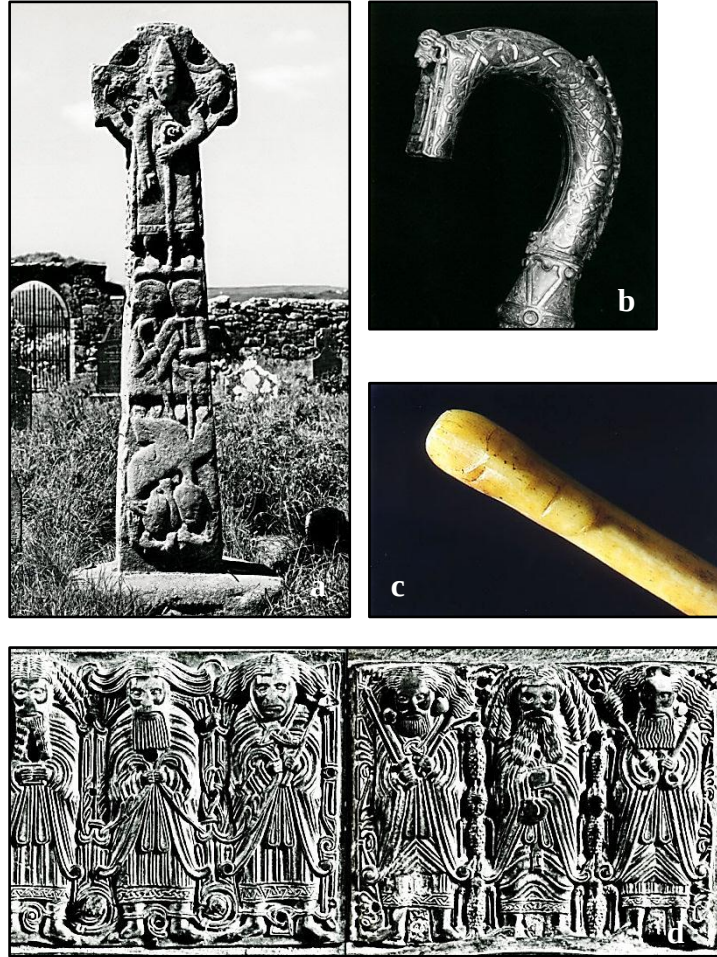


Figure 6.98a-d: **a)** ‘Doorty’ cross at Kilfenora, Co. Clare (Harbison 1998); **b)** Clonmacnoise crozier (Harbison 1998); **c)** Anthropomorphic head on a bone parchment stylus from Kells Priory, Co. Kilkenny; **d)** Figures from the *Breac Maedhóg* Shrine (Harbison 1998)

The predominant amount of the materiality that survives from the late medieval period is ecclesiastical in nature. This is due to archaeological visibility and the surviving nature of these artefacts compared to their secular counterparts. It can provide a skewed image of the amount of material culture devoted to ecclesiastical endeavours, but nonetheless describes a portion of the lived experience of late medieval Ireland. As well as being skewed toward the religious, there is a tendency there is also a tendency for archaeologists and historians to divert attention away from the everyday and focus instead on the portions of the archaeological record deemed elite. As Horning stated, “the material lives of the medieval non-elite remains a consistently under-researched topic. Their lack of visibility has led some archaeologists to question our ability to ever appreciate non-elite life” (2012, 176).

Ranging over mediums, the face in ecclesiastical Ireland is illustrated in illuminated scriptures, stone carvings, and metalwork. For example, high crosses (mostly dating from the last centuries of the early medieval period) became a mixture of visual signposts for people, their origin story, and religion (figure 6.15a), while figures from the Breac Maedhóg Shrine (figure 6.15d) and the face located on the front of the Clonmacnoise crozier (figure 6.15b) utilise the Levinasian qualities of the countenance such as command, authority, ethical relationship, and obligatory response in their placement on material culture. Anthropomorphic features continue through this period of time seen in such artefact like the stylistically abstracted bone stylus from Kells Priory, Co. Kilkenny (figure 6.15c). Also seen in illuminations later in this section, the face is a dominant presence in the late medieval period throughout many contexts and features of this portion of the archaeological narrative.

Shifting from the main emphasis of the face in a kingship and a necessity for wholeness (as seen in the previous chapter), the face becomes the appearance of a dividing factor. Although historians have fluctuated in the manner in which they conceive the historical events of the past from a monolithic event to the dynamic, interplay between groups, there is most definitely an emergence of different cultural identities. This even includes the new third identity of the Anglo-Irish with appropriation of certain sectors of both populations. The dividing factor is very evident in the significant variation between continental and Gaelic Irish churches as well as the cultural differences captured by the biased historians of the time such as Giraldus Cambrensis and William of Malmesbury, but exactly how different the social customs of the native Irish and their European/English counterparts were in reality is an integral question (Fry 1999). This is a further aim and objective of to those investigating late medieval Ireland.



Figure 6.99: "Arrest of Christ" scene depicted on the high cross at Monasterboice, Co. Louth (Henry1967)

This division and cultural interfacing is seen in instances such as the cross at Monasterboice, Co. Louth. Although from an early medieval Viking context, the high cross at Monasterboice (figure 6.16) illustrates the context of alterity and the firm tradition of otherness Irish craftsmen and the psyche of the native Irish have concerning those deemed 'outsiders' (Purcell and Sheehan 2013). The scene in question is the stone relief panel depicting the arrest of Christ where the soldiers arresting Christ are depicted with Viking characteristics. These include their contemporary (to the early medieval period) dress and facial hair as well as the very much in early medieval contemporary dress. Heavily armed with swords and illustrated with long hair and beards this individuals have been interpreted as Vikings from Dublin. The Christ figure has, in turn, been figured as a native Irish individual. What this archaeological informative artefact has displayed is a consistent acknowledgement of the alterity within medieval populations. Through costume, dress, and weapons the individuals which demonise the Christ-like figure of the Irish are no longer just foreign in appearance but treacherous and evil with the assumption of these biblical figures who are literally against Christ.

On a secular note, the difference in 'warrior classes' between the Gaelic Irish and the Anglo-Normans such as costume and appearance is shown in late medieval illustrations which at times take place in ecclesiastical contexts (such as illuminations). The Irish manner of dress and hairstyle is particular to the Gaelic Irish as visual records represent their facial hair and longer hair (figure 6.17a). A feature of interest to some scholars is the difference in weapons with which each group seems to identify with. The Irish appear

mainly with axes or variations therewithin, while the outside populations such as Anglo-Normans appear with their swords (Giraldus Cambrensis 1978). There is also a division in appearance of armour worn by each group's warring class. This is seen in the illuminations and illustrations of the late medieval period (figure 6.17a-e). There is no discrepancy in the bodily appearance of each group. Neither appears superior or inferior to the other, but there is clearly differentiation between the Gaelic Irish and the Anglo-Normans.



Figure 6.100a-e: **a)** Sixteenth century drawing of Irish soldiers by Dürer; **b)** Sculpture of a Norman warrior from Kilfane Monestary, Co. Kilkenny; **c)** Uncle of Giraldus de Barri (Cambrensis) Maurice Fitzgerald (Kissane 1986); **d)** Diarmait MacMurchada (Kissane 1986); **e)** Anglo-Norman magnate and Lord of Meath Hugh de Lacy (Kissane 1986)

Henry and Marsh-Micheli (1987) noted that it is usual to assume that with the arrival of the Anglo-Normans there is an end to the 'vernacular' style of Irish art and instead transitions towards imported trends. However, as they stated, this was a valid claim for such mediums as architecture, sculpture, and metalwork, but not a legitimate claim for the field of manuscripts and illuminations which were heavily impacted by Anglo-Norman traditions then subsequently reverted back to the older Irish traditions (specifically outside of the Pale). The depictions (such as figures 6.17c-e) and documentation of the other in late

medieval Ireland is interesting as well because we as contemporary academics know that these are not an accurate description of the cultural realities because, “if one could possess, grasp, and know the other, it would not be the other” (Levinas 1979, 83 in Zahavi 2001, 159). This in turn means that the material culture we are presented with is the attempt of the late medieval Irish and Anglo-Norman individuals to understand the other in their otherness without a reduction to the same. This is a crucial point for the understanding of alterity in relation to material culture and late medieval Ireland.



Figure 6.101a-e: **a)** East face of the Dysert O'Dea cross, Co. Clare (Harbison 1998); **b)** Head of Christ found at Inishcealtra, Co. Clare (Harbison 1998); **c)** Brooch of St. John the Baptist found in Waterford; **d)** “Mouth-puller” from St. Louis Convent, Co. Louth (Weir 1977); **e)** Stone head in a graveyard in Killogilleen, Co. Galway (Chapple 2005)

The face in ecclesiastical contexts ranges in appearance due to its intention, use-value, and the artistic frameworks in which it is produced. This diversity (pictured in figures 6.18a-e) illustrates this exact statement. Depictions such as the twelfth century Dysert O'Dea cross and the face of St. John the Baptist (figures 6.18a and 6.18c) illustrate the stoic and dignified expressions of religious personas. While depictions such as the head of Christ at Inishcealtra, Co. Clare demonstrate the growing artistic transition to subtle emotion as this depiction of Christ which might have become detached from a high cross found in excavations at Inishcealtra, Co. Clare is dignified in resignation (Harbison 1998). The context of these figures dictates their appropriate presence and form. However, there are faces of the late medieval period which do not use the dignified repose of the latter images,

such as those known as “mouth-pullers” (figure 6.18d). Placed on or near the entrances of churches and buildings, these faces were used in an apotropaic function or perhaps even a metaphorical *Sheela na gig* with functions concerning medieval conceptions of sexuality (Houssaye 2007). The out of place face of “mouth-pullers” illustrates the dominant theme running through this research – that the face is appropriated for functions other than just a countenance, because as Levinas would say it goes beyond its finite physical appearance and speaks to infinite qualities such as ethics, responsibility, visibility, and otherness.

Perhaps out of place from the reserved religious representations like the fifteenth century “mouth-puller”, a stone head from the graveyard of Killogilleen, Co. Galway (figure 6.18e) is of late- or post-Medieval date, but stylistically harkens back to the parallels seen in earlier periods. Particular attention is paid to this sculpture’s face because of the incised lines displayed clearly on the countenance. Interpretations of this carving range from, “a wrinkled priest or bishop, to a tattooed Virgin Mary” (Chapple 2005, 187). The range of interpretations for such a formally unique sculpture such as this is curious, especially the last postulating the re-presentation of a tattooed Virgin Mary. This is of note because in the late medieval period, similar to the preceding period of time of the early medieval, there is a glaring lack of feminine facial depictions. The feminine body is seen in object such as the *Sheela na gigs*, but lacking in the representative effort given to many other artistic endeavours. The portion of the archaeological record seen in this section is a demographic representation of the overarching masculine overtone to the material culture that was represented in late medieval Ireland. Women were not scarce in other mediums such as poetry and law tracts and an obvious inclusion in the bioarchaeological record which makes this rarity of the feminine face much more curious.

Having discussed illustrations of the face within materiality associated with church sites, there are additional examples of ecclesiastical architectural merit which depict the face. Operating under Romanesque frameworks in terms of construction and aesthetic, these faces examined here appear on the external facades of these churches. Formerly thought to have begun at Cormac’s Chapel at Cashel (1127-1134) (de Paor 1967; Bradley and King 1985) the origin of Romanesque architectural tradition seen in Ireland has been modified to earlier sites (Garton 2001, 121) such as Killaloe (O’Keeffe 2003, 280-281).

The Romanesque period was more regional and local in architectural tradition than a singular phenomenon (O’Keeffe 2003). So while there are older interpretations that this artistic reference was imported from the Continent (Henry and Zarnecki 1958) the transference of Romanesque features to Ireland is much more dynamic than previous interpretations of rigid importation. Cognizant of contemporary international contexts, the Irish Romanesque emerged as, “products of an interaction between older indigenous and newly-gestated international traditions” (O’Keeffe 2003, 7). Due to this combination and unique aesthetic of Romanesque features in Ireland, Harbison (2001) has noted a theme of ‘otherness’ of Irish art within the twelfth-century that resonates with similar concepts within this chapter.

As O’Keeffe asserted, “[Romanesque churches] were complex discursive objects of visual cultural, located in, and contributing to, networks of understanding at a series of different levels” (2007, 107). This statement of the visually complex churches can be applied to the sight of faces upon the façade and their appealing nature to the attributes of alterity. The fascination with the face is at a juncture here in the context of church buildings because it is at once an artistic expression of those craftsmen working on the project, but as well making the church-goer remember their (Levinasian) duties and obligations to the other (see Garton 2001 for a stylistic discussion of heads on Romanesque edifices).

The architectural facet of heads upon the tympanum, archivolt, voussoirs, lintel, or jambs of entrance to a church (figures 6.19a-c) is a significance use of the face. The ecclesiastical sites which have arches containing human or animal heads include: Clonmacnois, Co. Offaly (Henry and Zarnecki 1958); Dysert O’Dea, Co. Clare (Henry 1970); Inchagoill, Co. Galway (Leask 1955); Ballysadare, Co. Sligo (Garton 2001); Kilmore, Co. Cavan (Leask 1955); St. Fin Barre’s Cathedral, Cork (Bradley and King 1985); Clonfert, Co. Galway (Henry and Zarnecki 1958); St. Francis Friary, Kilkenny (Harbison 1973); Inishcealtra, Co. Clare (Garton 2001). Again departing from the discourse surrounding the head, it is believed that in this context it is the face which prompts response and action when entering this sacred space - for what is more sacred than the commanding face? The face places the viewer in a state of responsibility for themselves and for others (the other in this case being stone sculptures which extend to one’s neighbour). Various interpretations of these faces

on the exterior of churches exist, particularly those seen in Clonfert, which are compared in architectural features to the heavenly city of Jerusalem or the Holy Temple (Richardson and Scarry 1990; O’Keefee 2003, 277-278); however, here we are concerned with how the face evokes the philosophical concepts from Levinas which speak to the fundamental qualities of the self and the other within their shared communal world.

In this Levinasian interpretation, the sculpted face on the façade of the other is clearly gazing down upon the church-goer in a state of pure authority. To cross these gazes and enter the threshold of a holy space, the face is used as a type of commanding register by the church to engage with the laity and put them in the correct mind space. Additionally, a type of veneration is to be expected when encountering these faces on the liminal surface of the outside secular world and the religious interior.

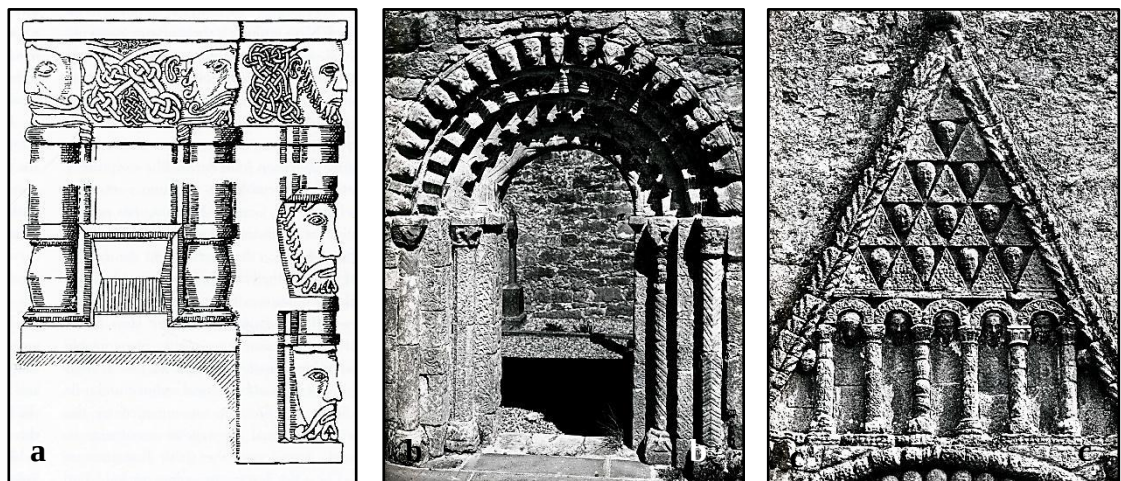


Figure 6.102a-c: **a)** Faces carved into the capitals and bases of the round tower doorway at Timahoe, Co. Laois; **b)** South doorway at the church of Dysert O’Dea, Co. Clare; **c)** Clonfert Cathedral and its gable recesses for human heads (Harbison 1998)

These faces could have been utilised by the Church to place the laity within direct responsibility to the other, who judge their actions outside of this sphere of religiosity. The secular and ecclesiastic realms by using the inherent power are bordered by the power of the architecturally present faces. This conception of the other would be in complete disagreement with the reduction to the same which the Catholic Church espoused in this time period, but what the purpose of the face is ultimately for is reminding the plead of the other and the asymmetrical relationship the self has to one’s neighbour and one’s endless obligation to the gaze of the other’s such as these.

In Levinasian terms which this research is situated, the presence of carvings of the face (not the generalised head) associates with the essential human element of intersubjectivity and therefore, alterity (in a very religious connotation) as described above. Herein, we transition to similar architectural ornamentation of the severe challenges of the fourteenth century (which were mentioned in the previous section). These illustrate the relevance of alterity and the way in which the face calls the self into obligation to the other. Although in a different context than previous material of this chapter, this is an extremely pertinent portion of time in the late medieval period when discussing themes such as the self and the other and its appearance in the (bio)archaeological record.



Figure 6.103a-c: **a)** Corbel figure from St. Francis Church acting as an architectural support for the bell tower (Kelly 2001); **b)** Fifteenth century example of cadaver tombstones (Kelly 2001); **c)** Fourteenth century Black Death burial pits from the former Mint at East Smithfield in London (Kelly 2001)

The effect of the Black Death in the fourteenth century on the late medieval population not only caused high mortality rates but consequently altered the psychological sphere of late medieval life. As one historian observes of this time period and its inhabitants, they “always oscillate between the fear of hell and the most naïve joy, between cruelty and tenderness, between harsh asceticism and insane attachments to the delights of this world, between hatred and goodness, always running to extremes” (Huizinga 1965, 25).

Population decline, famine, settlement abandonment, and other severe challenges are just a slight overview to the misery that these populations endured (Horning 2012, 172; Nicholls 2001).

The records of this time are scarce due to the fire of the Public Records Office in 1922 as well as the paucity of recording performed during this particular portion of medieval Ireland (Kelly 2001). Even lacking records, this event was such a massive alteration in the communal psyche of late medieval Ireland that it had to, and is, shown in the archaeological record through the emotive sculptures and fright of death. With the large number of deaths, the colonial state which England held over Ireland fragmented and went into a state of decline allowing for a process of revival of the Gaelic Irish (Cosgrove 1981).

The face enters into a new realm of emotive qualities in the late medieval period. Not only used on the arches of the entrance to churches to evoke a response and reinforce the other to the contemporary population, but now imbued with emotion of the awful events of the fourteenth century. Stated in the previous section, the mortality rate and amount of death that occurred in this period of time took its toll on the population. This is illustrated in cemetery sculptures such as figures 6.20a-b which personify the terror and sadness of this time period. Caryatids (figure 6.20a) from St. Francis Church, Kilkenny were architectural supports, but according to Kelly (2001) were also representative of the laity in charge of construction for the bell tower at this site. A parallel appears between the support of this architectural feature and the individuals populating the church who figuratively support this edifice. The individuals were re-presented with a variety of emotions, but mainly appear in states of terror or sadness personifying the plague (Kelly 2001). *Memento morii* in the realistic appearance of skeletons are also material expressions which resonate with life during the turbulent periods of plague (figure 6.20b).

According to Bradshaw, Ellis assumed, “Ireland had no meaningful historical existence in the late medieval period. It was merely a geographical expression, part of a borderland which demarcated two politico-cultural zones: one English, under the jurisdiction of the English monarch; the other formed by the ‘Celtic’ peoples on the Atlantic fringe” (1989, 329). Again resonating Duffy (1997), the impact of the arrival of Anglo-Normans into Irish society was the most influential impact in the development of Ireland, far greater than that

of the previous Viking incursion. We know from Ellis (1989) that the writings of other historians from the past such as William of Malmesbury and Giraldus Cambrensis, and from the twentieth century such as Orpen to be biased in the slanted historical depiction of Ireland in the late medieval period and from the previous discussion of this chapter can demonstrate that the cultural interplay between the Anglo-Norman and Gaelic Irish was much more than one culture dominating another.

The new types of settlement, agricultural and religious practices, and architectural forms of the Anglo-Norman conquest were once thought of as one-sided change with acculturation by the passive Gaelic population, however, “more recent investigations have highlighted dynamism in the cultural interplay between Gaelic and Anglo-Norman societies as marked through processes of continuity and change” (Horning 2012, 172). This dynamic and eruptive relationship can be seen throughout many visual documents – material culture and human remains. The discussion of alterity in regards to Ireland had been building since the early medieval period. This has been shown by the previous theoretical layer of intersubjectivity and archaeologically, by illustrating preceding mortuary and material remains of the heterogeneous population of the island of Ireland. These theoretical and archaeological narratives of the early medieval period have brought us to the understanding of the late medieval period, which has a similarly vibrant (bio)archaeological narrative.

The layer of alterity in this structure of this research leads to the next theoretical thread which is that of response and responsibility. Instances of the response and responsibility the face evokes has been present in the previous periods of time, however with the emerging strength of nationalism and governing superstructures, the face is harnessed in a manner which responsibility (the beckoning of the face for a response) transforms to the responsibility or welfare of individuals within a large structural socio-cultural landscape.

CHAPTER SEVEN – THE GAZE AND THE DEMAND: *RESPONSE AND RESPONS-IBILITY* OF THE (BIO)ARCHAEOLOGICAL FACE IN POST-MEDIEVAL IRELAND

“We are all responsible for everything and guilty in front of everyone, but I am that more than all others”
(Dostoevsky 1880, 330).

This chapter is the concluding portion of the chosen Levinasian phenomenological themes applied through consideration of the face in the (bio)archaeological record. It is built on the foundation of visibility, intersubjectivity, and alterity which aid in this culmination of response and respons-ibility. Historical archaeology and the post-medieval archaeological record of Ireland is an ideal setting for such a topic as the events of this era illustrate prime examples of the response and respons-ibility or the breakdown of Levinasian respons-ibility in the (bio)archaeological record. Following the discussion of the face and alterity in the (bio)archaeological record in late medieval Ireland, a foundation has been layered for this chapter’s discussion regarding the respons-ibility the self has toward the other – prompted by the face (in both physical and Levinasian terms) – and illustrated here in the (bio)archaeological record of post-medieval Ireland. In this time period we see the face in its most elusive and abstracted dimension yet: in the sense of respons-ibility for the other.

The post-medieval archaeological record spans from the sixteenth century to the recent times (Brannon and Horning 2005; McNeill 2007). This area of archaeological examination contributes to the understanding of our most recent past. It is of no doubt that this time span was marked by a profound set of social, economic, and political changes and the post-medieval archaeological material which constitutes its narrative is extremely varied (Horning *et al.* 2007). Evidence of diverse industries, increased presence of material culture and stratified social classes characterise this portion of the archaeological record. Although this period begins at the sixteenth/seventeenth century, this chapter will focus on the later portion of this period in specific regards of institutions such as workhouses and prisons which played a prominent role in the Irish lived experience and impacted the collective consciousness of society on the island. This chapter seeks to evaluate the role the archaeological landscape, materiality of artefacts, and human remains in illustrating this humanistic dimension of responding to the suffering (in all senses of the term) of the other. Additionally, the face now appearing in this time period as its modern sense is considered

with regards to consumption, appropriation, and how it appeared within the discipline of archaeology.

Post-medieval Ireland is normally distinguished from its medieval past by the transition of material evidence from church-building towards the expansion of secular construction and the implementation of the plantation system (Horning 2007). McNeill (2007) claimed the beginning of this period is difficult to ascertain in Ireland due to different categories of change but he posited that in terms of social and economic qualities, the post-medieval period may not have truly occurred until the late seventeenth century. The post-medieval period of archaeology, with a connotation of insignificance, has had difficulty claiming legitimacy within the larger discipline as most “post-medieval levels were removed to reach the archaeology” (Brannon and Horning 2005) being a common methodology in excavations until recently. The disciplines of archaeology and history blur in this time period, but importantly they engage with one another providing a richer overall picture of the past. This chapter will combine these two for the benefit of the topic at hand. The contribution this temporal era can provide to the discipline of archaeology is equally as significant about our past ancestors and their lived experiences as further removed archaeological periods.

This era is relevant in this body of research because of the Levinasian notion of response and respons-ibility. What is intended by the term respons-ibility is significant for the following discussion. In this sense, it is not the responsibility as in the rigid duty justice or in a judicial sense of awarding responsibility or guilt to a party. Instead, it is respons-ibility as responding: *to* the other, *for oneself* to the other person, and *for the other* in the sense of substituting the self for the other in their responsibilities (Hutchens 2004, 19). We can see the core word which is pointed to: the response in *respons-ibility*, “responsibility is interpreted by Levinas...as response, and response is interpreted as saying, whether or not out loud” (Llewelyn 2002, 131). This essential action put upon the self by the other is another recognition of the asymmetrical relationship between the self and the other in a completely unlimited sense; the ethical response which leads one to “his distinctive understanding of our asymmetrical and non-reciprocal responsibility to and for the other, a response to the suffering of the other, my neighbour” (Bernstein 2002, 258).

As demonstrated over the previous three chapters, Levinas is demonstrably associated with the realm of human interactions and the manner in which they intertwine in our encounter of each other. The notion of respons-ibility is of the utmost importance in the interaction of subjects (Manning 1993). At this juncture of beings meeting in their similar worldly situation, “the interhuman, properly speaking, lies in a non-indifference of one to another, in a responsibility, which will be inscribed in impersonal laws, comes to be superimposed on the pure altruism of this responsibility” (Levinas 1998, 86). Not to be confused with charity, as one is meant to be and determined to be *for* the other and this respons-ibility to the other is never finished, it is “an inexhaustible, concrete responsibility [with] the impossibility of saying no” (Levinas 1999, 104-105).

How does the face in the archaeological sense connect with the response and respons-ibility? To begin, we know the face to elicit a response from the self towards obligation. It is distinguished from the plethora of objects in the post-medieval world by its contradictory “weakness and authority” (Levinas 1999 104-105) in the powerful, humanity-driven presence. The feature of respons-ibility becomes prominent in this time period in one example as due to the increased presence of a centralised governing body which appears more alienated from the previously active kin and local community oriented infrastructures (Starkey 1982) causing the enhanced creation for respons-ibility of increasingly heterogeneous groups of people. This process was also illustrated in Ireland through the institutions that were active in welfare response to the events such as the Great Famine and the political response of transportation and the penal system.

This time period is included in this body of research as an archaeological time period because of its relevance and constitution of the archaeological record. Additionally, the volume of post-medieval material, whether artefacts or human remains, is increasing and deserves to be investigated as part of this on-going archaeological record and its narrative in the public consciousness. The concept of the face as the presence of the other to the self is seen in this portion of the Irish archaeological record in that the burgeoning modernisation impacted the manner in which the other (building upon the alterity seen in the previous chapter of the late medieval period) was perceived and thus interacted with or cared for. It seems paradoxical that the post-medieval period became so much more

heterogeneous in its general (bio)archaeological record yet the lived experience points to a more collectivised arrangement of society with central governments and the appearance of large nation states.

The landscape of post-medieval Ireland is marked with the construction of power and industry (Rynne 2006, 2007) but also the alienation of people through their marginalisation whether from structural violence. Structural violence is, “harm done to individuals or groups through the normalization of inequalities that are intimately, and invisibly, embedded in political-economic organization (Nystrom 2014, 1). It can be argued that structural violence is evident as early as the medieval period (see Ó Donnabháin 2000), but is applied herein to the post-medieval period. The confrontation of the (bio)archaeological face which according to Levinas, would deny structural boundaries. However as will be shown, the face becomes entangled within the process of commodification in modern terms as it becomes intertwined with the body. It is at this phase where the face is lost in anthropological discourse overshadowed by the rising field of craniometrics. The site that provides the past countenance(s) and the anchor for the humanistic element of post-medieval Ireland originates from a site which incorporates many of the themes that will be discussed in this chapter: Spike Island, Co. Cork.

7.1 Spike Island, Co. Cork

The one hundred and four acres which constitute Spike Island, Co. Cork (Inis Píic) are abundant with archaeological and historical material (figure 7.1b). ‘Ireland’s Alcatraz’ is a site that contributes to the archaeological imagination of the post-medieval period with its impact within Ireland and its particularly notable role in the global transportation of prisoners. The individuals from this site are extremely relevant to applying the notions of response and respons-ibility to the archaeological record. This is due to the institutionalised nature of the prison on Spike Island and this impact upon the lived experience of those individuals which occupied their spaces.

7.1.1 Site information

The reconstructed human remains to follow originate from the mid-nineteenth century British prison (O'Donnabhain 2013). The island of Spike has a long history which predates this prison (Martin 2007). This includes the potential prehistoric occupation which occurred on many coastal locations throughout Ireland. There are two megalithic tombs, Rostellan and Castlemary, in close coastal proximity to Spike Island which gives rise to potential association on Spike Island (Kieran 2013, 9). However, this has yet to be substantiated by any research or excavation. The possibility of an early medieval archaeological presence of Spike Island is more likely although no evidence of this has ever been found.

This beginning arises around the seventh century when it is said in a hagiography of St. Carthage (Mochuda) supposedly founded a monastery on the island in the year 635AD with reference to other saints such as St. Ruisen associated with the monastic landscape of Spike Island with additional remarks (Martin 2007). The Annals of 821AD document the death of the Abbot of Inis Píc (Kieran 2013, 11). With the later early medieval period, the Viking presence and influence upon Cork and its harbour most likely had an impact on the island (Valante 2008) as must the Normans later on. No evidence of impacts survived the nineteenth century transformation of the island.

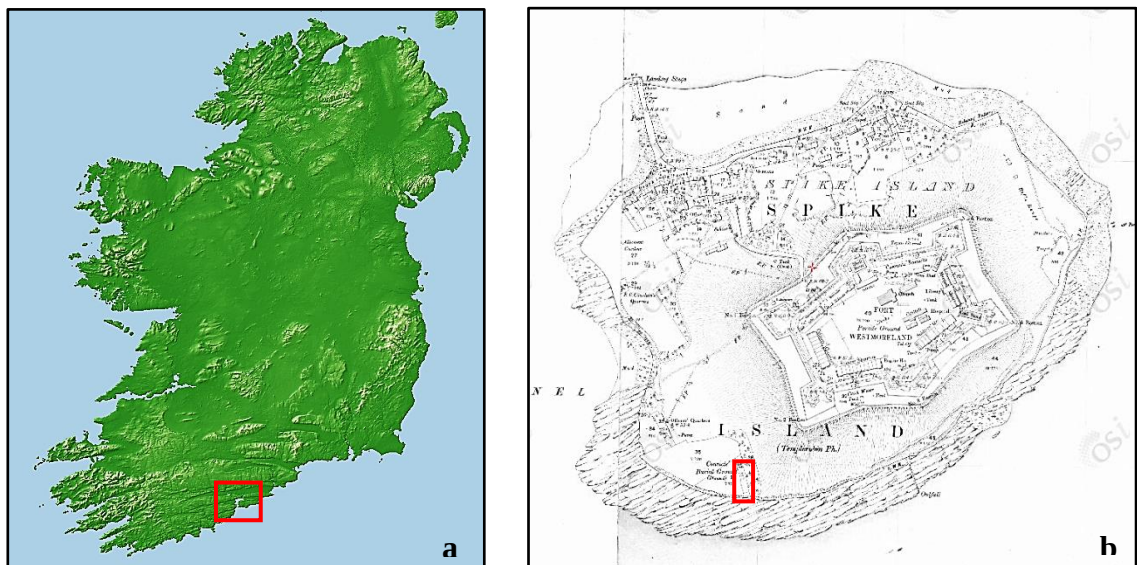


Figure 7.104a-b: a) Location of Cork Harbour and Spike Island b) Map of Spike Island with the cemetery which yielded skeletons 318 and 507 demarcated in red

The early history of this site created the layers of occupation upon which the site of our present focus has originated. In the seventeenth century, and as a consequence of the Cromwellian campaign, this island was used as the departure point for the transportation for prisoners to portions of the New World which would continue in the later eighteenth century transition to areas of the British Empire in the Pacific, namely Australia and Van Diemen's Land (Tasmania) (O'Callaghan 2000). There were many phases of construction. The construction of Fort Westmoreland, as it was initially called, commenced from 1792 (Martin 2011), whereas the third fort begins again in 1804. Construction was suspended in 1820 and resumed with convict labour post-1847 (O'Donnabháin 2013). Convict labour was used not only in the construction of the fort on Spike Island with additional use of their work in extensive ground works upon the island, but the other nearby forts of Camden and Carlisle (Martin 2007).

Spike Island as a prison and penal station was opened in 1847 and functioned in this manner until 1883 (Martin 2007). It was in these years that the Irish famine of 1845-52 took place and this prison became central in the response to these catastrophic events (Martin 2007) by the housing and transportation of thousands of these men. The convicts who occupied Spike were sentenced with a range of crimes from petty offences to serious crimes. During the height of the famine, prisoners were kept in over-crowded conditions with over population of the prison. The British authorities kept many records detailing the general operations at Spike Island. Their documentation of the many specifics is exceptionally helpful in aiding (bio)archaeologists to learn about the lived experience of the prison from the grounds, the diet and health of the prisoner population, to the transportation of the prisoners abroad.

The prison was closed in 1883. The British Army continued to use this island for militaristic uses as well as a prison for political prisoners until the handover to the newly created Irish state in 1938 (Martin 2007). From this period of new ownership of the island, under the name Fort Mitchel with the Irish Army and subsequently the Irish Naval Service continued the militaristic usage in a site of defence and training. In 1984, the Department of Justice ordered the Naval Service to vacate operations on the island and once again

opened Fort Mitchel as inmate accommodation (O'Donnabhain 2013). The prison was closed in 2004 and opened to the public in 2013.

O'Donnabhain (UCC) began the first archaeological investigations and excavations of Spike Island in 2012. The walled cemetery where a portion of this excavation took place is situated on the southeast portion of the island near the former hospital (figure 7.1b). This cemetery is demarcated by a wall constructed between 1879 and 1902. A cross was added in 1947 as a commemoration of the famine deaths (O'Donnabhain 2013). The excavation at a portion of the cemetery on Spike Island illustrates the burial practices used in the mid-nineteenth century. The inhumations are supine, extended with an east-west orientation with the heads to the west. Interred in coffins, the human remains were found at a uniform depth and placement in rows which coincides with the military dimension of the authorities of the island (O'Donnabhain 2013).

Convict labour was particularly formative in shaping the physical landscape of both Spike Island and the broader surroundings of Cork Harbour. The individuals embedded within this system underwent rigorous physical work evident in bioarchaeological material of individuals and in particular of those analysed here for the purpose of archaeological facial reconstruction. This physical work was to a manner of criminal reformation (Hill 1857). We have a chance to look at two of the men whose operation under this (at times) inhumane system, humanise this portion of (bio)archaeological history.

7.1.2 Skeleton 318

This individual was interred in coffin a supine position oriented east-west with the head lying to the west. The lower portion of the body and right side were beyond the limits of excavation of this trench (figure 7.2). The remains recovered include: the skull, the bones of the shoulders, left upper limb, ribs, and the vertebrae down to the L5 (O'Donnabhain 2013). No artefactual evidence was associated with this burial.

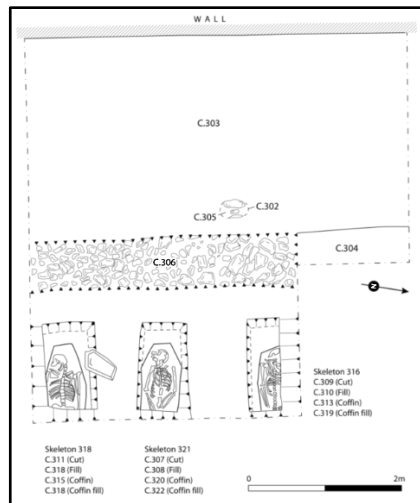


Figure 7.105: Plan of skeleton 318's burial and associated skeletons (O'Donnabhain 2013)

The excavation of this burial aided in the understanding of the mortuary practices of the prisoners on Spike Island. Discovered within the confines of the walled cemetery on the west side of the island, skeleton 318 was excavated to the depth of 1.45cm and was aligned in approximation to the similar burials (O'Donnabhain 2013). This regimented interment revealed in the archaeological excavation as previously stated, is in line with the militaristic history of the island.

Osteobiography

The remains from the island were analysed by O'Donnabhain (2013). The individual, skeleton 318, displays osteological characteristics of a younger or middle male. With the available skeletal material due to the partial recovery of remains, the left humerus provides a stature estimate of 175.9 ± 4.05 cm.

The estimation of sex of this individual was only done through the analysis of the cranium because of lacking the pelvis due to the position of the skeletal material within the limit of excavation. This skeletal material displays masculine characteristics in the sloping forehead and prominent brow ridges. The muscle markers are moderate on the remaining portions of the cranium with a very prominent chin and slight gonial flare appearing on the mandible.



Figure 7.106a-b: a) Frontal and b) lateral view of skeleton 318 from Spike Island, Co. Cork

Age-at-death of this individual was based on dentition and the individual's epiphyseal fusions available from the partial excavation of remains. According to O'Donnabhain (2013) the medial end of the right clavicle retained its epiphyseal line indicating his younger or middle adult age range. The dentition and the attrition is not a reliable factor in this instance but does support the estimate provided by this epiphyseal fusion.

The dentition of skeleton 318 displays five absent teeth from ante-mortem causes with the appearance of calculus, caries, and minimal to moderate dental attrition and evidence of dental enamel hypoplasia (DEH) (O'Donnabhain 2013). A notable pipe smoker's notch can be seen confined on the individual's right side produced through the consistent use of a clay pipe placed in between this particular set of teeth (figure 7.4). This is a common osteological trait found on the broad skeletal material assemblage of the post-medieval period.

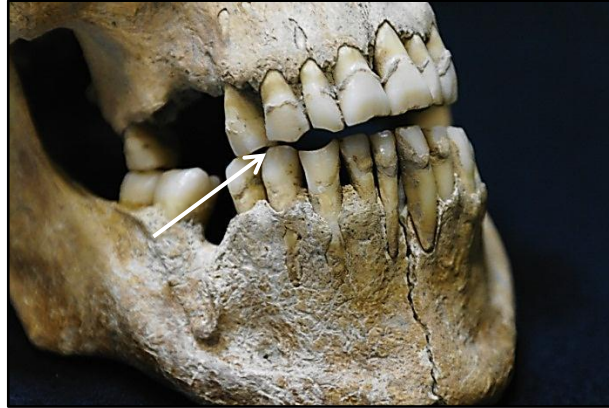


Figure 7.107: Detail of skeleton 318's dentition and the pipe smoker's notch

Skeleton 318 has a healed fracture to the left nasal bone, resulting in ossification of the nasal cartilage and possible degenerative changes to the temporomandibular joint (TMJ) (O'Donnabhain 2013). Mild porotic hyperostosis was noted by O'Donnabhain on both parietals and appears to have been active at the time of death indicating a period of stress the individual was undergoing at the time of death.

Post-cranially according to O'Donnabhain's report, skeleton 318 displays a bilateral fusion of the first cervical vertebra to the occipital. A congenital anomaly appears in the fusion of the anterior portion of the C1 along the laminae. Accessory facets between the C2 and C3 on the margin of the centra are also present. Additionally, the left humerus displays a dimple in the subchondral bone, but is not associated with degenerative changes and is not present upon the right humerus.

Soft tissue prediction

The cranium of skeleton 318 displays a long and slim facial skeleton with a predominantly flat facial profile. Doliocephalic in appearance, on first impression this individual has strikingly round orbits, a healed fracture to the left nasal bone, a prominent pipe smoker's notch, and a rather long and flat chin. The following is a prediction of the soft tissue appearance of this individual feature by feature.

Beginning with the upper face of skeleton 318 and the association between the features of the orbits, brow ridge and nasal bones, the skeletal material displays very round orbits and a heavy supraorbital ridge with illustration of strong muscle markers. The eye slit dictated by

the tangent between the lacrimal crest and the malar tubercle (Wilkinson 2004) displays a horizontal tangent (figure 7.5). The juncture of the heavy set brows and moderately set nasal ridge with the particular round orbits indicated that the eyebrows for this individual would have been rounded and curved (Fedosyutkin and Nainys 1993 in Wilkinson 2004; Rynn *et al.* 2012). The eyelid pattern would have been mainly lateral with a minutely central fold due to the overhang of the mid supraorbital rim.



Figure 7.108: Prediction of eye slant from the skeletal material of skeleton 318

A narrow nasal aperture with a slightly asymmetrical vomer, this nose would have appeared long and thin in line with the typical characteristics of individuals displaying Caucasoid traits. The two predictions (table 7.1) that allow for the greatest justifiability in the creation of the individual's nasal profile are Gerasimov's (1955) two tangent theory and Rynn and colleagues (2010) regression equations (figures 7.6a and 7.6b).

As with many archaeological specimens and the delicate nature of the nasal spine, this piece of osteological material is incomplete along with the other full structure including the rhinion which is a potential source of error for predicting this soft tissue feature.

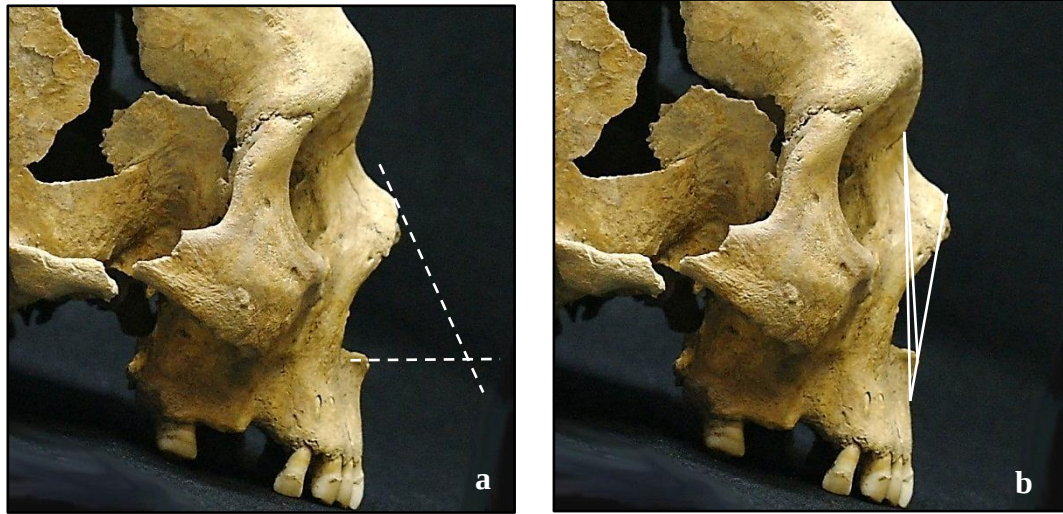


Figure 7.109a-b: **a)** Gerasimov's two tangent theory (1955) for nasal prediction applied to skeleton 318; **b)** Measurements applied in accordance to Rynn and colleagues (2010) nasal prediction of skeleton 318

However, it is supposed that the nasal spine which effects the direction of the columella (Taylor 2001) in the case of skeleton 318 would have been horizontal with the possibility of a minute upwards trajectory. The tip of the nose in this instance, would be a normal pointed tip following the inversion of the lateral perspective of the nasal aperture. The change in direction of the piriform contour which designates the height of the alae is quite high on this individual.

Measurement for Prediction (mm)	Spike Island 318 Measurements	Predicted Dimension	Simplified Equation	Spike Island 318 Results
Nasion – Acanthion (x)	52.61mm	Pronasale anterior projection	$0.83Y - 3.5$	26.04mm
Rhinion – Subspinale (y)	35.59mm	Pronasale vertical height	$0.9X - 2$	45.35mm
Nasion – Subspinale (z)	57.03mm	Pronasale projection from subspinale in Frankfurt Horizontal Plane	$0.93Y - 6$	27.10mm
		Nasal length	$0.74Z + 3.5$	45.70mm
		Nasal height	$0.78Z + 9.5$	53.98mm
		Nasal depth	$0.4Y + 5$	19.24mm

Table 7.10: Measurements for nasal prediction and results for nasal prediction of skeleton 318 based on Rynn *et al.* (2010)

Previously stated, this male had a healed fracture to the left nasal bone. This is not an uncommon occurrence within this portion of the facial skeleton as the nasal bones are likely to break with everyday occurrences or in cases of interpersonal violence. Most heal

themselves without intervention, and in regards to this individual it produces a slightly more exaggerated curve to the natural aspect of the appearance of his nose.

As seen with prior facial reconstructions, the lower face is predominantly structured around the appearance of the dentition and the mandible. The facial profile of skeleton 318 had a slight protrusion of the maxillary dentition over the lower teeth, but not enough to create an overtly prognathic appearance. The mandible of skeleton 318 (figure 7.7) is obtuse in its gonial angle which according to Fedosyutkin and Nainys (1993) leads to an oval or triangular lower face shape. This male would have had a long chin, but due to a taphonomic fracture in the middle of the mandible obscures the possible prediction of a cleft in the chin.



Figure 7.110: Illustration of the angle of the mandible which has implications on the shape of the lower face

Lip thickness is not a constant variable, but through the equations established by Wilkinson and colleagues (2003) this feature of skeleton 318 can be predicted to a certain degree of justifiability (table 7.2). The noticeable pipe notch on this males' right side is an interesting characteristic which probably meant that this individual would have been smoking often and possibly associated with a pipe in his mouth.

Spike Island 318 Measurements	Simplified Equation	Spike Island 318 Results
8.38mm, 7.84mm (avg. 8.11mm)	$0.4 + 0.6 \times (\text{upper teeth height})$	Upper lip thickness = 5.27mm
5.78mm, 6.16mm (avg. 5.97mm)	$5.5 + 0.4 \times (\text{lower teeth height})$	Lower lip thickness = 7.89mm

Table 7.11: Lip thickness prediction for skeleton 318 based on equations provided by Wilkinson *et al.* (2003)

The mandible and the potential degenerative changes to the temporomandiblar joint would affect the prediction of the angle of the ear. It is a likely source of potential error in the

prediction of the placement of the ears because of the degenerative changes that occurred to the mandibular ramus and surrounding skeletal features. However, the position of the ear is here predicted by aligning with the given angle to the existing skeletal material (figure 7.8). Traditionally it was believed that the mastoid processes would indicate whether the soft tissue earlobes were attached or free, however Guyomarc'h and Stephan (2012) illustrate that these skeletal markers have minimal impact upon this feature and therefore skeleton 318 with the strong downward pointing mastoid processes would be represented with lobed ears.



Figure 7.111: The ear angle prediction of skeleton 318

Facial Reconstruction

The two dimensional reconstruction of skeleton 318 was produced in this medium due to the constraints upon the ability to create a cast of the original skeletal material by the National Museum of Ireland. The fragmented nature of this skeletal material also lends itself to this type of facial reconstruction for the overall preservation of remains. This is a face of a young male who through his labour as a convict, contributed to the construction of the landscape of Cork Harbour. This man endured the structural violence of nineteenth century Ireland through the famous institutions on Spike Island.

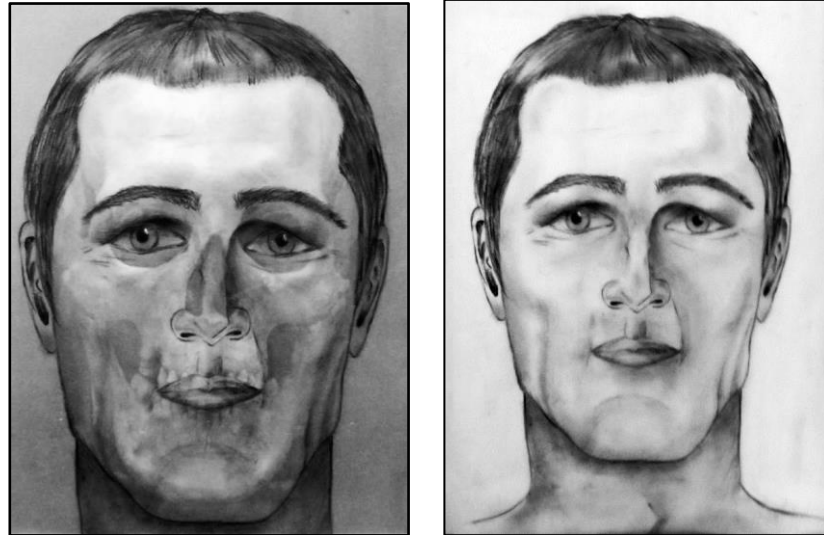


Figure 7.112**a-b:** **a)** Skeletal material of skeleton 318 with reconstruction overlay illustrating the relationship between soft tissue and remains; **b)** Final two-dimensional reconstruction of skeleton 318 from Spike Island

7.1.3 Skeleton 507

Skeleton 507 was excavated in the entirety of skeletal material and illustrates an individual interred in a supine position. Oriented east-west with the head to the west, skeleton 507 was found in a coffin with the hands crossed on the pelvis and the head to the left.

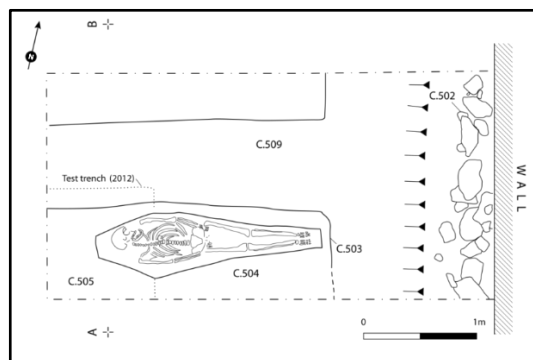


Figure 7.113: Plan of the burial of skeleton 507 from Spike Island, Co. Cork (O'Donnabhain 2013)

Whereas skeleton 318 was found without any accompanying materials, skeleton 507 was associated with existing portions of coffin materials and in particular a notable small crucifix was found attached to cloth in the region of his chest. Known as a scapular, the inclusion of this religious paraphernalia is an insight into the ideologies of the convicts and the life within the prison system.

Osteobiography

The osteological analysis of skeleton 507 from Spike Island (O'Donnabhain 2013) demonstrates that this individual was indeed a middle or older adult male. This age and sex profile aligns with the Spike Island male prisoner demography. With the many intact long bones, the living stature of 169.7 ± 3.27 cm was derived from the length of the left femur (O'Donnabhain 2013). The estimation of sex of this individual was possible through the indications provided from the morphology and the cranium and the pelvis. In terms of the sexual features of the cranium, skeleton 507 is an individual with particularly robust qualities apparent in the skeletal material (figures 7.11a and 7.11b). The prominent brow ridge and alternative heavy muscle markers apparent such as those on the occipital and other areas of the surface of the skull with such features as the extension of the zygomatic beyond the external acoustic meatus and large mastoid processes are exhibitions of male features. Additionally, the flared gonial angle of the mandible and the strong two-point chin are masculine in nature.



Figure 7.114a-b: **a)** Frontal and **b)** lateral view of skeleton 507 from Spike Island, Co. Cork

The age-at-death was estimated by O'Donnabhain by the analysis of the morphology of the pelvic symphysis and the additional presence of ossified thyroid cartilage. The pelvic symphysis illustrating a middle or older adult (methodology by Buckberry and Chamberlain suggesting an average age of 59) combined with the presence of ossified thyroid cartilage maintains the supposition that skeleton 507 is indeed an older adult.

Most dentition was present for skeleton 507 (not pictured with upper incisors) with the exception of two molars lost ante-mortem. Calculus was present upon most of the dentition along with a few instances of caries with a trace of a pipe smoker's notch on the individual's right side. Multiple bands of dental enamel hypoplasia (DEH) are apparent upon the surface of all teeth but the third molar with additional periodontal bone loss in upper right, upper left, and lower left quadrants of the jaw (O'Donnabhain 2013). The presence of DEH and (inactive) mild porotic hyperostosis on both parietals leads to the possibility that this individual underwent periods of malnutrition within earlier years of his life.

The post-cranial skeleton of this individual does display several pathologies and anomalies. Indicative of the hard labour this older male might have had to undertake in his life and assuredly would have in his time at the prison of Spike Island, skeleton 507 shows degenerative changes in both hips (mild on the right and moderate on the left) as well as more severe degenerative changes noted in the proximal end of the first metacarpal of the left hand (O'Donnabhain 2013).

Soft tissue prediction

From the osteobiography of this older male, skeleton 507 demonstrates a broad, square facial skeleton with a flat facial profile. Brachycephalic in appearance, the skeletal landscape of this individual is markedly dynamic with exceptional muscle markers apparent on the brow ridges, the zygomatics, the gonial flares, and the prominent chin. Through observation of the original skeletal material, the following is a prediction of the soft tissue features and justifiably potential appearance of this middle to late adult male.



Figure 7.115: Prediction of eye slant of skeleton 507 from the tangent in between the lacrimal crest and malar tubercle

The strong supraorbital ridges with the muscle markers of procerus and corrugator supercilii indicate a heavy set brow. The orbits of skeleton 507 are square in appearance with no central overhang of the supraorbital rim. This supraorbital ridge combined with the appearance of the nasal root would lead to the prediction of a low, slightly arched eyebrow (Fedosyutkin and Nainys 1993; Rynn *et al.* 2012). The tangent from the lacrimal crest and the malar tubercle (figure 7.12) display a horizontal eye slant. The thick lateral supraorbital rim predicts that the eyelid pattern of skeleton 507 would have been lateral in appearance.

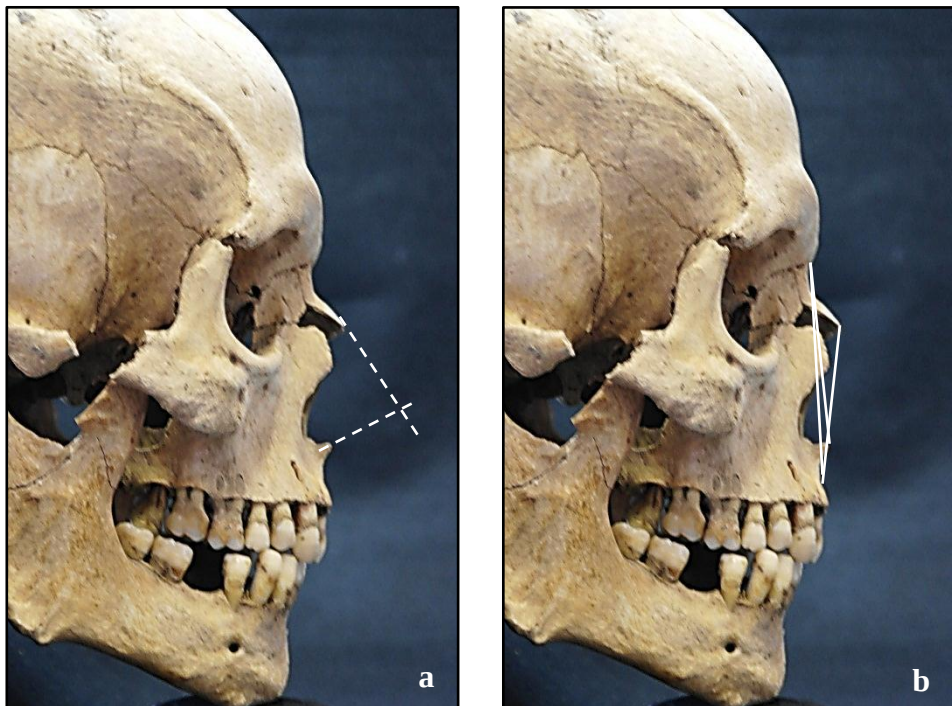


Figure 7.116a-b: **a)** Gerasimov's two tangent theory (1955) for nasal prediction applied to skeleton 507; **b)** Measurements applied in accordance to Rynn and colleagues (2010) for the nasal prediction of skeleton 507

The portion of the nasal bones and the aperture of skeleton 507 which are intact illustrate a soft tissue nose that when predicted would be have an upward pointing columella and overall all direction of the nose (Taylor 2001). When the lateral nasal profile is inverted, the tip of the nose is rounded. The trajectory of the nose is aided with Gerasimov's (1955) two tangent theory and Rynn and colleagues (2010) equations predict in fact just how upwards this nasal profile will appear (table 7.3). The nasal aperture is moderately wide and will have a wider soft tissue nasal appearance because of this.

Measurement for Prediction (mm)	Spike Island 318 Measurements	Predicted Dimension	Simplified Equation	Spike Island 318 Results
Nasion – Acanthion (x)	49.64mm	Pronasale anterior projection	$0.83Y - 3.5$	26.14mm
Rhinion – Subspinale (y)	35.71mm	Pronasale vertical height	$0.9X - 2$	42.68mm
Nasion – Subspinale (z)	52.61mm	Pronasale projection from subspinale in Frankfurt Horizontal Plane	$0.93Y - 6$	27.21mm
		Nasal length	$0.74Z + 3.5$	42.43mm
		Nasal height	$0.78Z + 9.5$	50.54mm
		Nasal depth	$0.4Y + 5$	19.28mm

Table 7.12: Measurements for nasal prediction and results of the equations from Rynn et al. (2010) in regards to sk. 507

The angle of the mandible dictates that the lower face of skeleton 507 (figure 7.14) is square or round Fedosyutkin and Nainys (1993). The heavy and prominently flared gonial angles would provide a sharp jaw line with what would have appeared as the additional strong, cleft chin. The structural importance of the dentition in the lower face in the case of skeleton 507 is not irregular and does not produce any particular special appearance. A slight presence of a pipe smoker's notch would be present when lips are not occluded.



Figure 7.117: Lower face prediction in regards to the mandible of skeleton 507

The thickness of lips indicated by the height of the upper and lower incisors for this individual are represented in table 7.4. The occlusion of skeleton 507 is normal and the lips would have sat in accordance with this normal occlusion. The chin is dominant and will have a cleft in between the two heavy points of the mental region of the mandible.

Spike Island 507 Measurements	Simplified Equation	Spike Island 507 Results
9.62mm, 10.05mm (avg. 9.85mm)	$0.4 + 0.6 \times (\text{upper teeth height})$	Upper lip thickness = 6.31mm
6.85mm, 7.09mm (avg. 6.97mm)	$5.5 + 0.4 \times (\text{lower teeth height})$	Lower lip thickness = 8.29mm

Table 7.13: Lip thickness of skeleton 507 with equations from Wilkinson *et al.* (2003)

The upright mandibular ramus in articulation with the skull in the Frankfurt Horizontal Plane indicates the very vertical angle of the position of the ear (figure 7.15). The mastoids of skeleton 507 are proportional to the skeletal material of the cranium. They are forward pointing, but as mentioned previously, Guyomarc'h and Stephan (2012) have demonstrated that these skeletal markers do not impact the appearance of the earlobes and will be predicted to be lobed.

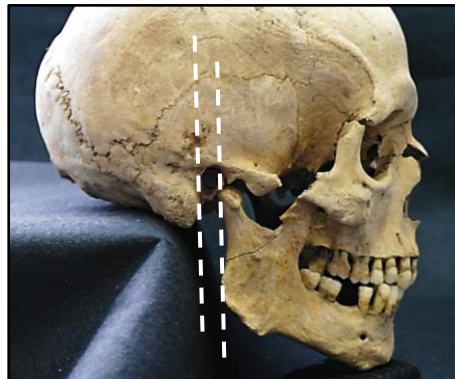


Figure 7.118: Angle of the ear predicted of skeleton 507 by the alignment with the position of the mandible

Facial Reconstruction

As was the case with the other remains from Spike Island, this individual was reconstructed in a two dimensional manner. This is the face of an older male who was imprisoned in the nineteenth century prison on Spike Island. His incarceration within the British prison system in his advanced age would have meant that the rigorous lifestyle given to convicts would have been amplified.

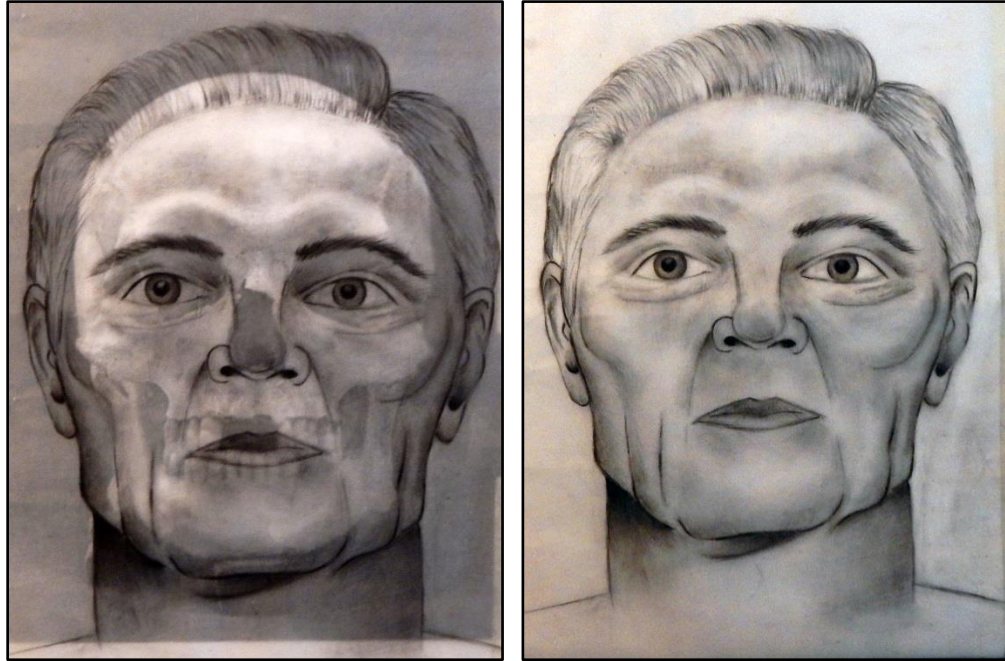


Figure 7.119**a-b**: **a**) Facial reconstruction of Spike sk. 507 superimposed with skeletal material; **b**) Facial reconstruction of Spike sk. 507

We do not know this male's crime or reason for his presence on Spike Island in the nineteenth century. We do not know his name. We only know that this face is now part of the post-medieval (bio)archaeological record of Ireland.

7.2 Institutionalised Ireland

The faces in the previous sections of this chapter are the faces that humanise and frame the following discussion regarding the institutions and overarching socio-cultural structures of post-medieval Ireland. These are the faces of the men that were part of this larger picture of Irish modernity, which for centuries took away the individualisation and agency of a population desiccated by famine and (forced) emigration. It is in this section that the Levinasian face (as in the presence of the other to the self) and all the meaning that comes with that will be examined in regards to the response and respons-ibility illustrated by post-medieval institutions such as workhouses, prisons, and the Churches.

As stated in the chapter discussing intersubjectivity (chapter five), it was argued that we live in a world of unavoidable social relations and community with others. Therefore with these social relations and inevitable moment of interaction, response to the other and the respons-ibility for them appears in the (bio)archaeological record through these institutional

sites of workhouses and prisons in addition to their presence within the historical records. Not denying the past and the events that took place, but rather “understanding the tangible realities and hardships of the recent past” (Orser 2012, 624) is the key to the archaeology of modern Ireland and the lived experience of those communities. This contribution in the discussion demonstrates that the face has been casually eroded through the (broad and individual) institutionalisation of Ireland and combined with engaging with this and the two facial reconstructions at the beginning of this chapter, will be significant towards understanding a new dimension of the human experience of post-medieval Ireland.

In this period of time the social contract between the people and the government became more visible and important. The state and the nation building (propagation) that occurred is a major institution within the period of the post-medieval period where these identities appeared and became a wider source of identity than the preceding local affiliations (Crooke 2000; Boyce 2001). This became increasingly important in the twentieth century with Ireland’s War of Independence and the many years after. The communal and kin systems of governing transitioned to further removed centralised sources of power and structural frameworks. Inadequacies of the local level of governing (Ó Tuathaigh 1972) led to a stronger nationalised version.

With the centralised government alienated from the individual and the community, the structure became more bureaucratic. Sir Robert Peel (1788-1850), Chief Secretary for Ireland and implementer of institutions such as the new Irish police force and famine relief thought that, “encouraging the maximum degree of local initiative, nevertheless realised that a strong central body would be necessary to co-ordinate these local efforts, and, when necessary, to compensate for their deficiencies” (Ó Tuathaigh 1972, 186). The government in pre-famine Ireland assumed control over functions that contemporary England’s governing bodies left to the initiative of the local gentry because, “the Irish gentry had neither the will nor the way to carry the same administrative burden as their English counterparts” (Ó Tuathaigh 1972, 83). This governmental alienation is important when considering the plight of the Irish who experienced the Great Irish Famine of 1846-1851.

This event is a landmark in Irish history which forever altered its historical, social, and political landscape. However, this was not the first famine to plague Ireland, as it was

preceded by a famine in 1740-1 (Lee 1973; Ó Gráda 2013). Many histories of this event have been written (Ó Gráda 1995, 2000; Gribben 1999; Bartoletti 2001; Tóibín and Ferriter 2004; O'Neill 2009; Crowley *et al.* 2012) and should be noted for their broad overview of the events that led to the Great Famine, but a historical trajectory of it will not be given here. Instead, the famine is a portion of the discussion in this chapter dedicated to exposing the *respons-ibility* to the population of others that underwent the tragedy of the famine. These responses to the suffering other are seen in the many legislative actions which manifested in the creation of workhouses: locations where people of low socio-economic levels could exchange work for lodging and food (figure 7.17).

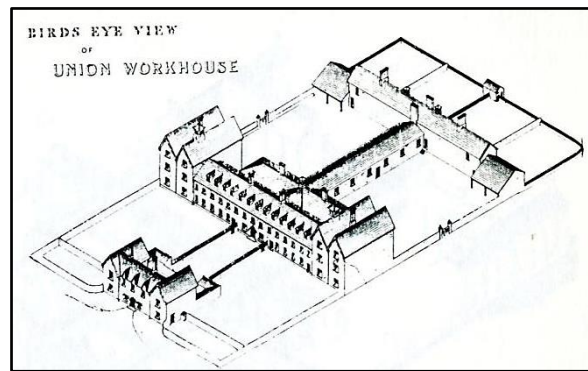


Figure 7.120: Illustration of a workhouse (O'Connor 1995)

The atrocities of the lived-experience of workhouses is illustrated through (bio)archaeological and historical evidence records the suffering of the other. Families were unable to remain together and were separated by age and sex and many that went into this system were unable to leave (O'Connor 1995). This suffering seen in the inhumane conditions of the workhouses resulting in multitudes of diseases such as dropsy, typhus, dysentery, but mainly recorded as 'fever' which was the main cause of the high mortality rate amongst workhouses (O'Connor 1995; Geber 2012; Lynch 2014). The physical and bodily experience of sickness and suffering would have been extremely common to and the overarching experience of suffering would have affected the consciousness of the general Irish society. While a well-intentioned response to the events of the mid nineteenth century, these workhouses became overcrowded and vectors for the spread of disease.

There is no doubt that suffering was a large portion of the national consciousness in the mid nineteenth century. There would have been a spectrum of this due to the solidifying class

structures which meant that, “the full range of famine sufferings was manifested chiefly in those areas where most of the elements of dire poverty were already deeply ingrained” (Ó Tuathaigh 1972, 184). Historical records that accompany this period of time describe this poverty and embodied suffering:

“I entered some of the hovels...and the scenes that presented themselves were such as no tongue or pen can convey the slightest idea of. In the first six famished and ghastly skeletons, to all appearance dead, were huddled in a corner on some filthy straw, their sole covering what seemed a ragged horse-cloth, and their wretched legs hanging about, naked above the knees. I approached in horror, and found by a low moaning they were alive, they were in fever – four children, a woman and what had once been a man...” (Cork magistrate 1848 quoted in Ó Tuathaigh 1972, 185).

If we recall not just the living condition of suffering, but that of the death that the living had to endure as well it is this event in the human cycle “death signifies in the concretization of what is for me the impossible abandonment of the other to his solitude, in the prohibition addressed to me regarding that abandonment. Its meaning begins in the interhuman. Death signifies primordially in the proximity of the other man itself or in sociality; just as it is on the basis of the face of the other” (Levinas 1999, 25). With the mass deaths the face of the other was difficult to maintain as seen in the mass graves which collectivised the death of mid-nineteenth century Ireland. One fifth of all famine-related deaths took place in Irish workhouses and their hospitals during the span of the famine (Guinnane and Ó Gráda 2000). This number meant that they would indeed need to care for the burial and interment of the deceased individuals.

In return to the responsibility, suffering opens the ethical perspective of the inter-human, that which connects us all, and as such is a principle that is not possible to contest and goes to command vast human groups to respond to each other in a manner responsible for the care of the other (Levinas 1998, 2006; Bernstein 2002). Although this suffering should call the self to be responsible to and for the other, this was not always adhered to due to the alienated governmental bodies symptomatic of the post-medieval period. The defacing institutions and the emerging capitalist economy which included the class stratification which became more definite and more difficult to escape (Mercer 1954; Reeves-Smyth 2007). The structural violence operating within the post-medieval class structure (while

widening slightly) could be argued to be worse than the strongly hierarchical medieval society which was difficult in terms of mobility to overcome.

Described in texts such as the above excerpt from the magistrate, human suffering during the famine is also illustrated in (bio)archaeological material. In the case of the Kilkenny Union Workhouse (figure 7.18a), the deceased were put into pits to facilitate the quantity of the dying per day. The remains of at least nine hundred and seventy individuals were excavated (Geber 2012, 343-344). A minimum of sixty-three pits at the Kilkenny Workhouse were found with remains while the sixty-third remains empty (Geber 2012, 343-344). Indications that this mortality rate was high arose from the potential capacity of the pits and the fact that they were dug in anticipation of the dying (the empty pit). Although there are mass burials, individual, coffined interments were discovered (Geber 2014, 142). Other workhouses however had individual burials which shows the range and heterogeneous nature of the famine throughout the country and the variety of responses given to this event (figure 7.18b). Guinnane and Ó Gráda (2000) illustrated that though there was a semblance of uniformity to the workhouse system, agency within the regime existed determining variation in mortality rates throughout the country.

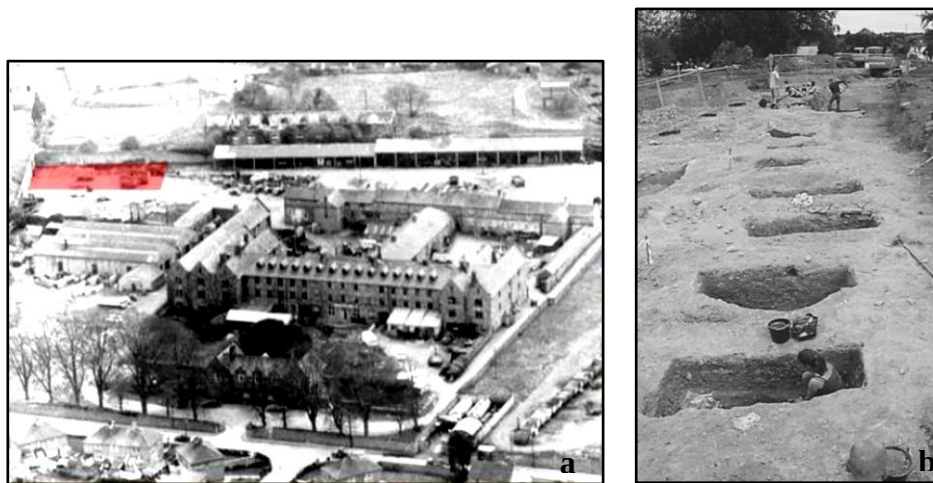


Figure 7.121a-b: **a)** Kilkenny Union Workhouse with the burial ground highlighted in red (Geber 2012); **b)** Creagh Junction, Ballinasloe, Co. Galway excavations viewed from the south (Rogers *et al.* 2006)

Analysis by Rodgers and colleagues (2006), Lynch (2014), and Geber (2012) provided osteological evidence from post-medieval workhouses. Geber's work on the Kilkenny workhouse has illuminated not only the health and diet visible upon skeletal remains but

also the funerary contexts of this particular site. Lynch (2014) on the other hand drew contrasting perspectives between social groups, those in workhouses and those in during the post-medieval period illustrating there is in fact a difference in the degree of health in relation to the socio-economical class.



Figure 7.122: A typical representation of the conditions and appearance of those living in the Great Famine

The horrors of the famine were given a face through images of gaunt men, women, and children in ragged clothing which reflected their even more depressed surrounding landscape. Representations of the Great Famine and the individuals who lived through the events of this time period were given a particular aesthetic (figure 7.19). The look of poverty and famine written upon the faces of these people just as it scarred the landscape is a type of document to be read. These images that pervaded the consciousness of this time were coupled with the saturated language of observers such as an excerpt from the 1851 Census of Ireland:

No person has recorded the number of forlorn and starving who perished by the wayside or in the ditches, or of the mournful groups, sometimes of whole families who lay down and died, one after another, upon the floor of their miserable cabins, and so remained uncoffined and unburied till chance unveiled the appalling scene. No such amount of suffering amid misery has been chronicled in Irish history and yet, through all, the forbearance of the Irish peasantry and the calm submission with which they bore the deadliest ills that can fall on man, can scarcely be paralleled in the annals of any people (*Table of Deaths* quoted in O'Connor 1995, 154).

As Ó Tuathaigh (1972) noted, some observers and historians have even tended to indict the governing policy of the mid-nineteenth century of the intent for genocide. This arises in discourse because “famines are nearly always blamed on somebody, and excess mortality is reckoned to be a measure of guilt” (Ó Gráda 2013, 203). This judicial sense of the term responsibility here is conjured, however there was a response made by governing bodies which was acted upon and resulted in the tangible sites and artefacts visible through the material record. This instance of responsibility can be the judicial sense in that a guilt is applied by scholars to a party that has erred in a manner, but what this guilt is underlying is the humanistic dimension of the state’s or even individuals’ responsibility for the individuals that are affected by the power of the famine. Kennedy suggested that the famine was, “an example, albeit an extreme one, of a socially disruptive force that uprooted individuals and their families in the process weakened or destroyed existing social norms” (2000, 7). This is the exact reversal of the understanding of the (Levinasian) face and the presence of the other that had been so noticed in the past that is being refuted in the post-medieval period.

There is an interesting dynamic that appears within the responsibility of the famine in consideration of the three operators: the landscape/environment, the body, and the government. Each intertwine and negotiate with one another on a daily basis in a fluctuating dynamic of belonging and operation. Notions of the body are very much connected to the landscape in terms of embodiment and the derivation of a sense of identity. For instance, the right to vote was connected to owning land, which is an example of how the land, body, and government intertwine (see Whyte 1960, 239). Lower socio-economic classes were removed from the physical, social, and political landscape of post-medieval Ireland as the poor were disproportionately hit by the famine. Individuals in a slightly higher economic range of mobility were also found absent within mid-nineteenth century Ireland as emigration took a large number abroad. The breakdown in the landscape’s ability to provide sustenance for its population put more pressure upon the governing authorities to recover from this inadequacy.

Post-famine there was a massive re-structuring of the land and the identities/bodies attached to the social and political landscape (Hoppen 1977). When the governing bodies were

symbolically divorced from the landscape by being placed in a centralised location and for a time in the British Parliament, the self/other divide became much more apparent and this caused the state's varying responses towards its constituting others/citizens. The end of the nineteenth century saw the growth of central authority at the expense of the small elite that made way for a rising managerial class. Therefore with the elite being marginalised and the lowest rung of the socio-economic class absent due to the famine and emigration, a new class of rural farmers emerged (Clark 1978, 22) with emerging county councils. These events reinforced responsible state intervention and the close association between the landscape, body, and government.

Life in the workhouses of Ireland was well-regulated and disciplined with no individual allowed idle time (O'Connor 1995). This was part of the broader work and reform mentality that pervaded institutions like these or contemporaneous prisons. The use of labour as reformation of a 'deviant' individual is a theme that connects the workhouses and the prison system. Each considered the use of this active lifestyle perhaps due to the overarching Enlightenment frameworks, there began an increase of focus on aspects of reforming the human instead of corporal punishment (Cohen 1978). Linking the workhouses and the prison system in Ireland was the mutual motivator of the famine, as the prisons filled to inhumane numbers in regards to available space due to increase in theft of food for the family or in violation of the Vagrancy Act of 1847 (criminalised in the medieval period as well) which made abandoning your family a criminal act (Martin 2007). Katz (2002) made the argument that it was the placeless presence of capitalism, a prominent feature of the later post-medieval period, reinforced the vagrant lifestyle. This cyclical nature of legislation many times made the victims of the famine criminals.

An entity symptomatic of the modern age is the penal system and is associated with the emergence of capitalism and its impact upon social, economic, and political factors (Hill 1857, 16 for a capitalistic system of convict skilled labour for wage embedded within Spike Island). In the modern age, prisons replaced corporeal punishment. The prison system allowed for the involuntary confinement as a form of discipline of a subset of the population. They instead focused on reform harnessing (even exploiting) the biological power of convicts for work rather than a punishment system based solely on corporeal

punishment (see Cohen 1978; O'Donnabhain 2011). Large and intensive histories of prisons have been written by those as Morris and Rothman (1998) and cover their broad origins and legislative trajectory. Institutions such as prisons were compounded with additional institutional control by the state drastically increasing in the mid-nineteenth century (McGowan 1977, 500). However, similar to the discussion on the famine, prisons here will be examined only in their relation to the Irish post-medieval sense of response and responsibility which inherently involves the presence and treatment of the other, or the face.

According to Durkheim, prisons are a punitive response to, “the moral outrage that members of a society experience toward those who violate shared social standards or mores” (Irwin 2005, 4). The violation of this collective consciousness is the soul of punishment (Durkheim 1933) and is the theoretical underpinning articulates the motivation behind the response to the imprisonment of others as a form of punishment. Beginning to appear in the late eighteenth century in Ireland, penal systems continue to have a presence in Irish society and have been strongly influenced by, “the containment of political disorder, specifically Irish nationalism and republicanism” (Tomlinson 1995, 195) which is particularly relevant to our consideration of the reconstructed faces of the men from Spike although not political prisoners, each still inhabited this lived landscape.

Labour was evident on Spike Island with convicts ordered to undertake large endeavours of altering the landscape of the island and surrounding forts such as those at Carlisle and Camden (Martin 2007). This was the overarching ethos of the prison:

I mean the fact that Spike Island is *penal* in its nature and that, although every attention must be paid to the health of the prisoners and to that *degree of comfort upon which health depends*, it is by no means our wish that it should be a desirable residence, or that the position of the convicts should be on level with, not to say superior to, that of the industrious labourer outside. For this purpose the labour extracted from them must, as far as possible, be continuous and severe (Inspector General Clement Johnson to Mr Grace, Governor, Convict Depot Spike Island 1847-1848, Annual Report of Inspectors General of the General State of Prisons of Ireland).

The main aspect of prisons in regards to the archaeological record would be the evidence of the imposing use and exploitation of architecture in controlling people and the attempts of

reform to their misbehaviour. Prisons are constructed with maximum impact upon the inmates in regards to architecture and the confining features of the cells and general outlay of the prison grounds. Preoccupation with prison architecture occurred in the eighteenth and nineteenth centuries with the attempt to create the optimum location for the housing and reform of the inmates (Evans 1982; Johnston 2000). These all reflected not just the detaining nature of confinement but the architecture of reforming the erring human.

Of course prisons in Ireland served the purpose for judicial purposes, but also served as a departure point for the transportation of a large portion of Ireland's population to other parts of the British Empire (O'Callaghan 2000). The transportation that occurred readily from the seventeenth to the mid nineteenth centuries was one means by which the emerging empire was constructed. The face of prisoners which we have seen in the reconstructions offered at the beginning of this chapter remind us that the masses and collective numbers that have been discussed in regards to the prison system have individual identities. The defacing of these subsets of the population is a response but not in the manner of responsibility towards the fulfilment of the other instead represses this face as in a fear of their otherness and their demanding nature (Levinas 1999, 23).

The institutionalisation of individuals as convicts sought to use their imprisonment as a time for reformation of wayward behaviour. This goes further than the embodied physicality of confinement and towards the transformation of their mental state. Individuals such as Hill exulted the manner in which teaching contributed to prisoner reform as it was, "the most important function of knowledge, it feeds the mind with wholesome nutriment, and occupies it with thoughts supplanting, and in time, it is hoped, utterly excluding, all tendencies to vicious and debasing reveries and conversations" (1857, 20). State intervention surpassed imposition on the physical body, but also the psyche of individuals within the institutions such as prisons. This is a key concept in the use of the subtle, invisible qualities of structural violence upon post-medieval populations. Passages like this from Hill also illustrated responses from the governing institutions in attempt to amend portions of structurally traumatised portions of society in mid-nineteenth century Ireland.

Political and economic institutions such as prison and workhouses respectively were not the only type of institution to affect the (bio)archaeological record and the portrayal of the face is the significant influence of religion in Ireland with particular regards to the Catholic Church. This is not a new phenomenon in the post-medieval era as Western Christianity was a continuous existence in Ireland since the early medieval period. This fractured in the sixteenth century with the Reformation and Catholicism becoming illegal until the nineteenth century where there was a strong resurgence after the famine (Connolly 1992, 17). With many ecclesiastical sites already established, more concern turned towards the construction of secular Ireland (Horning 2007). Throughout the introduction of the Protestant orders under Henry VIII and the tension that ensued from the eighteenth century onwards, religion became an enhanced source of identity (Ó Tuathaigh 1972). Catholicism would in the later post-medieval period be appropriated as a portion of nationalistic identity as well (Boyce 2001).

The presence of the Catholic Church in Ireland has a high occurrence in the archaeological record with artefacts and architecture. As Lee stated, “Irish Catholicism displayed an obsession with the materialistic which might have made less institutionally religious societies squirm with envy. Not other worldly values, but a very intense ‘this worldly’ concern with social status characterised Catholic society” (1973, 16). This iconophilia can be seen in instance such as skeleton 507 from the prison on Spike Island, Co. Cork was found with a brown scapular (O’Donnabhain 2013). This artefact designates this individual as part of the Catholic Church. Its presence signals that this religious identity was allowed to proliferate in death and that this portion of the individual’s identity was honoured in the funerary context in which he was interred. Additionally, those interred in workhouses were also found with rosary beads or other religious paraphernalia (Rodgers *et al.* 2006; Geber 2012).

What the workhouses and prisons offer to us in the (bio)archaeological sense is the tangible visibility of marginalised individuals. In earlier periods of the archaeological record, they were absent due to their peripheral locations away from elite sites. Viewing these sites as the physical manifestation of a system attempting to be *responsible* is similar (perhaps less passionately opinionated) to Riis’ (1890) idea that tenement housing are the physical

embodiment of an evil system. It is perhaps too emotive to use the term ‘evil’, however just as Riis described it is structural violence which is enacted upon the people by the institutions that are evil (Nystrom 2014). This evil does not recognise the other in their plight or suffering as Levinas noted, “the humanity of those who suffer is overwhelmed by the evil that rends it” (1998, 79). These institutions which illustrate the liminal margins of society in the archaeological record are not “marginalising” institutions, but they indeed institutionalised marginality. It became very apparent in this period of time that agency is for the middle class.

7.3 The modern archaeologised face of Ireland

Expanding upon the an example framework of archaeological investigations by Orser (2012) for this body of research, the use of historical archaeology in looking at the face in the (bio)archaeological record can be ‘transformative’ (Price 2011). This is so because by examining the undermined face examining the post-medieval face provides a new dimension to this portion of the archaeological record. It is in this period of time in which the face recedes from the primal understanding of the interhuman and intersubjective nature of the human lived experience. Through the active presence of capitalism, the face (symbolically and in the Levinasian sense) becomes a fetish and a commodity of the modern world receding from its essence of the true presence of an other.

The post-medieval period and its transition into the modernisation of Ireland witnessed sweeping economic and population expansion. Just as the archaeological landscape altered drastically from the early medieval period to the post-medieval and modern era, so did the landscape of the face and its use within society and the manners in which it was represented to the image consuming public. In the emerging globalised economy and the interconnected societies which followed, it became a very aware fact that, “we are never alone, but always ‘face-to-face’ with other people who call us to recognize our responsibilities to them” (Hutchens 2004, 19). Therefore, it is the face that motivates this non-transferable responsibility and the motivation for the respect of the neighbour, our other.

In this era of time, the discipline of archaeology was created and developed. Within the discipline the overriding favour towards anthropo- and craniometrics appeared on the horizon of anthropological investigations with the objective to study modern populations with association to the archaeological past. This transition to cranio- and anthropometric study appropriated the face and emphasised its new sense as a commodity.



Figure 7.123: Caricatures of the modern Irish face with embedded negative connotations

It is asserted that the face in the post-medieval era de-faced certain individuals and the very much accentuated emphasis on the whole rather than the parts. For instance, the prisoners and individuals of the workhouses lost agency and became a mass collective instead of the individual identities they once constituted. Even the popularisation of caricatures of a ‘typical’ Irish person became a common experience in the political cartoon or social commentary of the later post-medieval world (figure 7.20). These re-presented faces that were portrayed with embedded meanings external to the implicit qualities of the face. These include layers of barbarity or primitiveness, or in regards to the caricatures of Irish depictions, drunkenness. Just as the face was re-presented in the prehistoric and medieval periods in fluctuating aesthetic depictions, the post-medieval face was also verging into its own illustrative appearances. Caricatures and increasing realism of aesthetic became the dominant manner in which the corporeal, plasticine face was seen.

The erosion of the face’s power from the collective consciousness can be attributed to aspects of the previous discussion structural violence from institutionalised Ireland. The ‘de-facing’ that followed was due to the creation of totalities and the misunderstanding of the full respons-ibility of others’ true needs. This is as Levinas stated:

“the necessity of comparing incomparables, of knowing men; hence their appearance as plastic forms of faces that are visible and, one might say, ‘de-

faced’: like a grouping from which the uniqueness of the face is torn free, as from a context, the source of my obligation toward other men; the source to which the quest for justice goes back, in the final analysis, and the forgetfulness of which risks transforming the sublime and difficult work of justice into a purely political calculation – to the point of totalitarian abuse” (1999, 170).

Examples of this defacing can be seen in the stripping away of the individualisation illustrated in the telling transition from the record of every name that entered workhouses to the sole figure numbers (Rogers *et al.* 2006). The face ripped from its context of the other was established by the expanding institutionalised nature of Ireland, but it is posited that this defacing was maintained by the transition to the dominating quantitative anthropological/archaeological investigation which further detached the humanity from the study of past and present populations.

In relation to Ireland as a colonial state, the face of the population was systematically degraded through institutions which sought to legitimise their rule over Ireland and the Irish people (see examination of re-presentations by Curtis 1971). The impact of colonial trauma (Fanon 1986, 85) upon the Irish people began in the fifteenth and sixteenth centuries wherein traditional Gaelic culture (language, song, oral and cultural traditions) were stifled. From 1883 to 1919, many rural dwellings were seized and demolished (Aalen 1986). Therein, the subordinate role which was inflicted upon Ireland was subsumed into a collective psyche. This left a failure to fully express.

Constructing a personality of these people by those populations who extolled industrial progression, it was thought that, “the ‘Celts’ of the British Isles were seen as the static and unchanging survivors of an earlier age, and only the advents of modernity could destroy them” (James 1999 quoted in Dwyer 2007, 131; see also Ó Donnabháin 2000). The diminished role of subordination caused because of desire to legitimise cultural suppression did not stop at the borders of Ireland as they were evident in Britain, the United States (i.e. introduction in Hooton 1955), and even Germanic imaginings (Bourke 2011) of this group of people (Ó Donnabháin 2000). While written records and documentation of demeaning the character proliferated a negative image of Ireland’s people, there was nothing better to purport this assertion of primitiveness than the pictorial imaged countenance and the archaeological imagination. Through this visual medium, the face is consumed not in its

reflection of an other being and its potential for intersubjective relations. The prejudice towards a sector of the population of Ireland perpetuated a global persona of Ireland and of its people, which was coupled with the artistic re-presentations proliferating a type of imagined identity. Instead, it is the superficial visuality that Levinas stated is inherently *not* the face.

Before the proposition of this research to separate the head and face (sections 2.2.1, 2.2.2) quantification of human remains, especially the skull in terms of an individual's potential, became a certainty in anthropological research in the later nineteenth century. There could be several reasons for the impoverished nature of the face (as in the presence of the other) until Levinas's articulation of the entity in the mid twentieth century. The power of the face to prompt intersubjective relations was eroded. Therefore, aspects of the face became concerned more with plasticised versions rather than engaging with fundamental qualities of the Levinasian face. Additionally, the institutions of the modern Western world defaced the individual by becoming less community-oriented and focused on nation building, which interestingly utilise(d) the plasticine face of facial reconstructions to construct a sense of patriotic identity.



Figure 7.124a-c: a) Photograph of the craniometric documentation during the Harvard Mission to Ireland; b) “Anthropometry in Inishbofin” illustrating the heavily social aspect of the Harvard Mission to Ireland’s craniometric research; c) The photographs (frontal and lateral) of as seen in Hooton (1955)

With the images supplied by Hooton's survey of the Irish male population, these faces are at once an individual, but in reality they supply the parts to the greater whole (figure 7.21c). Only upon intense motivation do these faces still evoke the power of response and break away from the grand collective that the foreign eye casts upon them. Hooton's survey of Ireland and the inquiry into the Irish origin is not unlike many previous endeavours of antiquarians such as the natural historian Gilbert White who in 1789:

“advocated an exploration of Ireland similar to that undertaken by James Banks and James Cook in the Pacific between 1768 and 1780. White's study was to involve the documentation of flora, fauna, and ‘the manners of these wild natives, their superstitions, their prejudices, [and] their sordid way of life’” (White 1900, 178 quoted in Dwyer 2007, 131).

Communities isolated or physically removed from the industrially progressing urban centres were deemed ‘primitive’, a term which continued in use throughout the twentieth century (Dwyer 2007). Usually derived in a colonial sense of the indigenous people of the New World, this term could also be applied to the Irish populations explored through research exhibitions. Giving a face to these isolated communities, these studies can be viewed by contemporary ethical and academic methodologies as the ‘fleshing out’ a holistic picture of past society.

In her paper concerning the archaeology of marginalised post-medieval communities, Dwyer (2007) used the Inishkea Islands as a case study for illustrating that the narratives in the form of ethnographies and archaeological fieldwork of isolated groups of people became part of the growing modern archaeological imagination. Often confused with the concepts and overarching presence of colonialism, the faces that peer out of this time period and illustrate the ‘civilised’ gaze upon the ‘primitive’ can be seen in those studies as late as Hooton (1955) which supply images of the populations under scrutiny. However this was not a one-sided endeavour with one group actively viewing and forming an identity for another but instead was far more fluid than it appeared (Dwyer 2007).

The industrial revolution and the repercussions that occurred due to this major shift in economic and social organization of societies as seen in Britain or the United States, did not predominantly affect Ireland with its “patchwork of industry” that in no way could be declared a large-scale industrialisation of the country mainly due to the plentiful and

inexpensive commodity of human labour instead of the introduction of mechanistic devices (Rynne 2007). However, industrialisation and capitalisation did increase in Ireland as well as the rest of the industrialising world. As such, there is no doubt that with the entrance of Ireland into the modern era and the global industrial society conceptions of the contemporary body altered and therefore the theories of embodiment of this period of time are entwined with mechanism and the capitalism of society. One question that Gaimster (2012) posed concerning the materiality of the post-medieval world in a reconfigured manner would be applicable to this project: to what extent is the macro world of global capitalism reflected in the situational context, appearance and consumption of the face?

As the industrial revolution produced more goods, the consumer was born. This important role is, “central to any study of social, economic and cultural change from the late Middle Ages to the modern world, is the recognition of the emergence of the modern consumer society and its expanding materiality” (Gaimster 2012). With this new avid consumer, the capitalist market appropriated images to attract these individuals to products. Simultaneous with the economic market change towards capitalism, education of the masses ameliorated and Ireland particularly was an especially literate society by the nineteenth century and that this “spread of literacy allowed more people to understand advertisements and mail order catalogues, use the parcel post, shop more ambitiously, and generally become more receptive to new consumption patterns” (Lee 1973, 13). These patterns of consumption include the bartering of the face as a surface for the new emerging economy. This separates the true, original nature of the face which is pure in its truths and intersubjective nature and instead is now treated as a portion of this expanded materiality and can be traded and marketed as a product for the purchase of the gaze or commodity.



Figure 7.125: Skeleton 316 from Spike Island illustrating a post-mortem craniotomy (O'Donnabhain 2013)

The changing conceptions of the body as something to be used in a commercial or context outside of solely burial practices can be seen in the use of bodies in anatomical collections or in the teaching of medical sciences (Murphy 2010, 2011; O'Donnabhain 2011). Markers of post-mortem surgery on the skeletal material of individuals can be seen the eighteenth century site of Digges Lane, Dublin, Trinity College, Dublin (Simpson 2007) or additionally in the craniotomy of skeleton 316 excavated from Spike Island, Co. Cork (see figure 7.22).

With capitalism appearing, the Marxist notions and frameworks surrounding the relationship between goods and the consumers, it is evident the face became a commodity. It was something that could be bought or sold not in a physical manner (however the sale of bodies rose in regards to anatomical specimens), but in a commercial sense of advertisement or product. Perhaps even the theory of commodity fetish could be discussed in terms of the face. Fetish of the face in the burgeoning capitalistic society can be illustrated in the new implicit exchangeability which is alien to its inherent nature (Marx 1990). Faces are not intended to make a profit, but following this unnatural profit, a value is assigned to the faces as in their success of sales or perhaps in aesthetically pleasing appearances. In early medieval Waterford, we saw the face used upon economic bartering tools of the lead weights (figure 5.32d). It is in this modern period where this economic consumption and commercialisation of the face continues and where we, as contemporary

viewers with our modern eyes, are able to better understand than any other time period the re-presented face of this era. Additionally, it is in the late nineteenth century where the face (in the theoretical Levinasian sense) disappears from the archaeological record.

Culminating the discussion on the post-medieval face in Ireland, it has been shown that this period of time is relevant to the discussion of the face in the archaeological record. It has shown there is contribution to the pursuit of post-medieval archaeology in regards to understanding the face in the not so distant past. This is a revealing moment for the Irish populations that underwent excessive tragedy in the later post-medieval period and two faces of this period of time have contributed to the humanistic dimension of those individuals which have been undermined by a shift towards the mass collective. When we view these faces we cannot be sure that we ourselves have escaped the same structural violence which imposed upon them incarceration and involuntary labour, but our presently situated selves have a release of comfort knowing life in many areas around the world are free from the hardships they endured.

The institutions such as workhouses, prisons, and the nation state were all factors in this alteration of the agency of the person. The absence of the face in its Levinasian sense left a vacuum that the rising quantification of human remains (cranio- and anthropometrics) filled. This heavily influenced the research tropes and theoretical frameworks of the discipline of (bio)archaeology and is the reason why the face in its theoretical demand of response has disappeared from contemporary consciousness. Indeed, this latter aspect is exactly what this body of research is attempting to overcome and break through to expose this constant undercurrent of the imposing nature of the face. We have gone full circle in an argument building to this point, wherein we realise why the face has been previously neglected by (bio)archaeological research and consciously provide a body of work which attempts to rectify this oversight.

CHAPTER EIGHT – CONCLUDING REMARKS

“Theory is, like digging, a “doing”” (Hodder 2014, 4).

This research has examined a number of layered, theoretical threads concerning the (bio)archaeological face that will here be drawn together. Just as the excavation of stratigraphic layers give meaning to the depositions and materiality of the past, this body of research has presented its own layers. Visuality in the prehistoric period led to the intersubjectivity of the early medieval period, which was followed by the experience of others in the late medieval world by investigating alterity, and culminated in exploring the burden of these others in terms of response and responsibility. These appear in the sense of a theoretical framework which builds upon itself, compounding and revealing through diachronic unravelling. This layered analogy of archaeology is extended to the face. The skeletal basis for the face is akin to the archaeological landscape and the soft tissues wherein symbolic traits are embedded are similar to the human traces left upon the surface of the landscape of the past. This connection to the formation of archaeology and its interpreted meaning is a viable conduit in which the face can be brought into (bio)archaeological discourse.

The main aims of this research were to explore the (bio)archaeological and theoretical presence of the face through a diachronic investigation of the Irish archaeological narrative. Examining mortuary practices, material culture, archaeological imagination, and the creation of archaeological facial reconstructions, the presence of this multifaceted phenomenon of the face has been shown to exist in a multitude of spatial and temporal contexts. Throughout and unifying all the chapters of discussion, the face has been the thread of commonality and the anchor of examination. The broad time span of the diachronic investigation of the face is beneficial to this study as its progression as a symbol and skeletal presence has transitioned throughout the archaeological narrative of Ireland. This is the first body of research that has provided a scholarly survey of the Irish face in its bioarchaeological and material culture presence in Ireland through time.

This research has also illustrated dimensions of the archaeological imagination. As we remember, from the outset and the body of this thesis, the archaeological imagination

concerns the cultural reception of the past (Shanks 2012) and the consciousness that arises through the fascination with the discipline of archaeology and its discoveries (Schnapps 1996). Through site contexts, materiality, and especially through the mode of facial reconstructions the appeal of the archaeological past to the minds of earlier peoples (such as those encounters detailed in prehistoric chapter four) and to our contemporary mind (like folklore surrounding Labbacallee and the face of figures such as Otzi and King Tutankhamun) have been revealed. The act of discovery prompts further growth in the area of archaeological imagination. This fascination with the past lures and draws us into a connection with materiality and legends such as those seen in this research.

The granular approach to this subject created the necessarily brief examination of certain (bio)archaeological phenomena. As the temporal scope of this research is broad, the (bio)archaeological material found within is examined in a less nuanced manner than a study which is focused on a particular period of time. This survey of (bio)archaeological materiality is inevitably concise on specific materials and themes because of the diachronic approach which was considered ideal for understanding the consistent temporal and spatial presence of the face. It has been acknowledged that material culture and mortuary remains enter into lateral realms of discourse, but those have been bracketed here and narrowed to their relationship with respective themes: visibility, intersubjectivity, alterity, or response and responsibility.

Moreover, there are many plausible approaches that could be taken with this type of research. This includes the following potential types of structure: diachronic sectioning of the face; thematic structure wherein the face is discussed in relation to archaeological landscape, material culture, and/or archaeological imagination (with facial reconstructions); or perhaps a traditionally-structured facial reconstruction-oriented body of research wherein the reconstructions are the data set and discussion and results radiate solely from their discursive properties. Each of these examples of project outlines is justifiably valid. Arguments can be made for and against them, but ultimately the structure chosen for this thesis was seen as the ideal for the unity of theoretical and practical elements. This structure was particularly relevant for the examination of the face throughout the

(bio)archaeological record and the analysis of the merit of facial reconstructions, all while keeping the primal importance of face at the forefront.

This research has applied the main concepts of Levinas appearing as: visibility, intersubjectivity, alterity, and response and responsibility to the theoretical landscape of Irish (bio)archaeology. These philosophical constructions are each present within the endeavours of the (bio)archaeological discipline. They are present because archaeology is inherently (and should only be treated thus) about people. Prompting the discussion about the experience in meeting another person, Levinas's discussions upon our worldly situation with our neighbour are particularly significant to the theoretical nature of archaeology. Even when we come across an assemblage, a deposit, or material culture in general – we are experiencing the other. Combining this other-ing with the archaeological (and phenomenological) methodologies for experiencing the past we see space for Levinas in the archaeological discipline. This humanistic dimension is available in the work of Levinas and can expose a spectrum of theoretical threads running through the archaeological narrative.

It can be argued of archaeological theory that it merely applies a veneer to archaeological assemblages without regard to their contextual qualities. Without regarding the archaeological situation of materials this application of theory dissolves the revealed knowledge excavation and discovery has given to the discipline. The manner in which the face is curated throughout the (bio)archaeological record changes in regards to the context. The face here has not been exploited or used as a blank canvas for external ideologies. Instead the realm of the face has been actively engaged with and brought back to its fundamental qualities (seen in the Levinasian notions). By exposing the face through this theoretical framework and examples such as facial reconstruction, mortuary practices, and material culture, the previously neglected face resounds with new command and dominance in discourse.

Therefore, the face operates on multiple levels of reality; both physiologically and symbolically. This (bio)archaeological materiality deserves an application of theoretical framework which encounters their status of being as integral into the lives of the beings that

shared intersubjective space. All of the Levinasian themes interact with one another and each exist simultaneously in past and our daily lives as we are always surrounded by others and objects. As visibility prompts the experience of the intersubjectivity, so the other appears in alterity and arrives to the responsibility we as selves have to the other being. This logical construction appears in the layers and progression of this body of research.

As the (bio)archaeological record is broad, to gaze through Levinas alone was a choice to use one philosopher to narrow down the manner of thoughts exposed. Further research upon this topic could approach the subject of the face in a broader phenomenological manner. This would incorporate a wider scope of philosophical concepts applied to the (bio)archaeological material of the face. For instance, Normack (2010) provided recent research similar to this study which examined the implications of the face through a theoretical (in Normack's instance, a neomaterialistic) lens. Other studies could include a larger sample of material that would illustrate the universality of the presence of the face throughout the (bio)archaeological discipline. Human and artefactual remains could also be discussed solely in terms of one Levinasian conception. An example being to regard skeletal material through the lens of alterity or investigating material culture in terms of intersubjective presence and response is an additional approach which could be taken concerning the investigation of the face.

As illustrated throughout this body of work, the attention to the face, misinterpreted as the fascination with the head, can be seen in the Irish archaeological narrative and is also a presence throughout other temporal and spatial contexts. This thesis has illustrated that when the head and face are separated with additional gendered discourse, an entirely new space emerges for discourse of the Irish (bio)archaeological record. This is not limited to Ireland, but is particularly relevant for all bioarchaeological scholarship. From the craniometric tradition that is the foundation for the bioarchaeological discipline, the head has been treated as the overarching seat of personhood. To the detriment of the facial phenomenon, this undermined value given to the face still exists. Wegenstein asserted that in the 'post facial era', the presence of the face is not necessary to understand the whole body of an individual (2006, 89). Edited volumes (Bonogofsky and Larsen (2011); Pinhasi

and Stock (2011); Armit (2012); Tiesler (2014)) still exist dedicated solely to the cranio-centric discourse of (bio)archaeology (discussed in section 2.2.1).

However, it has been asserted here that the head was wrongly identified as this powerful source of identity (section 2.2.2). This research has shown that the face has been the overlooked phenomenon which demands an authoritative response for recognition of individuality. The face, in the Levinasian sense of its commanding presence and symbolic potentialities in mortuary contexts, have been overshadowed by the craniometric framework. The undermined face has now been brought forth and its theoretical power and has gained new insights and interpretations.

In the instances of mortuary practices presented, alternative interpretations have been illustrated through the examination through a Levinasian lens. Attention towards the commanding presence of the face as the essence of the other has shown that non-normalised burials such as prone burials or re-articulated victims of decapitation are all effected by the Levinasian themes of the obligation to the other and their needs (see sections 5.3 and 6.3). This importance of restoring the other's commanding burden resides in the living who inter the deceased. Death is more important for the living as, "death rituals and celebrations of new social structures can be seen as an opportunity and a possibility to re-negotiate and re-create society and social order" (Oestigaard and Goldhahn 2006, 27). In regards to the contexts where the face is not restored to its articulated wholeness, such as pits of skulls seen in the late medieval period (section 6.3), the face still has significant implications upon the living viewing audience. Instead of belonging to the other, the self has corrupted and taken this authority and usurped it for reasons other than the creation of intersubjectivity. The usurpation has taken the response intended for alterity and manipulated it, through different contexts of curation, to create a response for an ulterior purpose.

The contribution of this research is two-fold. Firstly it investigates a neglected aspect of (bio)archaeology and secondly, it provides facial reconstructions to the broad Irish archaeological narrative. This research has displayed the author's own facial reconstructions which have significantly contributed to the facial reconstruction narrative of Ireland. Within the aims and objectives noted at the outset of this dissertation, it was stated

that this body of work in no certain terms uses facial reconstructions or materiality to provide *results* or *proof* in quantitative, metric terms. This contribution is a future impact in the involvement with and dissemination to the public realm. This process of dissemination is an undervalued tool for archaeologists because, “for a great number of years, archaeologists seldom perceived their labors as a social good with implications outside the narrow confines of academia” (Orser 2012, 629). Archaeological facial reconstructions are exactly what Orser pointed to – a social good which defies the boundaries of an academic ivory tower and impacts the archaeologically conscious/consuming public audience. The inclusion of facial reconstructions urges the material to be proliferated and seek the gaze of the archaeologically consuming public.

Archaeological facial reconstructions engage with the public and provide them a social and cultural good that connects them to the past. This body of research stands now with the discourse supporting the use of archaeological facial reconstructions as an archaeological methodology (just as Prag and Neave (1997), Clack and Brittain (2007, 44), Sanders (2009), Wilkinson (2010) have asserted). As Moser suggested, images personifying the past, “have an important place in archaeology because they are representations of the theories which have been developed by archaeologists and palaeoanthropologists to explain the evolution of human behaviour” (1992, 831). Arguably more conducive to imparting knowledge than a written record, the visual document of the face elicits the aspect of humanity from which archaeology derives its knowledge base.

This research has shown that the facial reconstructions and their use in the discipline of archaeology goes beyond their status as visual objects. Facial reconstructions and the (bio)archeological face are visual records of the past. They are key to highlighting past lifeways and offer an awareness into formal qualities or abstracted notions which aid in reconstructing manifestations of past socio-cultural structures. The power of these faces from the past is akin to other visual representations of archaeological life as they, “are not just visual translations of theories about past human behaviour, but rather they are influential documents which play a part in the shaping of archaeological debates” (Moser 1992, 831). As such, facial reconstructions are (over)laden with meaning arising from frameworks imposed upon the re-constructed countenances. The manner in which they

affect the perception of the past and the powerful weight they possess through the human element of connection to the past is the exemplary status of these (more than just) reproductions. Throughout the examination of a large span of time and the osteological and cultural material assemblages, it can be deemed that in fact facial reconstruction do have archaeological merit towards humanising the distant past.

It was a deliberate decision to have each chapter focusing on a temporal chapter begin with a facial reconstruction from the respective time period. This face, just as in Levinasian ethical philosophy, prompts the discussion of respective themes. Seen throughout this body of research, the production and inclusion of these past countenances solidify the human element of archaeology and are a vital part in the archaeological narrative of temporal periods and the sites constituting them. The faces in each chapter draw the reader into the respective era and frame the material thereafter. As such, we as archaeologists respond to the encounter of this past gaze.

By provoking the reader with these past faces, a relationship has been entered with the past in a manner which resonates with the main threads of this research. The use of the four Levinasian concepts (visuality, intersubjectivity, alterity, and response and responsibility) exposes the essential qualities of the discipline of (bio)archaeology. These notions are those which not only does the discipline utilise, but we as self-reflexive archaeologists function under their domain. Throughout the encounter of this study you have gazed upon faces from the past which are new to the bioarchaeological record of Ireland and in so being are now responsible for their continued life through the archaeological narrative.

It can be concluded that through the previous discussion of this study facial reconstructions are a highly pervasive and voyeuristic experience. Archaeological facial reconstructions are the gaze of an individual who is an object of curiosity to the contemporary viewer. This is partially due to the fact that these faces should not exist to our twenty-first century gaze. These re-constructed countenances of those in the distant past evoke a response from viewers arising as curiosity but also regard – regard for the face’s archaeological condition and our own condition leading to what Sanders calls a ‘self-archaeologization’ (2009, 179-180). Our looking into the past is confronted by the gaze of facial reconstruction who demands to be seen and imbues a sense of responsibility within the viewer for the

reconstruction's proliferation. There is no doubt that facial reconstructions would be a welcome addition to any cultural or heritage institution in Ireland. As this research offers the unique opportunity to contribute to the facial reconstruction record of Ireland, it is hoped that these teaching moments and formations of the archaeological imagination are used more often in Ireland.

Not only has the face and its human or material presence been noted, but the self-reflexive awareness of the archaeologist in their present discipline has also been alluded to in terms of the application of Levinasian themes. All four themes, separately and in combination, are relevant in our worldview as twenty-first archaeologists. We use visibility, intersubjectivity, the experience of alterity, and a sense of response (in interpretation) and responsibility (as ethically guided by our professional standards) in our scholarly endeavours and pursuit for understanding of the past and its place in the present.

As insightful as the landscape, human, and material remains are, what we see in the twenty-first century is not what past populations would have experienced. The filter and lens in which we as contemporary viewers see and experience the archaeological record is neither complete nor absent of twenty-first century biases. With this prejudice, the discipline of archaeology can only hope and endeavour to discuss the past through a holistic investigation which allows the concealed to be revealed.

The ramifications for this research should resound through the discipline of (bio)archaeology. Noting the power of the face with particular note of their cultural context could transform previously embedded meanings. This research also shows that there is a growing vibrancy in the theoretical landscape of Irish (bio)archaeology. Concepts within Levinas's work are viable parameters by which to interpret moments within the (bio)archaeological record. The use of Levinas in the unravelling of archaeological occurrences should be allocated more attention. The facial reconstructions constructed for and illustrated in this body of research is also an impact upon the visual narrative of the Irish past. They are a personified moment in this re-establishment of the past. Perhaps it is through the self-reflexive encounter with archaeological facial reconstructions and the theoretical privilege to the face wherein the particular landscapes can become particularly more relevant in our discussion of the past.

BIBLIOGRAPHY

1855. Discovery of an Ancient Sepulchral Chamber at Ballynahatty, County Down. *Ulster Journal of Archaeology*, 3, pp. 358-365.
- Aalen, F.H.A. The rehousing of rural labourers in Ireland under the Labourers (Ireland) Acts, 1883-1919. *Journal of Historical Geography*, 12(3), pp. 287-306.
- Abramiuk, M.A. 2012. *The Foundations of Cognitive Archaeology*. Cambridge, MA: Massachusetts Institute of Technology.
- Abrams, E.M. 1989. Architecture and Energy: An Evolutionary Perspective. In: Schiffer, M.B. ed. *Archaeological Method and Theory*. Tucson: University of Arizona Press, pp. 47-87.
- Aldhouse-Green, M. 2001. *Dying for the Gods: Human Sacrifice in Iron Age & Roman Europe*. Gloucestershire: Tempus.
- Aldhouse-Green, M. 2010. Review of: Sanders, K. Bodies in the Bog and the Archaeological Imagination. *Australian Archaeology*, 70, pp. 72-73.
- Amlé, A. 2014. *Black Pool: Hiberno-Norse identity in Viking Age and Early Medieval Ireland*. MA Thesis. Uppsala University.
- Angel, J.L. 1978. *Restoration of head and face for identification*. St Louis, MO, Proceedings of Meetings of American Academy of Forensic Science.
- Appleby, J., Mitchell, P.D, Robinson, C., Brough, A., Rutt, G., Harris, R.A., Thompson, D., and Morgan, B. 2014. The scoliosis of Richard III, last Plantagenet King of England: diagnosis and clinical significance. *Lancet*, 383(9932), pp. 1944-1944.
- Appleby, J., Rutt, G.N., Hainsworth, S.V., Woosnam-Savage, R.C., Morgan, B., Brough, A., Earp, R.W., Robinson, C., King, T.E., Morris, M., and Buckley, R. 2014b. Perimortem trauma in King Richard III: a skeletal analysis. *The Lancet*. Available at: <http://www.sciencedirect.com/science/article/pii/S0140673614608047>. [Accessed 20 November 2014].
- Arcici, C. 2009. Losing Face: The World Phenomenon of Ancient Prone Burial, On the Threshold. In: Danielsson, I. (ed.) *Döda personers sällskap: gravmaterialens identiteter och kulturella uttryck*. Stockholms universitet: Institutionen för arkeologi och antikens kultur, pp.187-198.
- Ariès, P. 1981. *The Hour of Our Death*. London: Allen Lane.
- Armstrong, G.J. 2003. Bioarchaeology as Anthropology. *Archaeological Papers of the American Anthropological Association*, 13, pp. 27-41.
- Armit, I. 2010. Janus in furs? Opposed human heads in the art of the European Iron Age. In: Cooney, G., Becker, K, Coles, J., Ryan, M. & Sievers, S. (eds.) *Relics of old decency*:

archaeological studies in later prehistory (Festschrift in honour of Barry Raferty). Dublin: Wordwell, pp. 279-86.

Armit, I. 2012. *Headhunting and the body in Iron Age Europe*. Cambridge: Cambridge University Press.

Agarwal, S.C. and Glencross, B.A. 2011. *Social Bioarchaeology*. Malden, MA: Blackwell Publishing Ltd.

Arensberg, C.M. and Kimball, S.T. 1940. *Family and Community in Ireland*. Cambridge, MA: Harvard University Press.

Arnold, B. and Wicker, N.L. (eds.) 2001. *Gender and the Archaeology of Death*. Plymouth: Altamira Press.

Arridge, S., Moss, J.P., Linney, A.D., and James, D.R. 1985. Three dimensional digitization of the face and skull. *Journal of Maxillofacial Surgery*, 13(3), pp. 136-43.

Aubrey, J. and Fowles, J. (1693)1980. *Monumenta Britannica: Or, A Miscellany of British Antiquities*. Sherborne: Dorset Publishing Co.

Aughey, A. and Oakland, J. 2013. *Irish Civilization: An Introduction*. Oxon: Routledge.

Avramescu, C. 2009. *An Intellectual History of Cannibalism*. Princeton: Princeton University Press.

Bahn, P. 1996. Comment on Dronfields "Entering Alternative Realities: Cognition, Art and Architecture in Irish Passage Tombs". *Cambridge Archaeological Journal*, 6(1), pp. 55-57.

Baker, C. 2004. Augherskea: Early Medieval cemetery. In: Bennett, I. (ed.) *Excavations 2002: summary accounts of archaeological excavations in Ireland*, Bray: Wordwell, p. 403.

Baker, C. 2007. Excavations at Cloncowan II, Co. Meath. *The Journal of Irish Archaeology*, 16, pp. 61-133.

Balme, J. and Bulbeck, C. 2008. Engendering Origins: Theories of Gender in Sociology and Archaeology. *Australian Archaeology*, 67, pp. 3-12.

Balter, M. 2005. 'Deviant' Burials Reveal Death of the Fringe in Ancient Societies. *Science*, 310 (5748), pp. 613.

Balueva, T., Veselovskaya, E., Lebedinskaya, G., & Pestrjakov, A. 1988. *Anthropological types of the ancient population at the territory of USSR*. AA Zubov ed. *Science, Moscow*.

Balueva, T.S. and Lebedinskaya, G.V. 1991. *Anthropological Reconstruction*. Russian Academy of Sciences, Moscow.

Balueva T.S., Lebedinskaya G.V. 1991. Interrelation between morphological attributes of the face and a skull. In: Zubov A.A. ed. *Unity and variety of mankind*. Publishing house of

Institute of Ethnology and Anthropology of the Russian Academy of Science, part. I, Moscow, pp. 282-311.

Balueva, T., Veselovskaya, E., Kobylansky E. 2009. Cranio-facial reconstruction by applying the ultrasound method in live human populations. *International Journal of Anthropology*, 24(2), pp. 87-111.

Bamforth, D.B. and Woodman, P.C. 2004 Tool hoards and Neolithic use of the landscape in north-eastern Ireland. *Oxford Journal of Archaeology*, 23(1), 21-44.

Barfield, L. 1994. The Iceman reviewed. *Antiquity*, 68, pp. 10-26.

Baring-Gould, S. 1892. *Strange Survivals*. London: Methuen.

Barker, P. 1982. *Techniques of Archaeological Excavation*. London: Batsford.

Barrett, J. 1988. The living the dead and the ancestors: Neolithic and Early Bronze Age mortuary practice. In: Barrett, J. and Kinnes, I. (eds.) *The Archaeology of Context in the Neolithic and Bronze Age: Recent Trends*. Sheffield: Department of Archaeology and Prehistory, University of Sheffield, pp. 30-41.

Barry, T.B. 1987. *The Archaeology of Medieval Ireland*. London: Routledge.

Barry, T.B. 1993. Late Medieval Ireland: The debate on social and economic transformation, 1350-1550. In: Graham, B.J. and Proudfoot, L.J. (eds.) *An Historical Geography of Ireland*. London: Academic Press, pp. 99-122.

Bartoletti, S.C. 2001. *Black Potatoes: The Story of the Great Irish Famine, 1845-1850*. New York: Houghton Mifflin Company.

Behrents, R. 1985. *An Atlas of Growth in the Aging Craniofacial Skeleton*. Craniofacial Growth Series. Ann Arbor: Needham Press.

Benazzi, S., Bertelli P., Lippi, B., Bedini, E., Caudana, R. Gruppioni, G., and Mallegni, F. 2010. Virtual anthropology and forensic arts: the facial reconstruction of Ferrante Gonzaga. *Journal of Archaeological Science*, 37(7), pp. 1572-1578.

Benazzi, S., Fantini, M., De Crescenzo, F., Mallegni, G., Mallegni, F., Persiani, F., and Gruppioni, G. 2009. The face of the poet Dante Alighieri reconstructed by virtual modelling and forensic anthropology techniques. *Journal of Archaeological Science*, 36(2), pp. 278-283.

Bentley, R.A. and Maschner, H.D.G. 2008. Introduction: On Archaeological Theories. In: Bentley, R.A., Maschner, H.D.G., and Chippendale, C. (eds.) *Handbook of Archaeological Theories*. Lanham, MD: Altamira Press, pp. 1-11.

Berger, J-F. and Guilaine, J. 2009. The 8200 cal BP abrupt environmental change and the Neolithic transition: A Mediterranean perspective. *Quaternary International*, 200(1-2), pp. 31-49.

- Bergo, B. 2014. Emmanuel Levinas. *The Stanford Encyclopedia of Philosophy*. Zalta, E.N. (ed.) Available at: <http://plato.stanford.edu/archives/spr2014/entries/levinas/>. [Accessed 23 April 2014].
- Bernabeu, J., Puchol, O.G., Pardo, S., Barton, M., and McClure, S.B. 2014. AEA 2012 Conference Reading: Socioecological dynamics at the time of Neolithic transition in Iberia. *Environmental Archaeology*, 19(3), pp. 214-225.
- Bernasconi, R. 2000. The Alterity of the Stranger and the Experience of the Alien. In: Bloechl, J. (ed.) *The Face of the Other and the Trace of God: Essays on the Philosophy of Emmanuel Levinas*. New York: Fordham University Press, pp. 62-89.
- Bernstein, R.J. 2002. Evil and the temptation of theodicy. In: Critchley, S. and Bernasconi, R. (eds.) *The Cambridge Companion to Levinas*. Cambridge: Cambridge University Press, pp. 252-267.
- Bhabha, H.K. 1994. *The Location of Culture*. New York: Routledge.
- Bieler, L. 1979. *The Patrician Texts in the Book of Armagh*. Dublin: The Dublin Institute for Advanced Studies.
- Bienert, H.D. 1991. Skull cult in the prehistoric Near East. *Journal of Prehistoric Religion*, 5, pp. 9-23.
- Billingsley, J. 1998. *Stony Gaze: Investigating Celtic & Other Stone Heads*. Chieveley: Capall Bann.
- Binchy, D. 1952. The saga of Fergus mac Léti. *Eriu*, 20, pp. 1-66.
- Binford, L.R. 1962. Archaeology as Anthropology. *American Antiquity*, 28(2), pp. 217-225.
- Binford, L.R. 1971. Mortuary Practices: Their Study and their Potential. In: Brown, A. (ed.) *Approaches to the Social Dimensions of Mortuary Practices*. *Memories of the society for American Archaeology*, 25, pp. 6-29.
- Binford, L.R. 1972. *An Archaeological Perspective*. New York: Seminar Press.
- Birkner, F. 1907. Die Dicke Der Gesichtswichteile bei verschiedenem Alter, Geschlecht und Rasse. *Sitzungsber Gesellschaft Morphologie, Physiologie Munchen*, 23, pp. 140-146.
- Black, E. 1999. *3D Facial Reconstruction of a 5,500 Year Old Skull from Ballynahatty*. M.A. Thesis. University of Manchester School of Biological Sciences.
- Blakely, R.L. 1977. (ed.) *Biocultural Adaptation in Prehistoric America*. *Proceedings of the Southern Anthropological Society*, No. 11. Athens, GA: University of Georgia Press
- Blumenbach, J.F. 1776. *De Generis Humani Varietate Nativa*. Gottingen.
- Blumenbach, J.F. 1786. *Geschichte und Beschreibung der Knochen des Menschlichen Korpers*. Gottingen.

- Blunt, A. and McEwan, C. 2002. Introduction. In: Blunt, A. and McEwan, C. (eds.) *Postcolonial Geographies*. London: Continuum, pp. 1-6.
- Bonogofsky, M. 2003. Neolithic Plastered Skulls and Railroading Epistemologies. *Bulletin of the American Schools of Oriental Research*, 331(3), pp. 1-10.
- Bonogofsky, M. 2004. Including Women and Children: Neolithic Modeled Skulls from Jordan, Israel, Syria and Turkey. *Near Eastern Archaeology*, 67(2), pp. 118-119.
- Bonogofsky, M. 2005. A bioarchaeological study of plastered skulls from Anatolia: new discoveries and interpretations. *International Journal of Osteoarchaeology*, 15(2), pp. 124-135.
- Bonogofsky, M. and Larsen, C.S. (eds.) 2011. *The Bioarchaeology of the Human Head*. Gainesville: University of Florida Press.
- Borlase, W. 1897. *The Dolmens of Ireland*. London: Chapman & Hall, Ltd.
- Boujot, C. and Cassen, S. 1993. A Pattern of Evolution for the Neolithic Funerary Structures of the West of France. *Antiquity*, 67, pp. 477-491.
- Bourke, E. (ed.) 2011. *“Poor Green Erin”: Germanic Travel Writers’ Narratives on Ireland from Before the 1798 Rising to After the Great Famine*. Frankfurt: Peter Lang.
- Bowen, P. 2008. Settlement and burial at Faughart Lower. *Seanda*, 3, pp. 9-11.
- Boyce, G. 1991. *Nationalism in Ireland*. London: Routledge.
- Boyd, R. 2014. Building Fences in Dublin: Exploring Ireland’s First Urban Community. In: Nititham, D.S. and Boyd, R. (eds.) *Heritage, Diaspora, and the Consumption of Culture: Movements in Irish Landscapes*. Farnham, UK: Ashgate Publishing Ltd, pp. 11-27.
- Bradley, J. 1988. Anglo-Norman sarcophagi from Ireland. In: Mac Niocaill, G. and Wallace, P.F. (eds.) *Keimelia: studies in medieval archaeology and history in memory of Tom Delaney*. Galway: Galway University Press, pp. 74-94.
- Bradley, J. and King, H.A. 1985. Romanesque Voussoirs at St Fin Barre's Cathedral, Cork. *The Journal of the Royal Society of Antiquaries of Ireland*, 115, pp. 146-151.
- Bradley, R. 1991. Rock art and the perception of landscape. *Cambridge Archaeological Journal*, 1(1), pp. 77-101.
- Bradley, R. 1998. *The Significance of Monuments*. London: Routledge.
- Bradley, R. 2010. Passage graves, statues and standing stones: megaliths and social identities in prehistoric Scotland and Ireland. Paper of the European Megalithic Studies Group. Available at: http://www.jungsteinsite.uni-kiel.de/2010_MSG/Bradley_MSG_2010_low.pdf. [Accessed on 26 October 2014].

- Bradshaw, B. 1989. Nationalism and Historical Scholarship in Modern Ireland. *Irish Historical Studies*, 26(104), pp. 329-351.
- Brannon, N. and Horning, A. 2005. Post-Medieval Archaeology. It Hasn't Gone Away, You Know. *Archaeology Ireland*, 19(2), p. 16.
- Brindley, A.L. and Lanting, J.N. 1989/1990. Radiocarbon Dates for Neolithic Single Burials. *The Journal of Irish Archaeology*, 5, pp. 1-7.
- Brindley, A.L., Lanting, J.N., and Mook, W.G. 1987/1988. Radiocarbon Dates from Moneen and Labbacallee, County Cork. *The Journal of Irish Archaeology*, 4, pp. 13-20.
- Broca, P. 1861. Sur le volume et la forme du cerveau suivant les individus et suivant les races. *Bulletins et Mémoires de la Société d'Anthropologie de Paris*, 2, pp. 139-204
- Bron, A.J., Tripathi, R.C., and Tripathi, B.J. 1997. *Wolff's Anatomy of the Eye and Orbit*, 8th edn. London: Chapman & Hall Medical.
- Brophy, K. 1999. Seeing the cursus as a symbolic river. *British Archaeology*, 44, pp. 6-7.
- Brosnan, A. 1993. *Mortuary practices in the cathedral cemetery, Ardfert, Co. Kerry: a preliminary assessment*. MA thesis. Department of Archaeology, University College Cork.
- Brothwell, D. 1981. *Digging up Bones*. New York: Cornell University Press.
- Brothwell, D. 1989. The relation of tooth wear to aging. In: Iscan, M.Y. (ed.) *Age Markers in the Human Skeleton*. Springfield, IL: C.C. Thomas.
- Brown, J.A. 1971. The dimensions of status in the burials at Spiro. In: Brown, J.A. (ed.) *Approaches to the social dimensions of mortuary practices*. Washington, D.C.: Society for American Archaeology, pp. 92-112.
- Brozio, J.P., Dörfler, W., Feeser, I., Kirleis, W., Kloof, S., and Müller, J. 2014. A Middle Neolithic well from Northern Germany: a precise source to reconstruct water supply management, subsistence economy, and deposition practices. *Journal of Archaeological Science*, 51, pp. 135-153.
- Brück, J. 2005. Experiencing the Past? The Development of Phenomenological Archaeology in British Prehistory. *Archaeological Dialogues*, 12(1), pp. 45-72.
- Buber, M. 1958. The I-thou theme, contemporary psychotherapy, and psychodrama. *Pastoral Psychology*, 9(5), pp. 57-58.
- Buckley, L. 2011. Ireland/Éire. In: Márquez-Grant, N. and Fibiger, L. (eds.) *The Routledge Handbook of Archaeological Human Remains and Legislation*. New York: Routledge, pp. 211-219.

- Buikstra, J. 1977. Biocultural Dimensions of Archaeological Study: A Regional Perspective. In: Blakely, R.L. (ed.) *Biocultural Adaptation in Prehistoric America*. Proceedings of the Southern Anthropological Society, No. 11. Athens, GA: University of Georgia Press, pp. 67-84.
- Buikstra, J.E. 2006. On to the 21st Century, Introduction. In: Buikstra, J.E. and Beck, L.A. (eds.) *The Contextual Analysis of Human Remains*. New York: Elsevier, pp. 347-357.
- Buikstra, J. and Beck, L.A. 2009. *Bioarchaeology: The Contextual Analysis of Human Remains*. Amsterdam: Academic Press.
- Buikstra, J. and Ubelaker, D. 1994. *Standards for data collection from human skeletal remains. Proceedings of a seminar at the Field Museum of Natural History, organized by Jonathan Haas, Fayetteville: Arkansas Archaeological Survey.*
- Burggraeve, R. 2005. Violence and the Vulnerable Face of the Other: The vision of Emmanuel Levinas on moral evil and our responsibility. In: Katz, C.E. (ed.) *Emmanuel Levinas: Critical Assessments of Leading Philosophers*. New York: Routledge, pp. 49-67.
- Caciola, N. 1996. Wraiths, Revenants and Ritual in Medieval Culture. *Past & Present* 152, pp. 3-45.
- Cagney, L. and O'Hara, R. 2009. An early medieval complex at Dowdstown 2. In: Deevy, M.B. and Murphy, D. (eds.) *Places Along the Way: First Findings on the M3*. National Roads Authority Scheme Monograph 5. Bray: Wordwell, pp. 123-134.
- Cahill, M. 2011. Introduction. In: Cahill, M. and Sikora, M. (eds.) *Breaking Ground, Finding Graves: reports on the excavations of burials by the National Museum of Ireland, 1927 – 2006*. Dublin: Wordwell Ltd, pp. 11-12.
- Cahill, M. and Sikora, M. (eds.) 2011. *Breaking Ground, Finding Graves: reports on the excavations of burials by the National Museum of Ireland, 1927 – 2006*. Dublin: Wordwell Ltd.
- Caldwell, M.C. 1981. *The Relationship of the Details of the Human Face to the Skull and its Application*. M.A. Thesis. Arizona State University.
- Caputo, J. March 2009. Solving a 17th-Century Crime: Forensic anthropologists at the National Museum of Natural History find answers to a colonial cold case. *Smithsonian Magazine*. Available at: <http://www.smithsonianmag.com/arts-culture/solving-a-17th-century-crime-50842762/?no-ist> [Accessed 27 August 2014].
- Carlile, P.R., Nicolini, D., Langley, A., Tsoukas, H. (eds.) 2013. *How Matter Matters: Objects, Artifacts, and Materiality in Organisation Studies*. Oxford: Oxford University Press.
- Carroll, C. and King, P. (eds.) 2003. *Ireland and postcolonial theory*. Notre Dame: Notre Dame University Press.

- Carty, N. forthcoming. *The place of violence in Medieval Ireland: Osteological evidence for interpersonal trauma in Irish Medieval assemblages*. Unpublished PhD Thesis. University College Cork.
- Case, H. 1969. Settlement patterns in the North Irish Neolithic. *Ulster Journal of Archaeology*, 32, pp. 3-27.
- Case, H.J. 1973. A ritual site in north-east Ireland. In: Daniel, G. and Kjaerum, P. (eds.) *Megalithic Graves and Ritual*. Moesgård, Denmark: Jutland Archaeological Society, pp.173-96.
- Cattaneo, C. 2007. Forensic anthropology: developments of a classical discipline in the new millennium. *Forensic Science International*, 165(2-3), pp. 185-93.
- CBC News. 1 March 2008. True face of Bach unveiled by forensic experts. Available at: <http://www.cbc.ca/news/arts/true-face-of-bach-unveiled-by-forensic-experts-1.701163>. [Accessed 14 May 2013].
- Chamberlain, T. 4 March 2011. Pictures: New Iceman is Fit, Nearly Naked – And Too Old? Available at: <http://news.nationalgeographic.com/news/2011/03/pictures/110304-otzi-iceman-mummy-reconstruction-face-eyes-science-oetzi/>. [Accessed on 20 November 2014].
- Chambers, A. 1979. *Granuaile: the life and times of Grace O'Malley c. 1530-1603*. Dublin: Wolfhound Press.
- Channing, J. and Randolph-Quinney, P. 2006. Death, decay and reconstruction: the archaeology of Ballykilmore cemetery, County Westmeath. In: O'Sullivan, J. and Stanley, M. (eds.) *Settlement, industry and ritual: proceedings of a public seminar on archaeological discoveries on national road scheme*. Bray: Wordwell, 3, pp. 115-128.
- Chapman, R. 1995. Ten Years After – Megaliths, Mortuary Practices, and the Territorial Model. In: Beck, L.A. (ed.) *Regional Approaches to Mortuary Analysis*. New York: Springer, pp. 29-51.
- Chapple, R.M. 2005. Tattooed Lady?: A Carved Stone Head from the Graveyard of Killogilleen, Co. Galway. *Journal of the Galway Archaeological and Historical Society*, 57, pp. 181 – 188.
- Charney, M. and Coffin, J.C. 1981. *Facial reconstruction: a composite procedure*. St Louis MO, Proceedings of Meetings of American Academy of Forensic Science.
- Childe, V.G. 1946. Anthropology and archaeology. *Southwestern Journal of Anthropology*, 2, pp. 243-252.
- Claassen, C. 2000. Homophobia and women archaeologists. *World Archaeology*, 32(2), pp. 173-9.

- Clack, T. and Brittain, M. 2007. Introduction: Archaeology and the Media. In: Clack, T. and Brittain, M. (eds.) *Archaeology and the Media*. Walnut Creek, CA: Left Coast Press, pp. 11-66.
- Claes, P., Vandermeulen, D., DeGreef, S., Willems, G., Suetens, P. 2006. Craniofacial reconstruction using a combined statistical model of face shape and soft tissue depths: methodology and validation. *Forensic Science International*, 159, pp. S147-S58.
- Claes, P., Vandermeulen, D., De Greef, S., Willems, G., Clement, J. G., and Suetens, P. 2010. Computerized craniofacial reconstruction: Conceptual framework and review. *Forensic Science International*, 201(1-3), pp. 138-145.
- Clarke, D. 1968. *Analytical Archaeology*. London: Methuen.
- Clark, S. 1978. The importance of agrarian classes: agrarian class structure and collective action in nineteenth-century Ireland. *British Journal of Sociology*, 29(1), pp. 22-40.
- Clarke, D. 1998. *The Head Cult: Tradition and folklore surrounding the symbol of the severed head in the British Isles*. PhD Thesis. University of Sheffield.
- Clarke, L. 2002. An Early Medieval Enclosure and Burials: Johnstown, Co. Meath *Archaeology Ireland*, 16(4), pp. 13-15.
- Clarke, L. and Long, P. 2010. *Archaeological excavation (E2967) Prumplestown Lower, N9/N10 Kilcullen to Waterford scheme: Moone to Prumplestown, Co. Kildare*. Unpublished Head Archaeology (Ireland) report for National Monuments Service, Dublin.
- Clement J.G. and Marks, M. (eds.) 2005. *Computer-Graphic Facial Reconstruction*. Burlington: Elsevier Academic Press.
- Clement, J.G. and Ranson, D.L. 1998. *Craniofacial Identification in Forensic Medicine*. Sydney: Arnold Publishers.
- Cochrane, A. 2006. The Simulacra and Simulations of Irish Neolithic Passage Tombs. *Images, Representations and Heritage*, pp. 247-278.
- Cochrane, A. 2008. Additive Subtraction: addressing pick-dressing in Irish passage tombs. In: Thomas, J. and Oliveria Jorge, V. (eds.) *Archaeology and the Politics of Vision in a Post-Modern Context*. Newcastle: Cambridge Scholars Publishing, pp.163-185.
- Cochrane, A. and Jones, A. 2012. Visualising the Neolithic: an introduction. In: Cochrane, A. and Jones, A. (eds.) *Visualising the Neolithic: abstraction, figuration, performance, representation*. Oxford: Oxbow Books, pp. 1-14.
- Codinha, S. 2009. Facial soft tissue thicknesses for the Portuguese adult population. *Forensic science international*, 184(1), pp. 80-e1.
- Cody, E. 2002. *Survey of megalithic tombs of Ireland Co County Donegal Vol. VI*. Dublin: The Stationery Office.

- Coelho, Jr., E., Figueiredo, L. 2003. Patterns of Intersubjectivity in the Constitution of Subjectivity: Dimensions of Otherness. *Culture Psychology*, 9(3), pp. 193-208.
- Cohen, R. 2003. Introduction. In: Levinas, E. *Humanism of the Other*. N. Champaign: University of Illinois Press, pp. vii – xvl.
- Cohen, R. 2006. Levinas: thinking least about death – contra Heidegger. *International Journal for the Philosophy of Religion*, 60(1/3), pp. 21-39.
- Cohen, S. 1978. Prisons and the Future of Control Systems: From Concentration to Dispersal. In: Fitzgerald, M., Halmos, P., Mincie, J. (eds.) *Welfare in Action*. London: Routledge & Kegan Paul, pp. 217-228.
- Cole, S.A. 2001. *Suspect Identities: A History of Fingerprinting and Criminal Identification*. London: British Museum Press.
- Collins, A.E.P. 1954a. Excavations at the Giant's Ring, Ballynahatty. *Ulster Journal of Archaeology*. pp. 44-60
- Collins, A.E.P. 1954b. The excavation of a double horned cairn at Audleystown, Co. Down. *Ulster Journal of Archaeology*, 17, pp. 7-56.
- Conkey, M.W. and Gero, J.M. 1991. *Engendering Archaeology: Women and Prehistory*. Oxford: Blackwell Publishing.
- Conkey, M.W. and Spector, J.D. 1984. Archaeology and the Study of Gender. In: Schiffer, M.B. (ed.) *Advances in Archaeological Method and Theory*. New York: Academic, pp. 1-38.
- Conkey, M. and Tringham, R.E. 1995. Archaeology and the Goddess: Exploring the Contours of Feminist Archaeology. In: Stanton, D.C. and Steward, A.J. (eds.) *Feminisms in the Academy: Rethinking the Disciplines*. Ann Arbor: University of Michigan Press, pp. 199-247.
- Connolly, M. 2000. Cloghermore cave: the Lee Valhalla. *Archaeology Ireland*, 14(4), pp. 16-19.
- Connolly, M. and Coyne, F. 2000. The underworld of the Lee Valley. *Archaeology Ireland*, 14(2), pp. 8-12.
- Connolly, S.J. 1992. *Religion, Law and Power: The Making of Protestant Ireland, 1660-1760*. Oxford: Clarendon Press.
- Cooney, G. 2000. *Landscapes of Neolithic Ireland*. London: Routledge.
- Cooney, G. 2014. The Role of Cremation in Mortuary Practice in the Irish Neolithic. In: Kuijt, I., Quinn, C.P., and Cooney, G. (eds.) *Transformation by Fire: The Archaeology of Cremation in Cultural Context*. Tucson: University of Arizona Press, pp. 189-207.
- Cooney, G and Grogan, E. 1994. *Irish Prehistory: A Social Perspective*. Dublin: Wordwell.

- Corlett, C. and Potterton, M. 2010. *Death and Burial in Early Medieval Ireland*. Dublin: Wordwell.
- Corruccini, R.S. 1972. The Biological Relationships of Some Prehistoric and Historic Pueblo Populations. *American Journal of Physical Anthropology*, 37, pp. 373-388.
- Cosgrove, A. 1981. *Late Medieval Ireland, 1370-1541*. Dublin: Helicon Ltd.
- Coyne, F. 2006. Excavations of an early medieval “plectrum-shaped” enclosure at Newton, Co. Limerick. In: O’Sullivan, J. and Stanley, M. (eds.) *Settlement, Industry, and Ritual*. Archaeology and the National Roads Authority Monograph Series No. 3. Dublin: National Roads Authority, pp. 63-72.
- Crawford, O.G.S. 1955. *The Eye Goddess*. London.
- Critchley, S. 2002. Introduction. In: Critchley, S. and Bernasconi, R. (eds.) 2002. *The Cambridge Companion to Levinas*. Cambridge: Cambridge University Press, pp. 1-33.
- Croker, T.C. 1825. *Fairy Legends and Traditions of the South of Ireland*. London: Thomas Davison, Whitefriars.
- Crooke, E. 2000. *Politics, Archaeology and the Creation of a National Museum of Ireland*. Dublin: Irish Academic Press.
- Crossley, N. 1996. *Intersubjectivity: The Fabric of Social Becoming*. London: Sage Publications Ltd.
- Croucher, K. 2005. Queerying Near Eastern Archaeology. *World Archaeology*, 37(4), pp. 610-620.
- Croucher, K. 2012. *Death and Dying in the Neolithic Near East*. Oxford: Oxford University Press.
- Croucher, K. and Campbell, S. 2009. Dying for a change? Bringing new sense to Near Eastern Neolithic mortuary practice. In: Tereny, S., Lyons, N., and Kelly, J. (eds.) *Que(e)rying Archaeology: the proceedings of the 30th annual Chacmool Conference*. Calgary: Calgary Archaeological Association of the University of Calgary, pp. 95-105.
- Crowley, J., Smyth, W.J., Murphy, M., and Murphy, M. 2012. *Atlas of the Great Irish Famine*. New York: New York University Press.
- Cummings, V. 2002. Between mountains and sea: a reconsideration of the Neolithic monument of south-west Scotland. *Proceedings of the Prehistoric Society*, 68, pp. 1254-1256.
- Cunliffe, B. 1986. *Danebury: An anatomy of an Iron Age hillfort*. London: Batsford.
- Cunliffe, B. 1995. *Danebury, An Iron Age Hillfort in Hampshire, Vol. 6: a hillfort community in perspective*. CBA Research Report, 102.

Curtis, Jr., L.P. 1971. *Apes and Angels: The Irishman in Victorian Caricature*. Washington, D.C.: Smithsonian Institution Press.

Davidsson, M. 2003. On the Anatomy of Megaliths-the interrelation between physical interment and morphology in Irish megalithic tombs. *Bar International Series*, 1201, pp. 235-246.

de Beauvoir, S. 1975. *The Second Sex*. London: Vintage Books.

De Greef, S., Claes, P., Mollemans, W., Vandermeulen, D., Suetens, P., Willems, G. 2005. Computer-assisted facial reconstruction recent developments and trends. *Revue Belge de Médecine Dentaire*, 60(3), pp. 237-49.

De Greef, S., Claes, P., Vandermeulen, D., Mollemans, W., Suetens, P., & Willems, G. 2006. Large-scale in-vivo Caucasian facial soft tissue thickness database for craniofacial reconstruction. *Forensic science international*, 159, pp. S126-S146.

De Greef, S., Willems, G. 2005. Three dimensional cranio-facial reconstruction in forensic identification: latest progress and new tendencies in the 21st century. *Journal of Forensic Sciences*, 50(1), pp. 1282-8.

de Paor, L. 1967. Cormac's Chapel: The Beginnings of Irish Romanesque. In: Rynne, E. (ed.) *North Munster Studies: Essays in Commemoration of Monsignor Michael Moloney*. Limerick, pp. 133-145.

de Paor, L. 1969. Excavations at Mellifont Abbey, Co. Louth. *Publications of the Royal Irish Academy*, Section C, pp. 109 – 64.

Decker, S., Ford, J., Davy-Jow, S., Faraut, P., Neville, W., and Hilbelink, D. 2013. Who is this person? A comparison study of current three-dimensional facial approximation methods. *Forensic Science International* 229 (1-3), 161.e1–161.e8.

Delaney, F. 2009. N18 Oranmore-Gort, Co. Galway. Eachtra Archaeological Projects for Galway County Council and the National Roads Authority. Available at: <http://eachtra.ie/index.php/journal/n18-oranmore-gort/>. [Accessed on 2 October 2014].

Delaney, F., Lehane, J., Keefe, K., and O'Sullivan, J. 2009. Medieval life and death by the 'broken river'. *Seanda: NRA Archaeology Magazine*, 4, pp. 36-9.

Dent, J.S. 1985. Three cart burials from Wetwang, Yorkshire. *Antiquity*, 59(226), pp. 85-92.

Dickson, J.H., Oeggl, K., and Handley, L.L. 2003. The Iceman Reconsidered. *Scientific American*, 288(5), pp. 4-13.

Dickson, J.H., Hofbauer, W., Porley, R., Schmidl, A., Kofler, W., and Oeggl, K. 2009. Six mosses from the Tyrolean Iceman's alimentary tract and their significance for his

ethnobotany and the events of his last days. *Vegetation History and Archaeobotany*, 18(1), pp. 13-22.

Dickinson, O. 2005. The "Face of Agamemnon". *Hesperia*, 74, pp. 299-308.

diLeonardo, M. (ed.) 1991. *Gender at the Crossroads of Knowledge: Feminist Anthropology in the Post-Modern Era*. Berkeley: University of California Press.

Dissing, J., Binladen, J., Hansen, A., Sejrsen, B., Willerslev, E., Lynnerup, N. 2007. The last Viking King: A royal maternity case solved by ancient DNA analysis. *Forensic Science International*, 166(1), pp. 21-27.

Dixson, A.F. and Dixson, B.J. 2011. Venus Figurines of the European Palaeolithic: Symbols of Fertility or Attractiveness? *Journal of Anthropology*, 2011, pp.1-9.

Dobres, M-A. and Robb, J.E. (eds.) 2014. *Agency in Archaeology*. London: Routledge.

Domingo Sanz, I., Fiore, D., and May, S.K. 2009. *Archaeologies of Art, Time, Place, Identity*. Walnut Creek: Left Coast Press.

Dostoevsky, F.M. 1880. *The Brothers Karamazov*. New York: Bantam Dell.

Dowd, M. 2001. Archaeology of the subterranean world. *Archaeology Ireland*, 15(1), pp. 24-29.

Dowd, M. 2002. Kilgreany, Co. Waterford: biography of a cave. *Journal of Irish Archaeology*, 11, pp. 77-97.

Dowd, M. 2008. The Use of Caves for Funerary Ritual Practices in Neolithic Ireland. *Antiquity*, 82(316), pp. 305-317.

Dowd, M., Fibiger, L., and Lynch, L.G. 2006. The Human Remains from Irish Caves Project. *Archaeology Ireland*, 20(3), pp. 16-19.

Downson, T.A. 2006. Archaeologists, Feminists, and Queers: Sexual Politics in the Construction of the Past. In: Geller, P.L. and Stockett, M.K. (eds.) *Feminist Anthropology: Past, Present and Future*. Philadelphia: University of Philadelphia Press, pp. 89-102.

Dowson, T.A. 2000. Why queer archaeology? An introduction. *World Archaeology*, 32, pp. 161-5.

Driscoll, K. 2013. Coastal communities in earlier prehistoric Ireland: ploughzone survey and the Tawin/Maree stone axes, Galway Bay. *Proceedings of the Royal Irish Academy*, 113C, pp. 29-65.

Droessler, J. 1981. *Craniometry and Biological Distance: Biocultural Continuity and Change at the Late Woodland-Mississippian Interface*. Evanston, Ill: Center for American Archaeology.

- Dronfield, J. 1996. Entering Alternative Realities: Cognition, Art and Architecture in Irish Passage-Tombs. *Cambridge Archaeological Journal*, 6(1), pp. 37-72.
- Dudley, S., Barnes, A.J., Binnie, J., Petrov, J., & Walklate, J. (eds.). 2011. *The Thing about Museums: Objects and Experience, Representation and Contestation*. London: Routledge.
- Duffy, S. 1997. *Ireland in the Middle Ages*. Dublin: Gill & Macmillan Ltd.
- Duffy, S. (ed.) 2005. *Medieval Ireland: An Encyclopedia*. New York: Routledge.
- Duignan, M. 1941. Historical Note. In: Kendrick, T.D. 1941. The Early Christian Irish: the Skeletons at Gallen Priory. *Journal of the Royal Society of Antiquaries of Ireland*, 69, pp. 104-106.
- Duncan, J. 1999. Complicity and resistance in the colonial archive: some issues of method and theory in historical geography. *Historical Geography*, 27, pp. 119-128.
- Dupont, C. 2011. The Dog Whelk *Nucella lapillus* and Dye Extraction Activities From the Iron Age to the Middle Ages Along the Atlantic Coast of France. *The Journal of Island and Coastal Archaeology*, 6(1), pp. 3-23.
- Dureau, C. 2000. Skulls, Mana, and Causality. *The Journal of the Polynesian Society*, 109(1), pp. 71-97.
- Durkheim, E. 1933. *The Division of Labor*. New York: Macmillan.
- Dwyer, E. 2007. Peripheral people and places: an archaeology of isolation. In: Horning, A. J., Ó Baoill, R., Donnelly, C. J., & Logue, P. (eds.) *The Post-Medieval Archaeology of Ireland, c. 1550-1850*. Dublin: Wordwell Ltd., pp. 131-142.
- Edwards, B. and Pope, R. 2013. Gender in British Prehistory. In: Bolger, D. (ed.) *A Companion to Gender Prehistory*. Malden, MA: Wiley & Sons, Inc., pp. 458-479.
- Edwards N. 1990. *The Archaeology of Early Medieval Ireland*. London: B.T. Batsford Ltd.
- Eisler, R. 1987. *The Chalice and the Blade: Our History, Our Future*. Cambridge, MA: Harper & Row.
- Ellis, S.G. 1986. Nationalist historiography and the English and Gaelic worlds in the late middle ages. *Irish Historical Studies*, 25(97), pp. 1-18.
- Ellis-Davidson, H. 1988. *Myths and Symbols in Pagan Europe: early Scandinavian and Celtic religions*. Manchester: Manchester University Press.
- Enlow, D.H. and Hans, M.G. 1996. *Essentials of Facial Growth*. Philadelphia, PA: W.B. Saunders.
- Eogan, G. 1973. A Decade of Excavations at Knowth, Co. Meath. *Irish University Review*, 3(1), pp. 66-79.

- Eogan, G. 1984. *Excavations at Knowth 1*. Dublin: Royal Irish Academy.
- Eogan, G. 1986. *Knowth and the passage tombs of Ireland*. London: Thames and Hudson.
- Eogan, G. and Richardson, H. 1982. Two Mace heads from Knowth, County, Meath. *The Journal of the Royal Society of Antiquaries of Ireland*, 112, pp. 123-138.
- Eogan, J. and Shee Twohig, E. (eds.) 2011. *Cois tSiúire – Nine Thousand Years of Human Activity in the Lower Suir Valley: Excavations on the N25 Waterford City Bypass*. National Roads Authority.
- Erdal, Y.S., & Erdal, Ö.D. 2012. Organized violence in Anatolia: A retrospective research on the injuries from the Neolithic to Early Bronze Age. *International Journal of Paleopathology*, 2(2), pp. 78-92.
- Ermini, L., Olivieri, C., Rizzi, E., Corti, G., Bonnal, R., Soares, P., Luciani, S., Marota, I., De Bellis, G., Richards, M.B. et al. 2008. Complete Mitochondrial Genome Sequence of the Tyrolean Iceman. *Current Biology*, 18(21), pp. 1687-1693.
- Etchingham, C. 1999. *Church Organisation in Ireland A.D. 650 to 1000*. Kildare: Laigin Publications.
- Evans, E. 2004. *Archaeology from art: exploring the interpretative potential of British and Irish Neolithic rock art*. Vol. 363. British Archaeological Reports Limited.
- Evans, R. 1982. *The fabrication of virtue: English prison architecture, 1750-1840*. Cambridge: Cambridge University Press.
- Evison, M.P. 2002. *Torticollis in an unidentified female from Leeds, England*. Bari, Italy, Proceedings of the 10th Conference of the International Association of Craniofacial Identification.
- Fang, J. 16 July 2014. Non-Human DNA Discovered During Biopsy of Otzi the Iceman. Available at: <http://www.iflscience.com/health-and-medicine/non-human-dna-discovered-during-biopsy-%C3%B6tzi-iceman>. [Accessed on 20 November 2014].
- Fanon, F. 1986. *Black Skin, White Masks*. London: Pluto Press.
- Farrar, F. 1977. From skull to visage: a forensic technique for facial restoration. *The Police Chief*, 44, pp. 78–80.
- Fedosyutkin, B.A. and Nainys, J.V. 1993. The relationship of skull morphology to facial features. In: Iscan, M.Y. and Helmer, R.P. (ed.) *Forensic Analysis of the Skull*. New York: Wiley-Liss Inc, pp. 199-213.
- Ferrario, V.F., Sforza, C. and Serrao, G. 2000. A three-dimensional quantitative analysis of lips in normal young adults. *Cleft-Palate Craniofacial Journal*, 37(1), pp. 48-54.

- Fewer, T.G. 1998. An Apparent Funerary Anomaly from Seventeenth-Century Waterford. *The Journal of the Royal Society of Antiquaries of Ireland*, 128, pp. 17-25.
- Fibiger, L. 2010. The human skeletal remains from Ratoath, Co. Meath. In: Corlett, C. and Potterton, M. (eds.) *Death and Burial in Early Medieval Ireland in the Light of Recent Archaeological Excavations*. Bray: Wordwell, pp. 117-137.
- Finlay, L. & Gough, B. (eds.). 2003. *Reflexivity: A practical guide for researchers in health and social sciences*. Oxford: Blackwell Science Ltd.
- Finn, C. 2004. *Past poetic: archaeology in the poetry of WB Yeats and Seamus Heaney*. London: Duckworth.
- Flanagan, M.T. 1989. *Irish Society, Anglo-Norman Settlers, Angevin Kingship*. Oxford: Clarendon Press.
- Flanagan, M.T. 2010. *The transformation of the Irish church in the twelfth century*. Woodbridge: Boydell Press.
- Fleming, A. 1999. Phenomenology and the megaliths of Wales: a dreaming too far. *Oxford Journal of Archaeology*, 18, pp. 119-125.
- Fluehr-Lobban, C. 2008. *Race and Racism*. Oxford: AltaMira Press.
- Forbes, W. 1990. The first recorded archaeological find at Emain Macha. *Emania*, 7, pp. 43-45.
- Foster, T. 1989. *Seamus Heaney*. Boston: Twayne Publishers.
- Fowler, B. 24 November 1998. The Iceman's Last Meal. Available at: <http://www.pbs.org/wgbh/nova/ancient/iceman-last-meal.html>. [Accessed on 20 November 2014].
- Fowler, C. 2001. Personhood and social relations in the British Neolithic with a study from the Isle of Man. *Journal of Material Culture* 6(2), pp. 137-163.
- Frame, R. 1998. Power and society in the lordship of Ireland, 1272-1377. In: *Ireland and Britain, 1170-1450*. London: A&C Black, pp. 191-220.
- Frame, R. 2012. *Colonial Ireland, 1169-1369*. Dublin: Four Courts Press.
- Fraser, S.M. 1998. The public forum and the space between. The materiality of social strategy in the Irish Neolithic. *Proceedings of the Prehistoric Society*, 64, pp. 203-224.
- Freyer, D.W. & Wolpoff, M.H. 1985. Sexual dimorphism. *Annual Review of Anthropology*, 14, pp. 429-473.

Frazer, W. 1879-1888. Description of a Great Sepulchral Mound at Aylesburyroad, Near Donnybrook, in the County of Dublin, Containing Human and Animal Remains, as Well as Some Objects of Antiquarian Interest, Referable to the Tenth or Eleventh Centuries *Proceedings of the Royal Irish Academy. Polite Literature and Antiquities*, 2, pp. 29-55.

Fritz, J.M. and Plog, F.T. 1970. The nature of archaeological excavation. *American Antiquity*, 35, pp. 305-319.

Fry, S.L. 1999. *Burials in Medieval Ireland, 900-1500: A Review of Written Sources*. Dublin: Four Courts Press.

Furholt, M. and Müller, J. 2011. The earliest monuments in Europe – architecture and social structures (5000-3000BC). In: Furholt, M., Lüth, F. and Müller, J. (eds.) *Megaliths and Identities: early monuments and Neolithic societies from the Atlantic to the Baltic*. Bonn: Dr Rudolph Habelt GmbH.

Furuta, M. 2001. Measurement of orbital volume by computed tomography - especially on the growth of the orbit. *Japanese Journal of Ophthalmology*, 45(6), pp. 600-606.

Garfinkel, Y. 1994. Ritual burial of cultic objects: the earliest evidence. *Cambridge Archaeological Journal*, 4(2), pp. 159–188.

Garton, T. 2001. Masks and Monsters: Some Recurring Themes in Irish Romanesque Sculpture. In: Hourihane, C. (ed.) *From Ireland Coming: Irish Art from the Early Christian to the Late Gothic Period and its European Context*. Princeton: Princeton University Press, pp. 121-140.

Gatliff, B.P. and Snow, C.C. 1979. From skull to visage. *The Journal of Biocommunication*, 6, pp. 27-30.

Gatliff, B.P. 1984. Facial sculpture on the skull for identification. *American Journal of Forensic Medicine and Pathology*, 5, pp. 327-332.

Gamboni, D. 2002. *Potential Images: Ambiguity and Indeterminacy in Modern Art*. London: Reaktion Books.

Gaimster, D. 2012. The Geoff Egan Memorial Lecture 2011: Artefacts, art and artifice: reconsidering iconographic sources for archaeological objects in early modern Europe. *Post-Medieval Archaeology*, 46(2), pp. 304-319.

Gauld, S., Campbell, S., Carter, E. 2003. Elusive Complexity : New Data from late Halaf Domuztepe in South Central Turkey. *Paléorient*, 29(2), pp. 117-133.

Geber, J. 2009. Osteological report on the human remains from Owenbristy, Co Galway E3770. Unpublished Osteological Report: Eachtra Archaeological Projects.

Geber, J. 2011. Human remains from Owenbristy. In: Delaney, F. and Tierney, J. (eds.) *In the Lowlands of South Galway. Archaeological excavations on the N18 Oranmore to Gort National Road Scheme*. NRA Scheme Monographs 7. Dublin: National Roads Authority, pp. 88-97.

- Geber, J. 2012. Comparative study of perimortem weapon trauma in two early medieval populations (AD 400–1200) from Ireland, *International Journal of Osteoarchaeology*, 25(3), pp. 253-264.
- Geber, J. 2012. Burying the Famine dead: Kilkenny Union Workhouse, In: Crowley, J. & Smyth, W.J. (eds.) *Atlas of the Great Irish Famine 1845-52*. Cork: University College Cork, pp. 341–8.
- Geber, J. 2014. Reconstructing Realities: Exploring the Human Experience of the Great Famine through Archaeology. In: Corporaal, M., Cusack, C., Janssen, L., and van den Beuken, R. (eds.) *Global Legacies of the Great Irish Famine: Transnational and Interdisciplinary Perspectives*. Oxford: Peter Lang, pp. 139-156.
- George, R. 1987. The lateral craniographic method of facial reconstruction. *Journal of Forensic Sciences*, 32, pp. 1305-1330.
- George, R.M. 1993. Anatomical and artistic guidelines for forensic facial reconstruction. In: Iscan, M.Y. and Helmer, R.P. (eds.) *Forensic Analysis of the Skull*. London: Wiley-Liss Inc, pp. 215-227.
- Gerasimov, M.M. 1955a. *Vosstanovlenie lica po cerepu*. Moskva: Izdat. Akademii Nauk SSSR.
- Gerasimov, M.M. 1955b. *Vosstanovleniia Litsa po Cherapu*; Gos Izd-vo Sovetskaia [The reconstruction of the face on the skull]. Unpublished translation (1975) by Tshernezky.
- Gerasimov, M.M. 1971. *The Face Finder*. New York: Hutchinson.
- Gerasimov, M.M. 1975. *The Reconstruction of the Face from the Basic Structure of the Skull*. Russia: Publishers unknown.
- Gero, J.M. and Conkey, M.W. (eds.) 1991. *Engendering Archaeology: Woman and Prehistory*. Oxford: Blackwell
- Ghose, T. 8 November 2014. Mummy Melodrama: Top 9 Secrets About Otzi the Iceman. Available at: <http://www.livescience.com/24666-otzi-iceman-mummy-life-death.html>. [Accessed on 20 November 2014].
- Giddens, A. 1979. *Central Problems in Social Theory*. London: Macmillan.
- Gilchrist, R. 1999. *Gender and Archaeology: Contesting the Past*. London: Routledge.
- Gilchrist, R. 2000 Archaeological Biographies: Realizing Human Lifecycles, Courses and Histories. *World Archaeology*, 31(1), pp. 325–28.
- Gilchrist, R. and Morris, R. 1993. Monasteries as Settlements: Religion, Society, and Economy AD 600-1150. In: Carver, M.O. (ed.) *Search of Cult: Investigations in Honour of Philip Ratz*. Woodbridge: Boydell Press, pp. 113 – 116.

Giles, M. 2009. Iron Age bog bodies of north-western Europe. Representing the dead. *Archaeological Dialogues*, 16(01), pp. 75-101.

Giles, M. 2012. *A Forged Glamour: Landscape, Identity, and Material Culture in the Iron Age*. Oxford: Oxbow Books.

Giles, M. and Joy, J. 2007. Mirrors in the British Iron Age: performance, revelation and power. In: Anderson, M. (ed.) *The Book of the Mirror: An Interdisciplinary Collection Exploring the Cultural Story of the Mirror*. Cambridge: Cambridge Scholars Press, pp. 16-31.

Gilmore, S., and Murphy, E. 2001 Reconstructing the dead man's face - a violent death from medieval Armagh. *Archaeology Ireland*, 56, pp. 16-18.

Giraldus Cambrensis. 1978. *Expugnatio Hibernica: The Conquest of Ireland*. Scott, A.B. and Martin, F. X. (eds.) Dublin: Royal Irish Academy.

Glaister, J. and Brash, J.C. 1937. *Medico-legal Aspects of the Ruxton Case*. Edinburgh: Elsevier Ltd.

Glanville, E.V. 1969. Nasal shape, prognathism and adaption in man. *American Journal of Physical Anthropology*, 30, pp. 29-38.

Glassman, D.M., Gatliff, B.P. and McGregor, R. 1989. Applications of facial sculpturing to the biological study of an archaeological population. *Plains Anthropologist*, 34(125), pp. 223-231.

Goldberg, R.A., Relan, A. and Hoening, J. 1999. Relationship of the eye to the bony orbit, with clinical correlations. *Australian and New Zealand Journal of Ophthalmology*, 27(6), pp. 398-403.

Goldnamer, W.W. 1923. *The anatomy of the eye and orbit*. Chicago: The Professional Press.

Goodman, A.H. and Rose, J.C. 1990. Assessment of systemic physiological perturbation from dental enamel hypoplasias and associated histological structures. *Yearbook of Physical Anthropology*, 33, pp. 59-110.

Gordon, G.M. and Steyn, M. 2012. An investigation into the accuracy and reliability of skull-photo superimposition in a South African sample. *Forensic Science International*, 216(1-3), pp. 198.e1-198.e6.

Goren, Y., Goring-Morris, A. N., & Segal, I. 2001. The technology of skull modelling in the Pre-Pottery Neolithic B (PPNB): Regional variability, the relation of technology and iconography and their archaeological implications. *Journal of Archaeological Science*, 28(7), pp. 671-690.

Gostner, P. and Egarter Vigl, E. 2002. INSIGHT: Report of Radiological-Forensic Findings on the Iceman. *Journal of Archaeological Science*, 29(3), pp. 323-326.

- Gould, S.J. 1996. *The Mismeasure of Man*. New York: W.W. Norton & Co.
- Gowland, R. and Knüsel, C. (eds.) 2009. *Social Archaeology of Funerary Remains*. Oxford: Oxbow Books.
- Graham, B. 2000. Urbanisation in Ireland During the High Middle Ages, c.1100 to c.1350: Settlement and environment. In: Barry, T. (ed.) *History of Settlement in Ireland*. London: Routledge, pp. 124-139.
- Graves-Brown, P. (ed.) 2000. *Matter, Materiality, and Modern Culture*. London: Routledge.
- Grauer, A.L. 1989. *Health, Disease, and Status in Medieval York*. University Microfilms International. Michigan.
- Gravett, C. 2003. *Towton 1461: England's Bloodiest Battle*. Oxford: Osprey Publishing.
- Gray, H. 1973. *Gray's Anatomy*. London: Longman Group Ltd.
- Green, M. 1986. *The Gods of the Celts*. Stroud: Sutton Publishing.
- Greyling, I.H. and Meiring, J.H. 1993. Morphological study on the convergence of the facial muscles at the angle of the mouth. *Acta Anatomica*, 143, pp.127-129.
- Gribben, A. (ed.) 1999. *The Great Irish Famine and the Irish Diaspora in America*. Boston: University of Massachusetts Press.
- Grogan, E. 1984. Excavation of an Iron Age burial at Furness. *Journal of the Kildare Archaeological and Historical Society*, 16(4), pp. 298-316.
- Guatelli-Steinberg D., Lukacs. 1999. Interpreting sex differences in enamel hypoplasia in human and non-human primates: developmental, environmental, and cultural considerations. *Yearbook of Physical Anthropology*, 42, pp. 78-126.
- Guinnane, T.W. and Ó Gráda, C. 2000. *The Workhouses and Irish Famine Mortality*. Dublin: University College Dublin.
- Guyomarc'h, P., Stephan, C.N. 2012. The Validity of Ear Prediction Guidelines Used in Facial Approximation. *Journal of Forensic Sciences*, 57(6), pp. 1427-1441.
- Haglund, W.D. and Reay, D.T. 1991. Use of facial approximation in identification of Green River Serial Murder Victims. *American Journal of Forensic Medicine and Pathology*, 12(2), pp. 132-142.
- Halpin, A. and Buckley, L. 1995. Archaeological Excavations at the Dominican Priory, Drogheda, Co. Louth. *Proceedings of the Royal Irish Academy*, 95C(5), pp. 175-253.
- Hamlin, A. 1985. The archaeology of the Irish church in the eighth century. *Peritia*, 4, pp. 279 – 299.

- Hand, S. 1989. Introduction. In: Hand, S. (ed.) *The Levinas Reader*. Cambridge, MA: Blackwell Publishing.
- Handwerk, B. 2005. King Tut's New Face: Behind the Forensic Reconstruction. National Geographic News. Available at: http://news.nationalgeographic.com/news/2005/05/0511_050511_kingtutface.html. [Accessed 4 June 2014].
- Hansen, C.C. 1921. Identifikation og rekonstruktion af historiske personers udseende paa grundlag af skelettet. Copenhagen: J.H. Schultz.
- Harbison, P. 1973. New light on St. Mary's "Abbey", Louth. *County Louth Archaeological and Historical Society Journal*, 18(1), pp. 39-42.
- Harbison, P. 1976. The Vanished Faces of Ireland. *Studies*, 65, pp. 53-62.
- Harbison, P. 1998. *The Golden Age of Irish Art*. London: Thames and Hudson.
- Harbison, P. 2001. The otherness in Irish art. In: Hourihane, C. (ed.) *From Ireland Coming: Irish Art from the Early Christian to the Late Gothic Period and its European Context*. Princeton: University of Princeton Press, pp. 103-20.
- Harrison, S. 2006. Skull Trophies of the Pacific War: Transgressive Objects of Remembrance. *The Journal of the Royal Anthropological Institute*, 12(4), pp. 817-836.
- Hartnett, P.J. 1956/1957. Excavation of a Passage Grave at Fourknocks, Co. Meath. *Proceedings of the Royal Irish Academy*, 58C, pp. 197-277.
- Hartwell, B. 1991. Ballynahatty: A Prehistoric Ceremonial Centre. *Archaeology Ireland*, 5(4), pp. 12-15.
- Hartwell, B. 2006. The Giant's Ring and the Ballynahatty Ceremonial Landscape. In: Swindles, G.T. (ed.) *Late Quaternary Environmental Change and Archaeology: Case Studies in the Lower Bann Valley and Belfast District*. Dublin: Irish Quaternary Association. pp. 17-23.
- Hayden, A. 2011. *Trim Castle, Co. Meath: Excavations 1995-8*. Department of the Arts, Heritage and the Gaeltacht.
- Hayes, S. 2014. Facial approximation of 'Angel': Case specific methodological review. *Forensic science international*, 237, pp. e30-e41.
- Hayes, S., Buckley, H., Bradley, R., Milne, N., Dennison, J. 2012. Approximating the Face of 'Aunty': A Question of Likeness. *Journal of Archaeological Method & Theory*, 19(2), pp. 306 – 321.
- Heathcote, G.M. 1986. Exploratory Human Craniometry of Recent Eskaleutian Regional Groups from the Western Arctic and Subarctic of North America: A New Approach to Population Historical Reconstruction. *BAR International Series* 301.

- Heaney, S. 1974. Bog Queen. *James Joyce Quarterly*, 11(3), pp. 221-223.
- Helmer, R. 1984. *Schadelidentifizierung durch elektronische Bildmischung*. Heidelberg: Kriminalistik-Verlag.
- Helmer, R. P., Rohricht, S., Petersen, D., & Mohr, F. 1993. Assessment of the reliability of facial reconstruction. In: Iscan, M.Y. and Helmer, R.P. (eds.) *Forensic analysis of the skull*, New York: Wiley-Liss, pp. 229-246.
- Helms, M. 1998. *Access to Origins, Affines, Ancestors, and Aristocrats*. Austin: University of Texas Press.
- Hennessy, W. (ed.) 1871. *The Annals of Lough Cé*. Vol. 1. Available at: <http://www.ucc.ie/celt/published/T100010B.html>. [Accessed 11 May 2015].
- Henry, F. 1952. A wooden hut on Inishkea North, Co. Mayo (Site 3, House A). *The Journal of the Royal Society of Antiquaries of Ireland*, 82(2), pp. 163-178.
- Henry, F. 1967. *Irish Art during the Viking Invasions 800-1020 A.D.* London: Methuen & Co Ltd.
- Henry, F. 1970. *Irish Art in the Romanesque Period 1020 -1170 A.D.* London: Methuen.
- Henry, F. and Marsh-Micheli, G. 2008. Manuscripts and illuminations, 1169-1603. In: Cosgrove, A. (ed.) *A New History of Ireland, Vol. II: Medieval Ireland 1169 – 1534*. Oxford: Oxford University Press, pp. 780-814.
- Henry, F. and Zarnecki, G. 1957. Romanesque arches decorated with human and animal heads. *Journal of the British Archaeological Association*, 21-22, pp. 1-34.
- Hensey, R. 2014. Artefact versus architecture: the use of space in Irish passage tombs. *Préhistoires Méditerranéennes*. Available at: <http://pm.revues.org/887>. [Accessed on 15 June 2015].
- Herity, M. 1964. The finds from the Irish Portal Dolmens. *The Journal of the Royal Society of Antiquaries of Ireland*, 94 (Part 2), pp. 123-144.
- Herity, M. 1974. *Irish Passage Graves*. Dublin.
- Hickey, H. 1976. *Images of Stone*. Belfast: Blackstaff Press.
- Hill, E. 1998. Gender-Informed Archaeology: The Priority of Definition, the Use of Analogy, and the Multivariate Approach. *Journal of Archaeological Method and Theory*, 5(1), pp. 99-128.
- Hill, J.D. 2002 Wetwang chariot burial. *Current Archaeology*, 15(178), pp. 410-412.
- Hill, M.D. 1857. *A Paper on the Irish Convict Prisons: Read at the First Meeting of the National Association for the Promotion of Social Science, Held at Birmingham, Under the Presidency of Lord Brougham*. London: J.W. Parker and Son.

His, W. 1895. Anatomische Forschungen über Johann Sebastian Bachs Gebeine und Antlitz nebst Bemerkungen über dessen Bilder. *Abhandlungen der mathematisch-physikalischen Klasse der Königlich-Sächsischen Gesellschaft der Wissenschaften*, 22, pp. 379-420.

Hodder, I. (ed.) 1982. *Structural and Symbolic Archaeology*. Cambridge: Cambridge University Press.

Hodder, I. 1991. *Archaeological Theory in Europe: The Last Three Decades*. London: Routledge.

Hodder, I. 1992. *Theory and Practice in Archaeology*. London: Routledge.

Hodder, I. (ed.) 2014. *Archaeological Theory Today*, 2nd Edition. Chichester: Polity Press.

Hooton, E., Dupertuis, C.W., and Dawson, H.L. 1955. *The Physical Anthropology of Ireland*. Cambridge, Mass.: Peabody Museum.

Hoppen, K.T. 1977. Landlords, society and electoral politics in mid-nineteenth-century Ireland. *Past and Present*, 75, pp.62-93.

Horning, A. 2007. Introduction. In Horning, A. J., Ó Baoill, R., Donnelly, C. J., & Logue, P. (eds.) *The Post-Medieval Archaeology of Ireland, c. 1550-1850*. Dublin: Wordwell Ltd., pp. 3-6.

Horning A. 2012. Ireland: Medieval Identities, Settlement and Land Use. In: Christie, N., and Stamper, P. (eds.) *Medieval Rural Settlement: Britain and Ireland, AD 800-1600*. Oxford: Oxbow Books, pp. 172-185.

Horning, A. J., Ó Baoill, R., Donnelly, C. J., & Logue, P. (eds.) 2007. *The Post-Medieval Archaeology of Ireland, c. 1550-1850*. Dublin: Wordwell Ltd.

Houssaye, V. 2007. 'Image of Lust'? The Origin and Function of the Castletown Mouth-Puller. *Journal of the County Louth Archaeological and Historical Society*, 26(3), pp. 349-359.

Howells, W.W. 1941. The Early Christian Irish: the Skeletons at Gallen Priory. *Journal of the Royal Society of Antiquaries of Ireland*, 69, pp. 103-219.

Howells, W.W. 1973. Cranial Variation in Man: A Study of Multivariate Analysis of Patterns of Difference among Recent Human Populations. *Papers of the Peabody Museum of Archaeology and Ethnology*, 79, Cambridge, Mass.: Peabody Museum, Harvard University.

Hughes, J.A. & Sharrock, W.W. 1980. *The philosophy of social research*. London: Longman.

Huizinga, J. 1965. *The Waning of the Middle Ages*. London: Peregrine Books.

Hulbert-Powell, C.L. 1944. Carved Corbels, Brackets, and Label Stops in Anglesey Churches. *Transactions of the Anglesey Antiquarian Society*, p. 19.

- Hunt, D.R. 2001. The Value of Human Remains for Research and Education. In: Williams, E. (ed.) *Human Remains: Conservations, Retrieval and Analysis*. Oxford: Archaeopress, pp. 129-134.
- Hunt, E.E. and Gleiser, I. 1955. The estimation of age and sex of preadolescent children from bones and teeth. *American Journal of Physical Anthropology*, 13, pp. 470-487.
- Hurley, M.F. and Sheehan, C.M. (1995) *Excavations at the Dominican Priory, St Mary's of the Isle, Cork*, Cork.
- Hutchens, B.C. 2004. *Levinas: A Guide for the Perplexed*. New York: Continuum.
- Hutterer, K.L. 2001. Area and International Studies: Archaeology. *International Encyclopedia of the Social & Behavioral Sciences*, pp. 653-657.
- Imai, K. and Tajima, S. 1993. Measurement of normal eyeball position synostosis. *Plastic and Reconstructive Surgery*, 92, pp. 588-592.
- Ince, K. 1996. Questions to Luce Irigaray. *Hypatia*, 11(2), pp. 122-140.
- Ingold, T. 1993. The Temporality of the Landscape. *World Archaeology*, 25(2), pp. 152-174.
- Irwin, J. 2005. *The Warehouse Prison: Disposal of the New Dangerous Class*. LA: Roxbury Publishing Co.
- Jacks, M. 2009. Teeth and the past in Portugal: pathology and the Mesolithic-Neolithic transition. In: Koppe, T., Meyer, G., and Alt, K. (eds.) *Comparative Dental Morphology, Frontiers of Oral Biology*. Basel: Karger, pp. 167-172.
- Jackson, S. 1973. *Celtic and Other Stone Heads*. Bradford: S. Jackson c/o Percy Lund, Humphries and Co. Ltd. The County Press, Drummond Rd.
- Jacobsthal, P. 1944. *Imagery in early Celtic Art*. The Sir John Rhys Memorial Lecture 1941. London: British Academy.
- James, S. 1999. *The Atlantic Celts: Ancient People or Modern Invention?*. Madison: University of Wisconsin Press.
- Jantz, R.L. 1974. The Redbird Focus: Cranial Evidence in Tribal Identification. *Plains Anthropologist*, 19, pp. 5-13.
- Jantz, R.L., Owsley, D.W., and Willey, P. 1978. Craniometric Relationships of Central Plains Populations. In: Blakeslee, D.J. (ed.) *Central Plains Tradition: Internal Development and External Relationships*. Report no. 11. Iowa City, Office of the Iowa State Archaeologist: pp. 144-156.
- Johnson, G. and Smith, M. (eds.) 1991. *Ontology and Alterity in Merleau-Ponty*, Evanston: Northwestern University Press.

- Johnson, M. 1987. *The Body in the Mind: The Bodily Basis of Meaning, Imagination, and Reason*. Chicago: University of Chicago Press.
- Johnson, M. 2010. *Archaeological Theory: An Introduction*. Malden, MA: Blackwell Publishing Ltd.
- Johnson, W. 1912. *Byways in British Archaeology*. Cambridge: Cambridge University Press.
- Johnston, N.B. 2000. *Forms of constraint: A history of prison architecture*. Urbana and Chicago: University of Illinois Press.
- Jones, C. 2007. *Temples of Stone: Exploring the Megalithic Tombs of Ireland*. Cork: Collins Press.
- Jones, M. 2013. Untangling Sociomateriality. In: Carlile, P.R., Nicolini, D., Langley, A., Tsoukas, H. (eds.) *How Matter Matters: Objects, Artifacts, and Materiality in Organisation Studies*. Oxford: Oxford University Press, pp. 197-227.
- Jordanov J. 2003. *Head reconstruction by the skull*. Sofia, Bulgaria: Marin Drinov Academic Publishing House.
- Jorion, P. 1982. The Downfall of the Skull. *RAIN*, 48, pp. 8-11.
- Joyce, R. 2005. Archaeology of the Body. *Annual Review of Anthropology*, 34, pp. 139-158.
- Jurmain, R., Kilgore, L., and Trevathan, W. 2014. *Essentials of Physical Anthropology*. Belmont, CA: Wadsworth.
- Katz, C. 2002. Vagabond capitalism and the necessity of social reproduction. *Antipode*, 33(4), pp. 709-728.
- Keating, D. 2008. An analysis of the human skeletal remains from Parknahown 5, Co. Laois. Unpublished report for Archaeology Consultancy Services Ltd.
- Keeley, V.J. 1990. *Archaeological Excavation at Marlinstown, County Westmeath*. Unpublished report by Valerie J Keeley Ltd for Westmeath County Council.
- Kelly, E. 2006. Secrets of the bog bodies. The enigma of the Iron Age explained, *Archaeology Ireland*, 20(1), pp. 26-31.
- Kelly, M. 2001. *A History of the Black Death in Ireland*. Dublin: The History Press.
- Kelly, R.L. and Thomas, D.H. 2010. *Archaeology*. Belmont, CA: Wadsworth.
- Kenaan, H. 2013. *The Ethics of Visuality: Levinas and the Contemporary Gaze*. New York: I. B. Tauris.

- Kendrick, T.D. 1939. Gallen Priory excavations, 1934-1935. *Journal of the Royal Society of Antiquaries of Ireland*, 69, pp. 1-20.
- Kennedy, L. 2000. Bastardy and the Great Famine: Ireland 1845-50. In: King, C. (ed.) *Famine Land and Culture in Ireland*. Dublin: University College Dublin Press, pp. 6 -29.
- Kenyon, K. 1957. *Digging up Jericho*. London: Ernest Benn Lmt.
- Kenyon, K. 1967. Jericho. *Archaeology*, 20, pp. 268-275.
- Key, P.J. 1983. Craniometric Relationships among Plain Indians: Culture-Historical and Evolutionary Implications. *Report of Investigations* no. 34, Department of Anthropology, University of Tennessee, Knoxville.
- Kieran, E. 2013. Report on Archaeological Assessment of Proposed Floating Pontoon Installation at Spike Island, Co. Cork. Unpublished report for Cork County Council by Geomara Ltd.
- Kilbride-Jones, H.E. and Keenan, E. 1951/1952. Double Horned Cairn at Cohaw, County Cavan. *Proceedings of the Royal Irish Academy. Section C*, 54, pp. 75-88.
- Kiley, J. 2009. The New Face of Bronze Age Pottery. *Eachtra Journal* 2. Available at: <http://eachtra.ie/index.php/journal/new-face-bronze-age-pottery/>. [Accessed 19 August 2014].
- King, P.R. 1986. I Step Through Origins. In: Bloom, H. (ed.) *Modern Critical Views: Seamus Heaney*. New Haven: Chelsea House, pp. 79-80.
- Kinsella, J. 2010. A new Irish early medieval type? Exploring the “recent” archaeological evidence for non-circular enclosed settlement and burial sites. *Proceedings of the Royal Irish Academy*, 110C, pp. 89-132.
- Kissane, N. 1986. *The Irish Face*. Dublin: The National Library of Ireland.
- Klingelhofer, E. 2010. *Castles and Colonists: An Archaeology of Elizabethan Ireland*. Manchester: Manchester University Press.
- Knudson, K. and Stonjanowski, C. 2008. New Directions in Bioarchaeology: Recent Contributions to the Study of Human Social Identities. *Journal of Archaeological Research*, 16, pp. 397-432.
- Knüsel, C. and Smith, M.J. (eds.) 2014. *The Routledge Handbook of the Bioarchaeology of Human Conflict*. New York: Routledge.
- Kollman J. and Buchly W. 1898. Die Persistenz der Rassen und die Reconstruction der Physiognomie prähistorischer Schädel. *Archiv für Anthropologie*, 25, pp. 329-359.

- Konigsberg, L.W., Algee-Hewitt, B.F.B. and Steadman, D.W. 2009. Estimation and Evidence in Forensic Anthropology: Sex and Race. *American Journal of Physical Anthropology*, 139, pp. 77-90.
- Kroeber, A.L. 1927. Disposal of the Dead. *American Anthropology*, 29, pp. 308-315.
- Krogman, W. and Iscan M.Y. 1986. *The Human Skeleton in Forensic Medicine*. Springfield, IL: C.C. Thomas Publishers.
- Kuijt, I. 2008. The Regeneration of Life: Neolithic Structures of Symbolic Remembering and Forgetting. *Current Anthropology*, 49(2), pp. 171-197.
- Kuijt, I., Özdoğan, M. and Pearson, M.P. 2009. Skull Removal: Enemies, Ancestors, and Memory. *Paléorient*, 35(1), pp. 117-127.
- Kus, S. 2006. In the Midst of the Moving Waters: Material, Metaphor, and Feminist Archaeology. In: Geller, P.L. and Stockett, M.K. (eds.) *Feminist Anthropology: Past, Present and Future*. Philadelphia: University of Philadelphia Press, pp. 105-115.
- Ladouceur, R. Race Art and Evolution. Available at: <http://www.textbookhistory.com/race-art-and-evolution-in-the-rocket-age-2/> 2010. [Accessed 20 January 2013].
- Lambrechts, P. 1954. *L'Exaltation de la tête dans le pensée et dans l'art des Celtes*. Dissertationes Archaeologiae Gandenses, 2. Bruges: De Tempel.
- Lanarch, S. and University of Sydney. 1978. *Australian aboriginal craniology*. Sydney: University of Sydney.
- Larsen, C.S. 1997. *Bioarchaeology Interpreting Behaviour from the Human Skelton*. Cambridge: Cambridge University Press.
- Larsen, C.S. 2006. The Changing Face of Bioarchaeology: An Interdisciplinary Science. In: Buikstra, J.E. and Beck, L.A. (eds.) *The Contextual Analysis of Human Remains*. New York: Elsevier, pp. 359-374.
- Le Douff, M. 2007. *Hipparchia's Choice*. New York: Columbia University Press.
- Leask, H.G. 1955. *Irish Churches and Monastic Buildings, Vol. 1*. Dundalk: Dungaldan Press.
- Leask, H.G., Price, L., Martin, C.P., and Bailey, K. C. 1935 – 1937. The Labbacallee Megalith, Co. Cork. *Proceedings of the Royal Irish Academy. Section C*, 43, pp. 77-101.
- Lebedinskaya, G.U., Balueva, T.S. and Veselovskaya, E.B. 1993. Development of methodological principles for reconstruction of the face on the basis of skull material. In: Iscan, M.Y. and Helmer, R.P. (eds.) *Forensic Analysis of the Skull*. New York: Wiley-Liss Inc., pp. 183-98.

- Leben-Seljak, P. and Jamnik, P. 2011. Slovenia/Republika Slovenija. In: Márquez-Grant, N. and Fibiger, L. (eds.) *The Routledge Handbook of Archaeological Human Remains and Legislation*. New York: Routledge, pp. 403-421.
- Lee, J. 1973. *The Modernisation of Irish Society: 1848-1918*. Dublin: Gill & Macmillan Ltd.
- Lee, W. J., Wilkinson, C. M., and Hwang, H. S. 2012. An Accuracy Assessment of Forensic Computerized Facial Reconstruction Employing Cone-Beam Computed Tomography from Live Subjects. *Journal of forensic sciences*, 57(2), pp. 318-327.
- Lehane, F. and Delaney, F. 2011. Owenbristy - Cashel & Cemetery. In: Delaney, F. and Tierney, J. (eds.) *In the Lowlands of South Galway. Archaeological excavations on the N18 Oranmore to Gort National Road Scheme*. NRA Scheme Monographs 7. Dublin: National Roads Authority, pp. 71-109.
- Leone, M.P. (ed.) 1972. *Contemporary Archaeology: A Guide to Theory and Contributions*. Carbondale, IL: Southern Illinois University Press.
- Levinas, E. 1961. *Totality and Infinity*. Pittsburgh: Duquesne University Press.
- Levinas, E. 1978. *Existence and Existents*. The Hague: Martinus Nijhoff Publishers.
- Levinas, E. 1979. *Le Temps et L'Autre*. Paris: Fata Morgana.
- Levinas, E. 1981. *Otherwise Than Being Or Beyond Essence*. The Hague: Martinus Nijhoff Publishers.
- Levinas, E. 1985. *Ethics and Infinity*. Pittsburgh: Duquesne University Press.
- Levinas, E. 1987. *Time and the Other Existents*. Pittsburgh: Duquesne University Press.
- Levinas, E. 1989. *The Levinas Reader*. Hand, S. (ed.) Cambridge, MA: Blackwell Publishing.
- Levinas, E. 1998. *Collected Philosophical Papers*. Pittsburgh: Duquesne University Press.
- Levinas, E. 1999. *Alterity & Transcendence*. New York: Columbia University Press.
- Levinas, E. 2003. *Humanism of the Other*. Urbana: University of Illinois Press.
- Levinas, E. 2006. *Entre-Nous: Thinking-of-the-Other*. London: Continuum.
- Lewis, B., Jurmain, R., and Kilgore, L. 2010. *Understanding Humans: An Introduction to Physical Anthropology and Archaeology*. Belmont, CA: Wadsworth.
- Lewis-Williams, J.D. & Dowson, T.A. 1993. On vision and power in the Neolithic: evidence from the decorated monuments. *Current Anthropology*, 34(1), pp. 55-65.

- Lilley, K.D. 2000. "Non urbe, non vico, non castris": territorial control and the colonization and urbanization of Wales and Ireland under Anglo-Norman lordship. *Journal of Historical Geography*, 26(4), pp. 517-531.
- Lingis, A. 1981. Translator's Introduction. In: Levinas, E. *Otherwise Than Being Or Beyond Essence*. The Hague: Martinus Nijhoff Publishers, pp. xvii-xlvi.
- Llywelyn, J. 2002. Levinas and language. In: Critchley, S. and Bernasconi, R. (ed.) *The Cambridge Companion to Levinas*. Cambridge: Cambridge University Press, pp. 119-38.
- Lokhorst, G-J. 2014. Descartes and the Pineal Gland. In: Zalta, E.N. (ed.) *The Stanford Encyclopedia of Philosophy*. Available at: <http://plato.stanford.edu/archives/spr2014/entries/pineal-gland/>. [Accessed 12 May 2014].
- Lorenzi, R. 19 September 2011. The Ice Mummy: Little-Known Facts. Available at: <http://news.discovery.com/history/archaeology/iceman-discovery-110919.htm>. [Accessed 20 November 2014].
- Lovejoy, C.O. 1985. Dental wear in the Libben population. *American Journal of Physical Anthropology*, 68, pp. 47-56.
- Lynch, A. 2014. *Poul nabrone: An early Neolithic portal tomb in Ireland*. Department of Arts, Heritage, and the Gaeltacht Archaeological Monograph Series.
- Lynch, L. 2014. *An Assessment of Health in Post-medieval Ireland: 'One Vast Lazar House Filled with Famine, Disease and Death'*. PhD Thesis. Department of Archaeology, University College Cork.
- Mac Airt, S. and Mac Niocaill, G. 1983. *The Annals of Ulster (to AD1131)*. Dublin: Dublin Institute for Advanced Studies.
- Macho, G. 1986. An appraisal of plastic reconstruction of the external nose. *Journal of Forensic Science*, 31, pp. 1391-1403.
- Maderspacher, F. 2008. Quick Guide: Ötzi. *Current Biology*, 18(21), pp. R990-R991.
- Maginn, C. 2010. Gaelic Ireland's English frontiers in the late Middle Ages. *Proceedings of the Royal Irish Academy*, 110C, pp. 173-190.
- Mak, B. 2014. Archaeology of a Digitization. *Journal of the Association for Information Science and Technology*, 65(8), pp. 1515-1526.
- Malmesbury, W. 1998. *Gesta regum Anglorum: The History of the English Kings*. In: Mynors, R.A.B. (ed.) Oxford: Clarendon Press.
- Manning, C. 1985. A Neolithic burial mound at Ashelypark, Co. Tipperary. *Proceedings of the Royal Irish Academy*, 85C, pp. 61-100.
- Manning, R.J.S. 1993. *Interpreting Otherwise than Heidegger: Emmanuel Levinas's Ethics as First Philosophy*. Pittsburgh: Duquesne University Press.

- Márquez-Grant, N. and Fibiger, L. (eds.) 2011. *The Routledge Handbook of Archaeological Human Remains and Legislation*. New York: Routledge.
- Martensen, R.L. 2004. *The Brain Takes Shape: An Early History*. Oxford: Oxford University Press.
- Martin, A. 2013. *Archaeology Beyond Postmodernity: A Science of the Social*. Lanham, MD: Altamira Press.
- Martin, D., Harrod, R. and Pérez, V. 2013. *Bioarchaeology: An Integrated Approach to Working with Human Remains*. New York: Springer.
- Martin, M. 2007. *Spike Island: Saints, Felons, and Famine*. Dublin: Nonsuch Publishing.
- Marx, K. 1990. *Capital*. London: Penguin Classics.
- McAlister, M. 1996. "The Common Heritage of Mankind": Race, Nation, and Masculinity in the King Tut Exhibit. *Representations*, 54, pp. 80-103.
- McCormick, F. 1995. Excavations at Kiltullagh. Available at: <http://www.excavations.ie/report/1994/Roscommon/0001810/>. [Accessed on: 23 June 2015].
- McCormick, F. and Murray, E.V. 2007. *Excavations at Knowth 3: Knowth and the zooarchaeology of early Christian Ireland*. Dublin: Royal Irish Academy.
- McGowan, J. 1977. Nineteenth Century Developments in Irish Prison Administration. *Administration*, 26(4), pp. 496-508.
- McGregor, J.H. 1926. Restoring Neanderthal man. *National History*, 26, pp. 288-93.
- McKenzie, C. 2008. An overview of the palaeopathological analyses of the medieval human remains from Ballyhanna, Co. Donegal. In: O'Sullivan, J. and Stanley, M. (eds.) *Roads, Rediscovery and Research: Proceedings of a public seminar on archaeological discoveries on national road schemes August 2007*. Dublin, National Roads Authority, pp. 133 – 142.
- McManus, D. 2009. Good-Looking and Irresistible: The Hero from Early Irish Saga to Classical Poetry. *Ériu*, 59(1), pp. 57-109.
- McNeill, T. 1997. *Castles in Ireland, Feudal Power in a Gaelic World*. London: Routledge.
- McNeill, T.E. 2007. Where should we place the boundary between the medieval and post-medieval periods in Ireland?. In: Horning, A. J., Ó Baoill, R., Donnelly, C. J., & Logue, P. (eds.) *The Post-Medieval Archaeology of Ireland, c. 1550-1850*. Dublin: Wordwell Ltd., pp. 7-13.
- Megaw, J.V.S. and Megaw, M.R. 1990. *The Basse-Yutz Find: masterpieces of Celtic art*. London: Society of Antiquaries Research Report 45.

- Megaw, R. and Megaw, J.V.S. 2005. *Early Celtic Art in Britain and Ireland*. Buckinghamshire: Shire Publications Ltd.
- Mercer, E. 1954. The houses of the gentry. *Past and Present*, 5, pp.11-32.
- Meredith, D. 1999. Landscape or Mindscape? Seamus Heaney's Bogs. *Irish Geography* 32(2), pp. 126-134.
- Merleau-Ponty, M. 1968. *The Visible and the Invisible*. Evanston: Northwestern University Press.
- Meskel, L. (ed.) 2005. *Archaeologies of Materiality*. Oxford: Blackwell Publishing.
- Meskel, L. and Preucel, R. 2004. *A Companion to Social Archaeology*. Oxford: Blackwell.
- Metzler, I. 2011. Disability in the Middle Ages: Impairment at the Intersection of Historical Inquiry and Disability Studies. *History Compass*, 9(1), pp. 45-60.
- Midgley, M. 2005. *The Monumental Cemeteries of Prehistoric Europe*. Gloucestershire: Tempus.
- Miller, F. 2006. Portfolio: Out of the Bog. *Irish Pages*, 3(2), pp. 72, i-xvi.
- Moore, F. 2007. *Ardfert Cathedral: Summary of Excavation Results*. Dublin: Brunswick Press Ltd.
- Morita, A. 2007. Tobacco smoke causes premature skin aging. *Journal of dermatological science*, 48(3), pp. 169-175.
- Morris, N. and Rothman, D.J. 1998. (eds.) *Oxford History of the Prison*. Oxford: Oxford University Press.
- Morrissey, J. 2004. Contours of colonialism: Gaelic Ireland and the early colonial subject. *Irish Geography*, 37(1), pp. 88-102.
- Morrissey, J. 2005. Cultural geographies of the contact zone: Gaels, Galls and overlapping territories in late medieval Ireland. *Social and Cultural Geography*, 6(4), pp. 551-566.
- Morton, S.G. 1839. *Crania Americana*. Philadelphia: J. Dobson.
- Morton, S.G. 1844. *Crania aegyptiaca*. Philadelphia: J. Penington.
- Morton, S.G. 1849. Observations on the Size of the Brain in Various Races and Families of Man. *Proceedings of the Academy of Natural Sciences of Philadelphia*, 1849, pp. 221-224.
- Moser, S. 1992. The visual language of archaeology: a case study of the Neanderthals. *Antiquity*, 66, pp. 831-844.
- Moser, S. 1998. *Ancestral Images. The iconography of human antiquity*. Ithaca: Cornell University Press.

- Moser, S. and Smiles, S. 2005. Introduction: The Image in Question. In: Smiles, S. and Moser, S. (eds.) *Envisioning the Past: Archaeology and the Image*. Malden, MA: Blackwell Publishing, pp. 1-12.
- Moser, S. 2012. Archaeological visualisation: early artifact illustration and the birth of the archaeological image. In: Hodder, I. (ed.) *Archaeological Theory Today*, 2nd Edition. Chichester: Polity Press, pp. 292-322.
- Moss, J.P., Linney, A.D., Grindrod, S.R., Arridge, S.R., Clifton J.S. 1987. Three dimensional visualization of the face and skull using computerized tomography and laser scanning techniques. *European Journal of Orthodontics*, 9, pp. 247-53.
- Mount, C. 1995. New research on Irish Early Bronze Age cemeteries. In: Waddell, J. and Shee Twohig, E. (eds.) *Ireland in the Bronze Age*. Dublin: Stationery Office, pp. 97-112.
- Mount, C. 2010. Excavation of an Early Medieval promontory fort and enclosed cemetery at Knoxspark, Co. Sligo. In: Corlett, C. and Potterton, M. (eds.) *Death and Burial in Early Medieval Ireland in the Light of Recent Archaeological Excavations*. Bray: Wordwell, pp. 187-216.
- Movius, H.L. 1935. Kilgreany Cave, County Waterford. *Journal of the Royal Society of Antiquaries of Ireland*, 65, pp. 254-296.
- Movius, H.L. 1942. *The Irish Stone Age; its Chronology, Development and Relationships*. Cambridge: Cambridge University Press.
- Müller, J. 2010. Ritual Cooperation and Ritual Collectivity: The Social Structure of the Middle and Younger Funnel Beaker North Group (3500-2800 B.C.). www.jungsteinsite.de.
- Müller, J. 2014. Monuments and Ideologies in the Neolithic Landscape. In: Osborne, J.F. (ed.) *Approaching Monumentality in Archaeology*. Albany, NY: State University of New York Press, pp.181-214.
- Murphy, C. 2010. *A Study of the Human Remains Excavated from the Old Anatomy School (1711-1825) Trinity College Dublin*. PhD thesis. Trinity College Dublin.
- Murphy, C. 2011. What Can an Osteological Investigation Reveal About Medical Education in Eighteenth-Century Dublin?. *Archaeology Ireland*, 97, pp. 30-34
- Murphy, E. 2010. *Deviant Burial in the Archaeological Record*. Oxford: Oxbow Books.
- Murphy, D. and Clarke, L. 2001. Stratigraphic report for Colp West, Co. Meath. Unpublished report.
- Naginski, E. 2001. Riegl, Archaeology, and the Periodization of Culture. *RES: Anthropology and Aesthetics*, 40, pp. 135-152.
- Neave, R.A.H. 1989. Reconstruction of the Skull and the Soft Tissues of the Head and Face of "Lindow Man". *Canadian Society of Forensic Science Journal*, 22(1), pp. 43-53.

- Neave, R.A.H. 1998. Age changes in the face in adulthood. In: Clement, J.G. and Ranson, D.L. (eds.) *Craniofacial Identification in Forensic Medicine*. Sydney: Arnold Publications, pp. 215-231.
- Needham, C., Wilkinson, C., Knüsel, C. 2003. Reconstructing visual manifestations of disease from archaeological human remains. *The Journal of Audiovisual Media in Medicine*, 26(3), pp. 103-7.
- Neely, P. May 2013. Jamestown Colonists Resorted to Cannibalism. National Geographic News. Available at: <http://news.nationalgeographic.com/news/2013/13/130501-jamestown-cannibalism-archeology-science/>. [Accessed 26 June 2014].
- Nelson, M.R. 2002. The Mummy's Curse: Historical Cohort Study. *British Medical Journal*, 325(7378), pp. 1482-1484.
- Nicholls, K. 2001. Woodland cover in pre-modern Ireland. In: Duffy, P., Edwards, D., and FitzPatrick, E. (eds.) *Gaelic Ireland: Land, Lordship and Settlement 1250 - 1650*. Dublin: Four Courts Press, pp. 181-206.
- Normark, J. 2010. Face/Off: A Neomaterialistic Study of the Face. In: Fahlander, F. and Kjellström, K. (eds.) *Making Sense of Things*. Stockholm: Stockholm University, pp. 69-82. Available at: http://mikroarkeologi.se/showPdf.php?pdf=senses/5_JohanNormark. [Accessed on 17 November 2014].
- Nystrom, K.C. 2014. The Bioarchaeology of Structural Violence and Dissection in the 19th-Century United States. *American Anthropologist*, 116(4), pp. 1-15.
- Ó Carragáin, T. 2010. From family cemeteries to community cemeteries in Viking Age Ireland. In: Corlett, C. and Potterton, M. (eds.) *Death and Burial in Early Medieval Ireland in the Light of Recent Archaeological Excavations*. Dublin: Wordwell, pp. 217-226.
- Ó Donnabháin, B. 2011. Human Remains of Annagh. In: Cahill, M. and Sikora, M. (eds.) *Breaking Ground, Finding Graves: reports on the excavations of burials by the National Museum of Ireland, 1927 – 2006*. Dublin: Wordwell Ltd, pp. 34-47.
- Ó Donnabháin, B. and Cosgrave, U. 1994. *The human remains from Isolde's Tower*. Dublin.
- Ó Floinn, R. 1988. Irish Bog Bodies. *Archaeology Ireland*, 2(3), pp. 94-97.
- Ó Floinn, R. 2011. Annagh, Co. Limerick. In: Cahill, M. and Sikora, M. (eds.) *Breaking Ground, Finding Graves: reports on the excavations of burials by the National Museum of Ireland, 1927 – 2006*. Dublin: Wordwell Ltd, pp. 17-33.
- Ó Gráda, C. 2013. Varieties of Irish famine death. In: Kelly, J. and Lyon, M.A. (eds.) *Death and Dying in Ireland, Britain and Europe: Historical Perspectives*. Sallins, Co. Kildare: Irish Academic Press, pp. 203-220.

- Ó Néill, J. 2006. Excavation of pre-Norman structures on the site of an enclosed Early Christian cemetery at Cherrywood, County Dublin. In: Duffy, S. (ed.) *Medieval Dublin VII: proceedings of the Friends of Medieval Dublin Symposium 2005*. Medieval Dublin Series 7. Dublin: Four Courts Press, pp. 66-88.
- Ó Néill, J. 2010. The Changing character of early medieval burial at Parknahown 5, Co. Laois. In: Corlett, C. and Potterton, M. (eds.) *Death and Burial in Early Medieval Ireland in Light of Recent Archaeological Excavations*, Research Papers in Irish Archaeology, 2. Dublin: Wordwell, pp. 251-260.
- Ó Nualláin, S. 1979. The megalithic tombs of Ireland: Neolithic tombs and their art. *Expedition: The magazine of the University of Pennsylvania*, 21(3), pp. 6-15.
- Ó hÓgáin, D.O. 1991. *Myth, Legend and Romance: An Encyclopaedia of the Irish Folk Tradition*. London: Ryan.
- Ó Ríordáin, A.B. and Rynne, E. 1961. A settlement in the sandhills at Doohey, Co. Donegal. *Journal of the Royal Society of Antiquaries of Ireland*, 91, pp. 58-64.
- Ó Tuathaigh, G. 1972. *Ireland Before the Famine: 1798-1848*. Dublin: Gill & Macmillan Ltd.
- O'Brien, E. 1992. A re-assessment of the 'Great Sepulchral Mound' containing a Viking burial at Donnybrook, Dublin. *Medieval Archaeology*, 36, 170-3.
- O'Brien, E. 1996. Past rites, future concerns. In: Blair, J. and Pyrah, C. (eds.) *Church archaeology: research directions for the future*. York: CBA Research Report, 104, pp. 160-166.
- O'Brien, E. 2003. Burial practices in Ireland: first to seventh centuries A.D. In: Downes, J. and Ritchie, A. (eds.) *Sea change: Orkney and Northern Europe in the later Iron Age, A.D. 300-800*. Angus: Pinkfoot Press, pp. 63-72.
- O'Brien, E. 2009a. Pagan or Christian? Burial in Ireland during the fifth to eighth centuries AD. In: Edwards, N. (ed.) *The Archaeology of Early Medieval Celtic Churches*. Society for Medieval Archaeology Monograph 29: London & Leeds, pp.135-54.
- O'Brien E. 2009b. A re-evaluation of the find-spot of, and a possible context for, the anthropoid hilted sword from Ballyshannon, Co. Donegal. In: Cooney, G., Becker, K., Coles, J., Ryan, M., and Sievers, S. (eds.) *Relics of Old Decency: archaeological studies in later prehistory*. Dublin: Wordwell Press, pp. 193-198.
- O'Brien E. 2011. The context and content of the cemetery. In: Delaney, F. and Tierney, J. (eds.) *In the Lowlands of South Galway: Archaeological excavations on the N18 Oranmore to Gort National Road Scheme*. NRA Scheme Monograph 7. The National Roads Authority: Dublin, pp. 94-98.
- O'Callaghan, C. 2000. *To Hell or Barbados*. Dingle, Co. Kerry: Brandon.

- O'Connell, A. 2009. Excavations at Castlefarm – director's first findings. In: Deevy, M.B. and Murphy, D. (eds.) *Places Along the Way: First Findings on the M3*. National Roads Authority Scheme Monograph 5. Bray: Wordwell, pp. 69-73.
- O'Connor, J. 1995. *The Workhouses of Ireland: The fate of Ireland's poor*. Dublin: Anvil Books.
- O'Donnabhain, B. 2011. The Social Lives of Severed Heads. In: Bonogofsky, M. and Larsen, C.S. (eds.) *The Bioarchaeology of the Human Head*. Gainesville: University of Florida Press, pp. 122-138.
- O'Donnabhain, B. 2013. Stratigraphic Report on Archaeological Excavations carried out at Spike Island, Co. Cork. Unpublished report for the National Museum of Ireland.
- O'Donnabhain, B. and Lozada, M.C. (eds.) 2014. *Archaeological Human Remains: Global Perspectives*. New York: Springer
- O'Donnabhain, B. and Tesorieri, M. 2014. Bioarchaeology. In: Lynch, A. (ed.) *Poulnabrone: An early Neolithic portal tomb in Ireland*. Department of Arts, Heritage, and the Gaeltacht Archaeological Monograph Series, pp. 61-86.
- O'Donovan, E., and Geber J. 2010. Excavations on Mount Gamble Hill, Swords, Co. Dublin. In Death and Burial. In: Corlett, C. and Potterton, (eds.) *Early Medieval Ireland in the Light of Recent Archaeological Excavations*. Wordwell: Bray, pp. 227-238.
- O'Keeffe, T. 1992. Medieval frontiers and fortifications: the Pale and its evolution. In: Aalen, F.H.A. and Whelan, K. (eds.) *Dublin from Prehistory to Present – Studies in Honour of J.H. Andrews*. Dublin: Geography Publications, pp. 57-77.
- O'Keeffe, T. 1994. Lismore and Cashel: Reflections on the Beginnings of Romanesque Architecture in Munster. *JRSAI*, 124, pp. 31-57.
- O'Keeffe, T. 2001. Concepts of 'castle' and the construction of identity in medieval and post-medieval Ireland. *Irish Geography*, 34(1), pp. 69-88.
- O'Keeffe, T. 2003. *Romanesque Ireland: Architecture and Ideology in the Twelfth Century*. Dublin: Four Courts Press.
- O'Keeffe, T. 2007. *Archaeology and the Pan-European Romanesque*. London: Duckworth.
- O'Neill, J.R. 2009. *The Irish Potato Famine*. Edina, Minnesota: ABDO Publishing Co.
- O'Rahilly, C. 1970. *Táin Bó Cúalnge*. Dublin: Royal Irish Academy.
- O'Sullivan, A. and Breen, C. 2007. *Maritime Ireland: An Archaeology of Coastal Communities*. Stroud: Tempus.
- O'Sullivan, A., McCormick, F., Kerr, T.R., and Harney, L. 2013. Death and Burial in Early Medieval Ireland. In: O'Sullivan, A., McCormick, F., Kerr, T.R., and Harney, L. (eds.)

Early Medieval Ireland, AD 400-1100: The Evidence from Archaeological Excavations. Dublin: Royal Irish Academy, pp. 283-319.

O'Sullivan, M. 1986. Approaches to Passage Tomb Art. *The Journal of the Royal Society of Antiquaries of Ireland*, 116, pp. 68-83.

O'Sullivan, M. 1993. *Megalithic Art in Ireland*. Dublin: Country House.

O'Sullivan, M. 2010. Preserved in Stone: material and ideology in the Neolithic. In: O'Connor, B., Cooney, G., and Chapman, J. (eds.) *Materialitas: Working Stone, Carving Identity*. Oxford: Oxbow Books.

Oestigaard, T. and Goldhahn, J. 2006. From the Dead to the Living: Death as Transactions and Re-negotiations. *Norwegian Archaeological Review*, 39(1), pp. 27-48.

Ogden, A. 2008. Advances in the palaeopathology of teeth and jaws. In: Pinhasi, R. and Mays, S. (eds.) *Advances in Human Palaeopathology*. West Sussex: John Wiley & Sons, Ltd, pp. 283-307.

Olsen, B., Shanks, M., Webmoor, T., and Witmore, C. 2012. *Archaeology: The Discipline of Things*. Berkeley: University of California Press.

Olsen, B. 2013. Reclaiming Things: An Archaeology of Matter. In: Carlile, P.R., Nicolini, D., Langley, A., Tsoukas, H. (eds.) *How Matter Matters: Objects, Artifacts, and Materiality in Organisation Studies*. Oxford: Oxford University Press, pp. 171-191.

Orpen, G.H. 1911-20. *Ireland Under the Normans*. Oxford: Oxford University Press.

Orser, Jr., C.E. 2012. Why the Gilded Age...and Why now?. *International Journal of Historical Archaeology*, 16, pp. 623-633.

Otway-Ruthven, A.J. 1980. *A History of Medieval Ireland*. 2nd ed. London: Benn.

Owen, J. 16 October 2013. 5 Surprising Facts About Otzi the Iceman. Available at: <http://news.nationalgeographic.com/news/2013/10/131016-otzi-ice-man-mummy-five-facts/>. [Accessed on 20 November 2014].

Owsley, D. and Bruwelheide, K. 2009. *Written in Bone: Bone Biographer's Casebook*. Minneapolis: LeanTo Press.

Özbek, M. 1988. Culte des cranes humains a Çayönü. *Anatolica*, 15, pp. 127-137.

Özbek, M. 2005. Neolitik Toplumlarda Baş veya Tüm Bedeni Alçılama Geleneği: Anadolu ve Yakınođu'dan Bazı Örnekler. *TUBA-AR*, 8, pp. 127-136.

Özbeck, M. 2009. Remodeled human skulls in Köşk Höyük (Neolithic Age, Anatolia): a new appraisal in view of recent discoveries. *Journal of Archaeological Science*, 36(2), pp. 379-386.

- Painter, T.J. 1991. Lindow man, Tollund man and other peat-bog bodies: The preservative and antimicrobial action of Sphagnum, a reactive glycuronoglycan with tanning and sequestering properties. *Carbohydrate Polymers*, 15(2), pp. 123-142.
- Parker Pearson, M. 2006. Mortuary Practices, society and ideology: an ethnographical study. In: Hodder, I. (ed.) *Symbolic and Structural Archaeology*. Cambridge: Cambridge University Press, pp. 99-115.
- Parks, C. L., Richard, A. H., & Monson, K. L. 2013. Preliminary performance assessment of computer automated facial approximations using computed tomography scans of living individuals. *Forensic science international*, 233(1), pp. 133-139.
- Pedersen, P. 1949. The East Greenland Eskimo Dentition. Kobenhavn, 1940. *Bianco Lunos, Banstrijkken and Meddelsen on Gronland*, 60, pp. 142-244.
- Peperzak, A.T. (ed.) 1993. *Ethics as First Philosophy: The Significance of Emmanuel Levinas For Philosophy, Literature, and Religion*. New York: Routledge.
- Pernter, P., Gostner, P., Vigl, E.E., and Rühli, F.J. 2007. Radiologic proof for the Iceman's cause of death (ca. 5,300 BP). *Journal of Archaeological Science*, 34(11), pp. 1784-1786.
- Peter the Great Museum of Anthropology and Ethnography Russian Academy of Sciences. 2008. Mikhail Gerasimov's Career Available at: http://www.kunstkamera.ru/en/temporary_exhibitions/virtual/gerasimov/01/. [Accessed 14 September 2012].
- Pietrokovski, J., Starinsky, R., Arensburg, B., & Kaffe, I. 2007. Morphologic characteristics of bony edentulous jaws. *Journal of Prosthodontics*, 16(2), pp. 141-147.
- Pinhasi, R. and Stock, J.T. (eds.) 2011. *Human Bioarchaeology of the Transition to Agriculture*. Oxford: Wiley Sons, Ltd.
- Pope, R. and Ralston, I. 2011. Approaching Sex and Status in Iron Age Britain with Reference to the Nearer Continent. In: Moore, T. and Armada, X-L. (eds.) *Atlantic Europe in the First Millennium BC: Crossing the Divide*. Oxford: Oxford University Press, pp. 375-416.
- Postman, N. 1992. *Technology: The Surrender of Culture to Technology*. New York: Vintage Books.
- Pounder, D. 1984. Forensic aspects of aboriginal skeletal remains in Australia. *American Journal of Forensic Medicine and Pathology*, 5(1), pp. 41-52.
- Power, C. 1993. Reconstructing Patterns of Health and Dietary Change in Irish Prehistoric Populations. *Ulster Journal of Archaeology*, 56, pp. 9-17.
- Prag, J. and Neave, R. 1997. *Making Faces*. London: British Museum Press.

- Preeyanont, P. 1995. The standard angle between the longitudinal axis of the ear and the bridge of the nose in Thai women. *Journal of the Medical Association of Thailand*, 78(3), pp. 127-134.
- Prendergast, F. 2014. Irish Neolithic Tombs in their Landscape. *Handbook of Archaeoastronomy and Ethnoastronomy*, pp. 1249-1262.
- Preucel, R.W. 2010. *Archaeological Semiotics*. Malden, MA: Blackwell Publishing Ltd.
- Price, D. H. 2011. *Weaponizing Anthropology: Social Science in Service to the Militarized State*. Petrolia, CA: Counterpunch.
- Privateer, P. 2005. Romancing the Human: The Ideology of Envisioned Human Remains. In: Smiles, S. and Moser, S. (eds.) *Envisioning the Past: Archaeology and the Image*. Malden, MA: Blackwell Publishing, pp. 13-29.
- Prokopec, P. and Ubelaker, D.H. 2002. Reconstructing the shape of the nose according to the skull. *Forensic Science Community*, 4(1).
- Prus, R.C. 1996. *Symbolic Interaction and Ethnographic Research: Intersubjectivity and the Study of Human Lived Experience*. Albany: State University of New York Press.
- Purcell, E. and Sheehan, J. 2013. Viking Dublin: Enmities, Alliances and the Cold Gleam of Silver. In: Hadley, D.M. and ten Harkel, L. (eds.) *Everyday Life in Viking-Age Towns: Social Approaches to Towns in England and Ireland, c. 800-1100*. Oxford: Oxbow Books, pp. 35-60.
- Quatrehomme, G. and Iscan, M.Y. 2000. Computerized facial reconstructions. In: Siegel, J.A., Saukko, P.J., and Knupfer, G.C. (eds.) *Encyclopedia of Forensic Sciences*. San Diego: Academic Press, pp. 773-779.
- Quatrehomme, G. and Subsol, G. 2005. Classical Non-Computer-Assisted Craniofacial Reconstruction. In: Clement, J.G. and Marks, M.K. (eds.) *Computer-Graphic Facial Reconstruction*. Burlington, MA: Elsevier Academic Press, pp. 15-33.
- Quigley, C. 1996. *The Corpse: A History*. Jefferson, NC: McFarland & Co.
- Radner, J.N. 1978. *Fragmentary Annals of Ireland*. Dublin: Dublin Institute for Advanced Studies.
- Raferty, B. 1974. A Prehistoric Burial Mound at Baunogenasraid, Co. Carlow. *Proceedings of the Royal Irish Academy. Section C*, 74, pp. 277-312.
- Rakita, G.F.M. 2014. Bioarchaeology as a Process: An Examination of Bioarchaeological Tribes in the USA. In: O'Donnabhain, B. and Lozada, M.C. (eds.) *Archaeological Human Remains: Global Perspectives*. New York: Springer, pp. 213-234.

- Rakita, G.F.M., Buikstra, J.E., Beck, L.A. and Williams, S.R. (eds.) 2005. *Interacting with the Dead: Perspectives on Mortuary Archaeology for the New Millennium*. Gainesville: University Press of Florida.
- Redman, C.L. (ed.) 1973. *Research and Theory in Current Archaeology*. New York: Wiley.
- Reeves-Smyth, T. 2007. Community to privacy: late Tudor and Jacobean manorial architecture in Ireland, 1560-1640. In: Horning, A. J., Ó Baoill, R., Donnelly, C. J., & Logue, P. (eds.) *The Post-Medieval Archaeology of Ireland, c. 1550-1850*. Dublin: Wordwell Ltd., pp. 289-326.
- Renfrew, C. 1976, Megaliths, territories and populations. In: De Laet, S.J. (ed.) *Acculturation and Continuity in Atlantic Europe*. Brugge: De Tempel, pp. 198-220.
- Reynolds, A. 2009. *Anglo-Saxon Deviant Burial Customs*. New York: Oxford University Press.
- Reynolds, J. 2004. *Merleau-Ponty and Derrida: Intertwining Embodiment and Alterity*. Athens, Ohio: Ohio University Press.
- Rhine, J.S. 1990. Coming to terms with facial reproduction. *Journal of Forensic Sciences*, 35(4), pp. 960-963.
- Richter, M. 1985. The Interpretation of Medieval Irish History. *Irish Historical Studies*, 24(95), pp. 289-98.
- Richardson, H. and Scarry, J. 1990. *An Introduction to Irish High Crosses*. Cork: Mercier Press.
- Riis, J. 1890. *How the other half lives: Studies among the tenements of New York*. New York: Charles Scribner's Sons.
- Robinson, M. 2014. The ecodynamics of clearance in the British Neolithic. *Environmental Archaeology*, 19(3), pp. 291-297.
- Rogers, T., Fibiger, L., Lynch, L.G. and Moore, D. 2006. Two Glimpses of Nineteenth-Century Institutional Burial Practice in Ireland: A Report on the Excavation of Burials from Manorhamilton Workhouse, Co. Leitrim, and St. Brigid's Hospital, Ballinasloe, Co. Galway. *The Journal of Irish Archaeology*, 15, pp. 93-104.
- Ross, A. 1959. The Human Head in Insular Pagan Celtic Religion. *Proceedings of the Society of Antiquaries of Scotland*, 91, pp. 10-43.
- Ross, A. 1967. *Pagan Celtic Britain*. London: Routledge.
- Ruff, C.B., Holt, B.M., Sládek, V., Berner, M., Murphy Jr., W.A., zur Nedden, D., Seidler, H., and Recheis, W. 2006. Body size, body proportions, and mobility in the Tyrolean "Iceman". *Journal of Human Evolution*, 51(1), pp. 91-101.

Ruigrok, M. 2009. Distribution of Megalithic Tombs in the Republic of Ireland. University of North Carolina at Chapel Hill. Available at: <http://geography.unc.edu/information/news/docs/maps/2009-gis-day/2009-gis-day-map-competition/>. [Accessed on 2 August 2014].

Ryan, M. 1989. Metalworking and style in the early Christian period, 7th to 10th centuries A.D. In: Ryan, M. (ed.) *Treasures of Ireland: Irish art 3000 B.C.-1500 A.D.* Dublin: Royal Irish Academy, pp. 34-45.

Ryan, S. 2014. The *Arma Christi* in Medieval and Early Modern Ireland. In: Cooper, L.H. and Denny-Brown, A. (eds.) *The Arma Christi in Medieval and Early Modern Material Culture: With a Critical Edition of 'O Vernicle'*. Farnham: Ashgate Publishing Company, pp. 243-273.

Rynn, C., Balueva, T., & Veselovskaya, E. 2012. Relationships between the skull and face. In: Wilkinson, C. and Rynn, C. (eds.) *Craniofacial Identification*. New York: Cambridge University Press, pp. 193-202.

Rynn C, and Wilkinson C. 2006. Appraisal of Traditional and Recently Proposed Relationships Between the Hard and Soft Dimensions of the Nose in Profile. *American Journal of Physical Anthropology*, 130(3), pp. 364-373.

Rynn, C., Wilkinson, C., and Peters, H.L. 2009/2010. Prediction of nasal morphology from the skull. *Forensic Science, Medicine and Pathology*, 6(1), 20-34.

Rynne, C. 2006. *Industrial Ireland 1750-1930: an archaeology*. Cork: The Collins Press.

Rynne, C. 2007. The archaeology of power and industry. In: Horning, A.J., Ó Baoill, R., Donnelly, C. J., & Logue, P. (eds.) *The Post-Medieval Archaeology of Ireland, c. 1550-1850*. Dublin: Wordwell Ltd., pp. 241-261.

Rynne, E. 1964. The Three Stone Heads at Woodlands, near Raphoe, Co. Donegal. *The Journal of the Royal Society of Antiquaries of Ireland*, 94(2), pp. 105-109.

Rynne, E. 1972. Celtic stone idols in Ireland. In: Thomas, C. (ed.) *The Iron Age in the Irish Sea Province*. Council for British Archaeology, pp. 79-98.

Said, E. 1978. *Orientalism*. New York: Random House, Inc.

Sanders, K. 2009. *Bodies in the Bog and the Archaeological Imagination*. Chicago: University of Chicago Press.

Saxe, A.A. 1970. *Social Dimensions of Mortuary Practices*. PhD Thesis. University of Michigan.

Sayer, A. 1992. *Method in Social Science: A Realist Approach*. London: Routledge.

Scarre, C. 2010. Stones with Character: animism, agency, and megalithic monuments. In: O'Connor, B., Cooney, G., and Chapman, J. (eds.) *Materialitas: Working Stone, Carving Identity*. Oxford: Oxbow Books.

- Scheff, T.J. 2006. *Goffman unbound!: A new paradigm for social science*. Boulder: Paradigm Publishers.
- Scheuer, L. and Black, S. (2000). *Developmental Juvenile Osteology*. London: Academic Press.
- Schnapps, A. 1996. *The Discovery of the Past: The Origins of Archaeology*. London: British Museum Press.
- Schroeder, B. 1996. *Altared Ground: Levinas, History, Violence*. New York: Routledge.
- Schulting, R. 2010. Holocene environmental change and the Mesolithic-Neolithic transition in north-west Europe: revisiting two models. *Environmental Archaeology*, 15(2), pp. 160-172.
- Schulting, R. J., Murphy, E., Jones, C., and Warren, G. 2012. New dates from the north and a proposed chronology for Irish court tombs. *Proceedings of the Royal Irish Academy* Vol. 112C, pp. 1- 60.
- Schultz, A.H. 1918. Relation of the external nose to the bony nose and nasal cartilages in whites and negroes. *American Journal of Physical Anthropology*, 1(3), pp. 329-338.
- Seaver, M. 2005. Run of the Mill? Excavation of an early medieval site at Raystown, Co. Meath. *Archaeology Ireland*, 19(4), pp. 9-12.
- Sforza, C., Grandi, G., Catti, F., Tommasi, D.G., Ugolini, A., Ferrario, V.F. 2009. Age- and sex-related changes in the soft tissues of the orbital region. *Forensic Science International* 185(1-3), pp. 115.e111-.e118.
- Shanks, M. 2012. *The Archaeological Imagination*. Walnut Creek, CA: Left Coast Press.
- Shanks, M. and Tilley, C. 1987. *Reconstructing Archaeology*. Cambridge: Cambridge University Press.
- Sharp, D. 2002. Time to leave Ötzi alone? *The Lancet*, 360(9345), pp. 1530.
- Sharpe, R. 1984. Some problems concerning the organization of the church in medieval Ireland, *Peritia*, 3, pp. 230-270.
- Shee Twohig, E. 1981. *The megalithic art of western Europe*. Oxford: Clarendon Press.
- Shee Twohig, E. 1997. Perspectives on the megaliths of north-west Europe. In: Rodríguez Casal, A. (ed.) *O Neolítico Atlántico e as Orizes do Megalitismo*. Santiago de Compostela: Consello da Cultura Galega/Universidade de Santiago de Compostela/UIPPS, pp. 117-27.
- Shee Twohig, E. 2004. *Irish Megalithic Tombs*. Buckinghamshire: Shire Publications Ltd.
- Sheehan, J. 1987. A Reassessment of the Viking Burial from Eyrephort, Co. Galway. *Journal of the Galway Archaeological and Historical Society*, 41, pp. 60-72.

- Skiles, M.S. and Randall, P. 1983. The aesthetics of ear placement. *Plastic and Reconstructive Surgery*, 84(8), pp. 133-138.
- Silistreli, U. 1989. Silistreli. Les fouilles de Köşk Höyük. Anatolia and the Ancient Near East. In: Emre, K., Hrouda, B., Mellink, M.J., Özgüç, N. (eds.), *Studies in Honor of Tahsin Özgüç* Ankara, pp. 461–463
- Simmons, A., Boulton, A., Butler, C.R., Kafafi, Z., Rollefson, G. 1990. A plaster skull from Neolithic 'Ain Ghazal', Jordan. *Journal of Field Archaeology*, 17, pp. 107–110.
- Simpson L. 1998. Emergency Excavation at No. 16, Eustace Street, Temple Bar, Dublin 2. 97E423. Dublin: Margaret Gowen & Co. Ltd.
- Simpson, J. 2003. Repentant Soul of Walking Corpse? Debatable Apparitions in Medieval England. *Folklore* 114(3), pp. 389-402.
- Simpson, L. 2004. Excavation report of Kevin St. Dublin. Margaret Gowen & Co. Ltd.
- Simpson, L. 2007. Post-medieval archaeology in Dublin. In: Horning, A.J., Ó Baoill, R., and Donnelly, C.J., & Logue, P. (eds.) *The Post-Medieval Archaeology of Ireland, c. 1550-1850*. Dublin: Wordwell Ltd., pp. 71 – 90.
- Slotkin, J.E. 2007. Honeyed Toads: Sinister Aesthetics in Shakespeare's "Richard III". *Journal for Early Modern Cultural Studies*, 7(1), pp. 5-32.
- Smiles, S. and Moser, S. (eds.) 2005. *Envisioning the Past: Archaeology and the Image*. Malden, MA: Blackwell Publishing.
- Smith, F. 1980. *Cause of death: The story of forensic science*. New York: Van Nostrand Reinhold.
- Smyth, A.P. 1982. *Celtic Leinster*. Dublin: Irish Academic Press.
- Smyth, J. 2011. The house and group identity in the Irish Neolithic. *Proceedings of the Royal Irish Academy, Section C*, 111, pp. 1-31.
- Snow, C., Gatliff, B.P., and McWilliams, K.R. 1970. Reconstruction of facial features from the skull: an evaluation of its usefulness in forensic anthropology. *American Journal of Physical Anthropology*, 33, pp. 221-228.
- Sofaer, J. 2006. *The Body as Material Culture: A Theoretical Osteoarchaeology*. Cambridge: Cambridge University Press.
- Sofaer, J. 2012. Touching the Body: The Living and the Dead in Osteoarchaeology and the Performance Art of Marina Abramović. *Norwegian Archaeological Review*, 45(2), pp. 135-150.
- Spector, J.D. and Whelan, M.K. 1989. Incorporating Gender into Archaeology Courses. In: Morgen, S. ed. *Gender and Anthropology: Critical Reviews for Research and Teaching*. Washington, D.C.: American Anthropological Association, pp. 65-94.

Starkey, D. 1982. From feud to faction, English politics circa 1450-1550. *History Today*, 32(11), pp. 16-22.

Stead, I.M. 1991. *Iron Age Cemeteries in East Yorkshire*. London: English Heritage

Stenstrom, S. 1946. Untersuchungen uber die Variation und Kovariation der optischen Elemente des menschlichen Auges. *Acta Ophthalmologica Scandinavia Supplementum*, 26, pp. 1-103.

Stephan, C.N. 2002. Do resemblance ratings measure the accuracy of facial approximations?. *Journal of Forensic Sciences*, 47(2), pp. 239-43.

Stephan, C.N. 2003. Anthropological facial 'reconstruction' - recognizing the fallacies, 'unembracing' the errors, and realizing method limits. *Science & Justice*, 43(4), pp. 193-200.

Stephan, C.N. 2005. Facial Approximation: A Review of the Current State of Play for Archaeologists. *International Journal of Osteoarchaeology*, 15(4), pp. 298-302.

Stephan, C.N. and Henneberg, M. 2001. Building faces from dry skulls: are they recognised above chance rates?. *Journal of Forensic Sciences*, 46(3), pp. 432 – 440.

Stephan, C.N., Henneberg M., and Sampson, W. 2003. Predicting nose projection and pronasale position in facial approximation: a test of published methods and proposal of new guidelines. *American Journal of Physical Anthropology*, 28, pp. 858-863.

Stephan, C.N., Huang, A.J.R. Davidson, P.L. 2009. Further Evidence on the Anatomical Placement of the Human Eyeball for Facial Approximation and Craniofacial Superimposition. *Journal of Forensic Science*, 54(2), pp. 267-269.

Stephan, C.N. and Arthur, R.S. 2006. Assessing facial approximation accuracy: how do resemblance ratings of disparate faces compare to recognition tests?. *Forensic Science International*, 159S, pp. S159-163.

Stephan, C.N. and Cicolini, J. 2008. Measuring the accuracy of facial approximations: a comparative study of resemblance rating and face array methods. *Journal of Forensic Sciences*, 53(1), pp. 58-64.

Stephan, C.N. and Davidson, P.L. 2008. The Placement of the Human Eyeball and Canthi in Craniofacial Identification. *Journal of Forensic Sciences*, 53, pp. 612-619.

Stephan, C.N. and Henneberg, M. 2006. Recognition by forensic facial approximation. Case specific examples and empirical tests. *Forensic Science International*, 156(2), pp. 181-191.

Stephan, C. N., Huang, A. J. R. and Davidson, P. L. 2009. Further Evidence on the Anatomical Placement of the Human Eyeball for Facial Approximation and Craniofacial Superimposition. *Journal of Forensic Sciences*, 54(2), pp. 267-269.

- Stephan, C.N. and Simpson, E.K. 2008. Facial Soft Tissue Depths in Craniofacial Identification (Part I): An Analytical Review of the Published Adult Data. *Journal of Forensic Sciences*, 53(6), pp. 1257-1272.
- Stevens, P. 2012. Burial and ritual in early medieval north Wexford: new evidence from Ask townland. In: Kelly, B., Roycroft, N., and Stanley, M. (eds.) *Encounters between people: proceedings of a public seminar on archaeological discoveries on national road schemes, August 2010*. Archaeology and the National Roads Authority Monograph Series 9. Dublin: National Roads Authority, pp. 49-60.
- Stewart, T.D. 1983. The points of attachment of the palpebral ligaments; their use in facial reconstructions on the skull. *Journal of Forensic Science*, 28(4), pp. 858-863.
- Steyn, M. and Cavanagh, D. 2011. Facial reconstruction: soft tissue thickness values for South African black female. *Forensic Science International*, 206(1-3), pp. 215.e1-7.
- Stodder, A.L.W. and Palkovich, A.M. 2012. Osteobiography and Bioarchaeology. In: Stodder, A.L.W. and Palkovich, A.M. (eds.) *The Bioarchaeology of Individuals*. Gainesville: University Press of Florida, pp. 1-11.
- Stottman, M.J. 2010. Introduction. In: Stottman, M.J. (ed.) *Archaeologists as Activists: Can Archaeologists Change the World?*. Tuscaloosa, AL: University of Alabama Press, pp. 1-18.
- Stout, M. 1996. Emyr Estyn Evans and Northern Ireland: The Archaeology and Geography of a New State. In: Atkinson, J.A., Banks, I., and O'Sullivan, J. (eds.) *Nationalism and Archaeology*. Glasgow: Cruithne Press, pp. 111-127.
- Stout, G. and Stout, M. 2008. *Excavation of an Early Medieval Secular Cemetery at Knowth Site M, County Meath*. Dublin: Wordwell.
- Strijbosch, C. 1999. The heathen giant in the Voyage of St Brenden. *Celtica*, 23, pp. 369-389.
- Strouhal, E. 1973. Five Plastered Skulls from Pre-Pottery Neolithic B Jericho: Anthropological Study. *Paléorient*, 1(2), pp. 231-247.
- Suckling, G.W. 1989. Developmental defects of enamel – historical and present-day perspectives of their pathogenesis. *Advances in Dental Research*, 3, pp. 87-94.
- Suk, V. 1935. Fallacies of anthropological identifications and reconstructions. *Publications de al Facultae des Sciences del'Universitae Masaryk Brno* 207, pp. 3-18.
- Tait, C. 2002. *Death, Burial, and Commemoration in Ireland, 1550-1650*. New York: Palgrave Macmillan.
- Tandler, J. 1909. Über den Schadel Haydns. *Mitteilungen der Anthropologie Gesellschaft Wien*, 39, pp. 260-280.
- Tarlow, S. 2000. Emotion in Archaeology. *Current Archaeology*, 41(5), pp. 713-730.

- Taylor, A. 2010. Aspects of Deviant Burial in Roman Britain. In: Murphy, E. (ed.) *Deviant Burial in the Archaeological Record*. Oxford: Oxbow books, pp. 91 – 115.
- Taylor, K.T. 2001. *Forensic Art and Illustration*. Boca Raton: CRC Press.
- Taylor, T. 2008. Materiality. In: Bentley, A.R., Maschner, H.D.G., Chippindale, C. (eds.) *Handbook of Archaeological Theories*. Lanham: Altamira Press, pp. 297-321.
- Tedeschi-Oliveira, S.V., Melani, R.F.H., de Almeida, N.H., & de Paiva, L.A.S. 2009. Facial soft tissue thickness of Brazilian adults. *Forensic science international*, 193(1), pp. 127-e1.
- Tesorieri, M. Forthcoming. Report on the human skeletal remains from Dooney, Co. Donegal. Unpublished report for the National Museum of Ireland.
- Tesorieri, M. 2008. Report on the human skeletal remains from Ballinderry, Co. Kildare. Unpublished report for National Archaeological Services.
- Testart, A. 2008. Des crânes et des vautours ou la guerre oubliée. *Paléorient*, 34(1), pp. 33-58.
- Tessier, P. 1971. Relationship of craniostenoses to craniofacial dysostoses, and to faciostenoses: a study with therapeutic implications. *Plastic and Reconstructive Surgery*, 48(3), pp. 224-237.
- The Death-Tales of the Ulster Heroes* (Author: unknown). Tale 2: The Death of Conchobar. Version A. Available at: <http://www.ucc.ie/celt/published/T301037/text003.html>. [Accessed 1 June 2014].
- Thiem, A. 2008. *Unbecoming Subjects*. New York: Fordham University Press.
- Thomas, J.S. 1993. The politics of vision and the archaeologies of landscape. In: Bender, B (ed.) *Landscape: Politics and Perspectives*. Oxford: Berg, pp. 19-48.
- Thomas, J.S. 1996. *Time, Culture and Identity: An Interpretive Archaeology*. London: Routledge.
- Thomas, J.S. 2005. Ambiguous symbols: why there were no figurines in Neolithic Britain. *Documenta Praehistorica*, XXXII, pp. 167-175.
- Tian, S., Nishida, Y., Isberg, B., and Lennerstrand, G. 2000. MRI measurements of normal extraocular muscles and other orbital structures. *Graefe's Archives of Clinical and Experimental Ophthalmology*, 238, pp. 393-404.
- Tiesler, V. 2014. *The Bioarchaeology of Artificial Cranial Modifications*. New York: Springer.
- Tilley, C. 1994. *A phenomenology of Landscape: Places, Paths, and Monuments*. Oxford: Berg.

- Tilly, C. 2008. Body and Image: A Phenomenological Perspective. In: Tilley, C. (ed.) *Body and Image: Explorations in Landscape Phenomenology 2*. Walnut Creek: Left Coast Press, pp.15-52.
- Timpson, A., Colledge, S., Crema, E., Edinborough, K., Kerig, T., Manning, K., Thomas, M.G., and Shennan, S. 2014. Reconstructing regional population fluctuations in the European Neolithic using radiocarbon dates: a new case-study using an improved method. *Journal of Archaeological Science*, In Press.
- Tóibín, C. and Ferriter, D. 2004 *The Irish Famine: A Documentary*. Darby, PA: Diane Publishing Company.
- Todd, J.T., Mark, L.S., Shaw, R.E, and Pittenger, J.B. 1980. The Perception of Human Growth. *Scientific American*, 242(2), pp. 132-144.
- Tomlinson, M. 1995. Can Britain Leave Ireland? The political economy of war and peace. *Race & Class*, 37(1), pp. 1-22.
- Trigger, B. 2006. *A History of Archaeological Thought*. Cambridge: Cambridge University Press.
- Trinkhaus, E. and Shipman, P. 1993. *The Neandertals: Changing the Image of Mankind*. New York: Knopf.
- Trotter, M. and Gleser, G.C. 1952. Estimation of Stature from Long Bones of American Whites and Negros. *American Journal of Physical Anthropology*, 10, pp. 463-514.
- Troy, C. 2010. *Final Report on the Human Remains from Ardreich, Co. Kildare*. Unpublished report to Headland Archaeology Ltd on behalf of Kildare County Council.
- Tsaliki, A. 2008. *An investigation of extraordinary human body disposals, with special reference to necrophobia: A multi-disciplinary analysis with case studies from Greece and cross-cultural comparisons*. PhD Thesis. University of Durham, Department of Archaeology.
- Tyrrell, A.J., Evison, M.P., Chamberlain, A.T., and Green, M.A. 1997. Forensic three-dimensional facial reconstruction: historical review and contemporary developments. *Journal of Forensic Sciences*, 42(4), pp. 653-661.
- Ubelaker D.H. and O'Donnell, G. 1992. Computer-assisted facial reconstruction. *Journal of Forensic Sciences*, 37(1), pp. 155-162.
- Ullrich H. 1966. Kritische Bemerkungen zur plastischen Rekonstruktionsmethode nach Gerasimov auf Grund persönlicher Erfahrungen. *Ethnographisch-archäologische Zeitschrift*, 7, pp. 111-123.
- Ullrich, H. and Stephan, C. N. 2011. On Gerasimov's Plastic Facial Reconstruction Technique: New Insights to Facilitate Repeatability. *Journal of forensic sciences*, 56(2), pp. 470-474.

- Utsuno, H., Kageyama, T., Uchida, K., Yoshino, M., Oohigashi, S., Miyazawa, H., and Inoue, K. 2010. Pilot study of facial soft tissue thickness differences among three skeletal classes in Japanese females. *Forensic Science International*, 195(1-3), pp. 165.e161 - 165.e165.
- Valante, M.A. 2008. *The Vikings in Ireland: Settlement, Trade, and Urbanisation*. Dublin: Four Courts Press.
- van Hoek, M.A. 1993. The spiral in British and Irish Neolithic rock art. *Glasgow Archaeological Journal*, 18(18), pp. 11-32.
- Vandermeulen, D., Claes, P., Loeckx, D., De Greef, S., Willems, G., and Suetens, P. 2006. Computerized craniofacial reconstruction using CT-derived implicit surface representations. *Forensic Science International*, 159(1), pp. S164-74.
- Vanezis, M. and Vanezis, P. 2000. Cranio-facial reconstruction in forensic identification—historical development and a review of current practice. *Medicine, Science and the Law*, 40(3), pp. 197-205.
- Vanezis, P., Blowers, R.W., Linney, A.D., Tan, A.C., Richards, R., and Neave, R. 1989. Application of 3-D computer graphics for facial reconstruction and comparison with sculpting techniques. *Forensic Science International*, 42(1-2), pp. 69-84.
- Vanezis, P., Vanezis, M., McCombe, G., and Niblett, T. 2000. Facial reconstruction using 3-D computer graphics. *Forensic Science International*, 108(2), pp. 81-95.
- Vaughan, R. 1986. The Past in the Middle Ages. *Journal of Medieval History*, 12(1), pp. 1-14.
- Verhoeven, M. 2002. Ritual and ideology in the Pre-Pottery Neolithic B of the Levant and Southeast Anatolia. *Cambridge Archaeology Journal*, 12, pp. 233-258.
- Vermeulen, L. 2012. Manual forensic facial reconstruction. In: Wilkinson, C. and Rynn, C. (eds.) *Craniofacial Identification*. Cambridge: Cambridge University Press, pp. 184-192.
- Verzé, L. 2009. History of facial reconstruction. *Acta Biomed*, 80(1), pp. 5-12.
- Veselovskaya, E., Pestrjakov A., and Kobylansky E. 2013 Dr. Tatiana Balueva: An Outstanding Contributor to the Development of the Russian School of Anthropological Reconstruction. *International Journal of Anthropology*, 28(2-3), pp. 95 – 119.
- Virchow, H. 1912. Die anthropologische Untersuchung der Nase. *Zeitschrift für Ethnologie*, 44, pp. 289-337.
- Von Eggeling, H. 1913. Die Leistungsfähigkeit physiognomischer Rekonstruktionsversuche auf Grundlage des Schädels. *Archiv für Anthropologie*, 12, pp. 44-47.
- Waddell, J. 2000. *The Prehistoric Archaeology of Ireland*. Bray: Wordwell.

- Waddell J. 2005. *Foundation Myths: The beginnings of Irish archaeology*. Bray: Wordwell Ltd.
- Waldenfels, B. 2002. Levinas and the face of the other. In: Critchley, S. and Bernasconi, R. (eds.) *The Cambridge Companion to Levinas*. Cambridge: Cambridge University Press, pp. 63-81.
- Walker, P.L. 2008. Bioarchaeological Ethics: A Historical Perspective on the Value of Human Remains. In: Katzenberg, M.A. and Saunders, S.R. (eds.) *The Biological Anthropology of the Human Skeleton*. New York: Wiley-Liss, pp. 3-40.
- Wallace, P.F. 2008a. Irish Archaeology and the Recognition of Ethnic Difference in Viking Dublin. In: Habu, J., Fawcett, C., and Matsunaga, J.M. (eds.) *Evaluating Multiple Narratives: Beyond Nationalist, Colonialist, Imperialist Archaeologies*. New York: Springer, pp. 166-183.
- Wallace, P.F. 2008b. Archaeological evidence for the different expressions of Scandinavian settlement in Ireland, 840-1100. In: Brink, S. & Price, N. (eds.) *The Viking World*. Abingdon: Routledge, pp. 434-438.
- Wallis, R.J. 2009. Re-enchanting rock art landscapes: Animic ontologies, nonhuman agency and rhizomic personhood. *Time and Mind*, 2(1), pp. 47-69.
- Wegenstein, B. 2006. *Getting under the skin: body and media theory*. Cambridge and London: MIT Press.
- Welcker, H. 1883. *Schiller's Schädel und Todenmaske nebst Mittheilungen über Schädel und Todenmaske Kants*. Braunschweig: Vieweg und Sohn.
- Weir, A. 1977. Three Carved Figures in County Louth. *Journal of the County Louth Archaeological and Historical Society*, 19(1), pp. 67-73.
- Wells, L.H. 1959. From Jericho to Wessex? A Neolithic Enigma. *The South African Archaeological Bulletin*, 14(55), pp. 113-115.
- West, R. 2007. Abject Cannibalism: Anthropohagic Poetics in Conrad, White, and Tennant – Towards a Critique of Julia Kristeva's Theory of Abjection. In: Kutzbach, K. and Mueller, M. (eds.) *The Abject of Desire: The Aestheticization of the Unaesthetic in Contemporary Literature and Culture*. Amsterdam: Genus, pp. 235-254.
- White, G. 1900. *The natural history and antiquities of Selborne*. London: S.T. Freemantle.
- Whitehouse, N.J., et al. 2013. Neolithic agriculture on the European western frontier: the boom and bust of early farming in Ireland. *Journal of Archaeological Science*. In press. Available at: <http://www.sciencedirect.com/science/article/pii/S0305440313002987>. [Accessed 14 August 2014].
- Whitehouse, N.J. and Kirleis, W. 2014. The world reshaped: practices and impacts of early agrarian societies. *Journal of Archaeological Science*, 51, pp. 1-11.

- Whitford, M. 1991. *Luce Irigaray: Philosophy in the Feminine*. New York: Routledge.
- Whitley, J. 2002. Too many ancestors. *Antiquity*, 76(291), pp. 119-126.
- Whitnall, S.E. 1932. *The anatomy of the human orbit and accessory organs of vision*. London: Oxford University Press.
- Whyte, J.H. 1960. The Influence of the Catholic Clergy on Elections in Nineteenth-Century Ireland. *English Historical Review*, 75(295), pp. 239-259.
- Wiggins, K. 2009. *Report on the Archaeological Excavation of Killeany 1, Co. Laois*. Unpublished report by Archaeological Consultancy Services Ltd for Laois County Council.
- Wild, J. 1969. Introduction. In: Levinas, E. *Totality and Infinity*. Pittsburgh: Duquesne University Press, pp. 11-20.
- Wilder, H.H. 1912. The physiognomy of the Indians of Southern New England. *American Anthropologist*, 14(3), pp. 415-435.
- Wilkinson C. 2004. *Forensic Facial Reconstruction*. Cambridge: Cambridge University Press.
- Wilkinson, C. 2005. Computerized forensic facial reconstruction. *Forensic Science, Medicine, and Pathology*, 1(3), pp. 173-177.
- Wilkinson, C.M. 2007. The facial reconstruction of Grauballe man. In: Asingh, P. and Lynnerup, N. (eds.) *Grauballe Man – An Iron Age Bog Body Revisited*. Moesgaard: Jutland Archaeological Society, pp. 260-273.
- Wilkinson, C.M. 2008. The facial reconstruction of ancient Egyptians. In: David, R. (ed.) *Egyptian Mummies and Modern Science*. Cambridge: Cambridge University Press, pp. 162–180.
- Wilkinson, C.M. 2009. The facial analysis of Clonycavan man. In: *Bog Bodies Research Project*. Monograph Publication. Dublin: National Museum of Ireland.
- Wilkinson, C. 2010. Facial reconstruction–anatomical art or artistic anatomy?. *Journal of anatomy*, 216(2), pp. 235-250.
- Wilkinson, C. and Mautner, S.A. 2003. Measurement of eyeball protrusion and its application in facial reconstruction. *Journal of Forensic Science*, 48(1), pp. 12-16.
- Wilkinson, C.M. and Neave, R.A.H. 2003. The reconstruction of faces showing healed wounds. *Journal of Archaeological Science*, 30(10), pp. 1343-1348.
- Wiley, G.R. 1990. *New World Archaeology and Culture History: Collected Essays and Articles*. Albuquerque: University of New Mexico Press.
- Williams, R.C. 2013. *The Forensic Historian: Using Science to Reexamine the Past*. Armonk, New York: M.E. Sharpe, Inc.

- Whittle, A. 2003. *The Archaeology of People. Dimensions of Neolithic Life*. London: Routledge.
- Whittle, A., Healy, F., and Bayliss, A. (eds.) 2011. *Gathering time: dating the early Neolithic enclosures of southern Britain and Ireland*. Oxford: Oxbow Books.
- Wolff, E. 1933. *The anatomy of the eye and orbit*. London: H. K. Lewis & Co.
- Wood, C.G. and Lynch, J.M. 1996. Sexual Dimorphism in the Craniofacial Skeleton of Modern Humans. *Advances in Morphometrics*, 284, pp. 407-414.
- Woodman, P. 2000. Getting back to basics: transitions to farming in Ireland and Britain. In: Price, D.T. (ed.) *Europe's First Farmers*. Cambridge: Cambridge University Press, pp. 219-259.
- Wylie, A. 1997. The Engendering of Archaeology: Refiguring Feminist Science Studies. *Osiris*, 12, pp. 80-99.
- Wylie, A. 2007. The constitution of archaeological evidence: Gender, politics, and science. In: Insoll, T. (ed.) *The Archaeology of Identities: A Reader*. New York: Routledge, pp. 97-118.
- Yin, L., Morita, A., & Tsuji, T. 2001. Skin aging induced by ultraviolet exposure and tobacco smoking: evidence from epidemiological and molecular studies. *Photodermatology, photoimmunology & photomedicine*, 17(4), pp. 178-183.
- Youngs, S. (ed.) 1989. *The Work of Angels, Masterpieces of Celtic metalwork, 6th to 9th centuries AD*. Texas: University of Texas Press.
- Zahavi, D. 2001. Beyond Empathy: Phenomenological Approaches to Intersubjectivity. *Journal of Consciousness Studies*, 8(5-7), pp. 151-167.
- Zlatev, J., Racine, T.P., Sinha, C., and Itkonen, E. 2008. Intersubjectivity: What makes us human? In: Zlatev, J., Racine, T.P., Sinha, C., Itkonen, E. (eds.) *The Shared Mind: Perspectives on intersubjectivity*. Amsterdam: John Benjamins Publishing Co., pp. 1-14.
- Zucchelli, C. 2007. *Stones of Adoration Sacred Stones and Mystic Megaliths of Ireland*. Cork: Collins Press.
- Zvelebil, M. and Rowley-Conwy, P. 1986. Foragers and farmers in Atlantic Europe. In: Zvelebil, M. (ed.) *Hunters in Transition*. Cambridge: Cambridge University Press.

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APPENDIX 1 – SOFT TISSUE PREDICTION AND METHODOLOGICAL STANDARDS

“The new millennium has witnessed a renewed interest in the scientific description of human shape and form” (Clement and Marks 2005, 3).

The trajectory of the practical aspect of producing facial reconstructions has both a long history and a large discourse surrounding the approximation of the soft tissue appearance of facial features in combination to create the general countenance. This chapter provides a review of this large body of research. This work is produced under the assumption that the bony landscape of the skeletal material is in relation and correlation with the morphology of the soft tissue surface. This is the framework that underlies all of the studies to follow.

The entangled nature of the developing relationship between soft and hard tissue has been noted as early as the Roman physician Galen (c. 129-199AD) who asserted, “as poles are to tents and walls to houses, so are bones to all living creatures, for other features naturally take their form from them and change with them” (quoted in Rynn and Wilkinson 2006, 364). This relationship is fluctuating: the cutaneous surface can many times, effect the appearance of the bone, just as the skeletal material structures the outward appearance. This is an important ideology to articulate, as the relationship between hard and soft tissues is dynamic and intertwining.

This chapter has its beginnings in the early modern period when measurement and categorization of cranial and postcranial measurements had been a seminal part of the study of skeletal biology (Blumenbach 1776, 1786; Broca 1861; Morton 1839, 1844) that ultimately led towards describing individuals or comparing population groups. This fascination with quantification of human remains has provided the evidence for patterns of cranial variation at worldwide, regional, ethnic, or intragroup levels (Corruccini 1972; Howells 1973; Jantz 1974; Jantz *et al.* 1978; Droessler 1981; Key 1983; Heathcote 1986; 1989; Buikstra and Ubelaker 1994, 69). This scholarship and research produced since the mid-nineteenth century has proliferated and enriched the process of understanding the face and its human variation in the context of facial reconstructions (previously discussed in section 2.2.1).

However, it was only in the twenty-first century that many of these studies have been legitimized and proven through experimental and empirical practice (Rynn and Wilkinson 2006; Guyomarc'h and Stephan 2012) instead of taken as standards without validation (Stephan 2003). This increased quantification into investigations provides improved accuracy and contributes substantially to the understanding of the human countenance in its many diverse facets. From this point, the chapter begins with the basics of the skull in relation to its characteristics and progresses to the array of predictions for soft tissue facial features.

1.1 The Skull

The skull is the anatomical term for the twenty-two bones which are constituted by the eight of the (neuro)cranium and the fourteen of the splanchnocranium (also called the viscerocranium or facial skeleton) (Wilkinson 2004, 21). Except for the mandible, all the bones of the skull are articulated by synarthrodial, immovable joints. Giving anchor to the musculature of the face which allows for expression and protecting the brain, the skeletal landscape of the skull is of obvious importance in the endeavour to reconstruct the face. A vital notion of anatomical theory is the undeniable link between structure and purpose. In particular, the physiology of the craniofacial skeleton relies on this principle for optimum functionality (Rynn *et al.* 2012). Sensory organs that are housed within this skeletal complex (olfaction/respiration, auditory/balance, mastication/verbalisation, and vision) each play a role in the architecture of the craniofacial morphology. On an evolutionary basis, the progression to bipedalism and brain growth had a crucial role within the head and face.

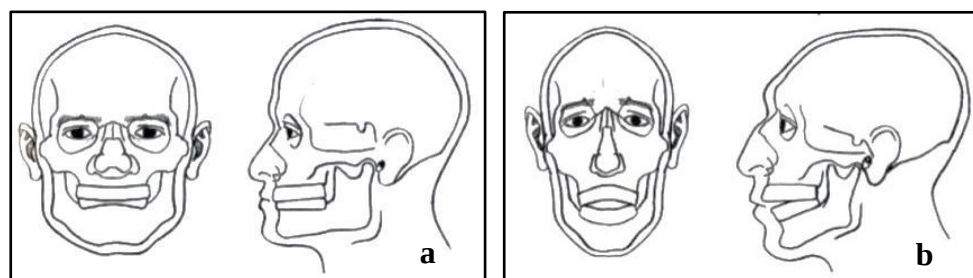


Figure 1.126a-b: **a)** brachycephalic representation and **b)** dolichocephalic representation in Caucasoid type craniofacial forms (modified from Enlow and Hans 1996 in Rynn *et al.* 2012)

Huxley first characterised general skull shapes (Cole 2001) and introduced the terms: *dolichocephalic*, a long and narrow skull that typically has narrow interocular distance and deep-set eyes with a longer and more protrusive nose that might have a high nasal root, sloping forehead, prominent cheekbones and an overall retrognathic facial profile (figure 1.1b). The *brachycephalic* (figure 1.1a) is characterised with a short and wide skull, with a broad, shorter, and more rounded nasal tip that is likely to have a low root and concave profile with an upright forehead and overall straight or concave facial profile (Wilkinson 2004, 22; Rynn *et al.* 2012). Forms that mediate between these two binaries are termed mesocephalic. Individual's countenances are not confined to one form over another as each facial type exists in mixed quotients of these terms across the globe.

According to Tessier (1971), craniostenosis of the sagittal suture lead to a dolichocephalic skull, while the same premature fusion of the coronal suture created a more brachycephalic appearance. However, Enlow and Hans (1996) posited that the changes between these two craniofacial variants are due to cranial base and the superior surface of the sphenoid bone as it surrounds the sellaturcica, which houses the pineal gland. The more obtuse the angle of the basicranium (i.e. flat and elongated) the more potential for a dolichocephalic head shape. Whereas, if the angle of the basicranium is acute (i.e. short and flexed) the head form will appear brachycephalic (Rynn *et al.* 2012). The overall generality of head shape and the variation therein is a foundation to the skeletal surface which many of the further traits will be discussed such as sex, age, and ancestry.

1.1.1 Sexual Dimorphism

Osteological material displays evidence of sexual dimorphism through morphological characteristics of the skull and pelvis (see Krogman and Iscan 1986). The evidence of this dimorphism found in human skeletal material appears only when the individual has reached full development after puberty (Frayer and Wolpoff 1985, 429). This stage of life allows for maturation of the skeleton and only then can the age be assigned with certainty. There are certain areas on the landscape of the skull where dimorphic characteristics are more likely to be found. These markers can vary significantly throughout global populations (Wood and Lynch 1996). Due to the importance of these features there have been set

certain standards and guides for recording these observable dimorphic traits (Buikstra and Ubelaker 1994). It should be noted that the most ideal manner in which to determine an individual's sex is through the examination of the pelvic array of osteological markers.

Due to the large amount of variation within global populations, individuals are not strictly defined by morphological or morphometric traits. Individual variation in the skeletal and soft tissue appearance extends beyond categorization of peoples. Many times sexing of a skull is done on a first, general observation. Larger, more robust skulls are deemed male, while females are more stereotypically smaller and gracile in nature (Frayser and Wolpoff 1985). For archaeological specimens, professional osteological standards are used and particular craniofacial traits are scored to arrive at a determination of sex (Buikstra and Ubelaker 1994). Assessment of features of an individual's cranium is necessary for the consequent re-production of the male or female countenance.

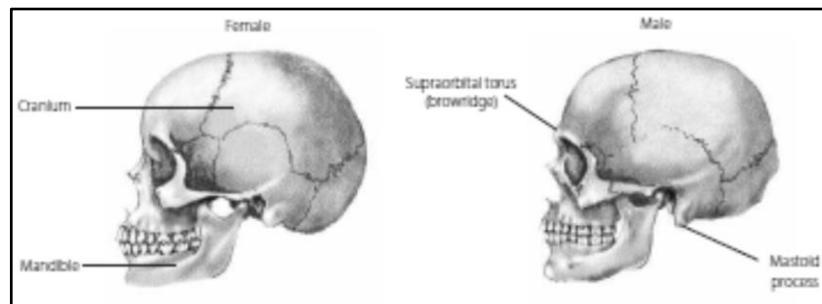


Figure 1.127: Locations of expressed sexual differences in female and male skeletal material (Jurmain *et al.* 2014)

There is a link between an individual's level of testosterone, muscle mass, and development of degree of skeletal development (Rynn *et al.* 2012). Therefore, male specimens are observed to be more robust and have more prominent muscle markers such as those at the brow ridge, mandibular formation, mastoid processes, and the occipital protuberance (figure 1.2). Typically displaying more squared or rectangular orbits, the nasal aperture can appear larger as with the U-shaped palate and their heavier zygomatics (Rynn *et al.* 2012). However, some populations throughout the world are not as stereotypically dimorphic and males appear more gracile such as some individuals from the Indian sub-continent (see ancestry section 1.1.3). Regarding skeletal features, females demonstrate a more vertical, higher, and smoother (absent of strong muscle markers) brow ridge with more noticeably bossed frontals and parietals (figure 1.2). The orbits can be larger, higher and more

rounded in comparison with other features and are associated with delicate cheekbones. With a smaller mandible than males, the female palate is parabolic in appearance.

With these combinations of characteristic skeletal features for each sex, there will be obvious variations in soft tissue appearance. As such, the male face will appear proportionately bigger, coarser, and deeper due to its robust and larger craniofacial forms. On the contrary, the female will appear to have eyes that are exophthalmic (protruding) with more prominent cheekbones leading to a flatter, delicate countenance than their male counterparts (Wilkinson 2004, 79). Thus, there are substantial variations between population's craniofacial morphologies, with some males fluctuating to the female traits, while some females displaying male characteristics.

Due to the process of facial reconstruction and the examination of facial features, there exists a difficult process of transferring visual observation into an articulated, written explanation. This difficulty is a main motivator for the over-scientific reaction of many scholars whose research directly focuses on the variation in appearances of the face. This may seem to limit the potentiality of human variation, but it instead seeks to understand it through reproducibility. The osteological material of the skull also undergoes developmental stages of age and illustrates divergent characteristics leading to sexual and ancestry identification. These features will be next in the discussion of the skull.

1.1.2 Age in the Face

There are obvious proportional changes from non-juvenile to adult craniofacial skeletons (Neave 1998). The facial skeleton grows rapidly in the first years of life and plateaus after adolescence and sexual maturity remaining consistent with exception of trauma or pathological conditions. The growth of the facial skeleton and the cranium throughout the life of an individual (figure 1.3b) is an illustration of physiological structure intertwined with purpose allowing for the development of the soft tissues and the hard skeletal surface in union. (Behrents 1985)

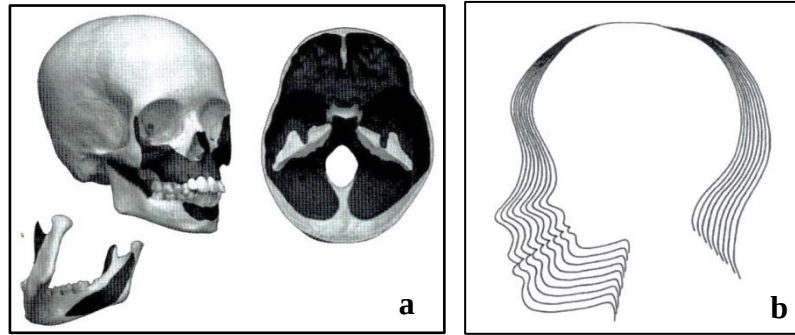


Figure 1.128a-b: **a)** Representation of depository (light) and resorptive (dark) areas of the developing skull (from Enlow *et al.* 1971 in Rynn *et al.* 2012); **b)** Transformation of profiles from infant to adult profile (modified from Todd *et al.* 1980 in Wilkinson 2004)

Enlow and Hans (1996) provided guidelines for practitioners which aid in understanding the process of growth and development. This is helpful especially when producing juvenile facial reconstruction or creating age progressions of missing children (Wilkinson 2004 dedicates a chapter to juvenile facial reconstructions). The brain and basicranium develop earlier and faster than the splanchnocranium (facial skeleton), which remains separate for potential growth (Scheuer and Black 2000). The face does not progressively enlarge as a unit, instead there are different manners in development: areas of displacement – where sections move away from one another; depository surfaces – in which new bone growth is laid down; and resorptive areas – from which bone is dissolved or assimilated into other pieces (figure 1.3a; Rynn *et al.* 2012).

The main identifiers for aging a cranium are the teeth (Hunt and Gleiser 1955). Age estimation from teeth is reliable in juveniles and adults across global populations as both deciduous and permanent dentition erupt in a consistent manner. For archaeological specimens, Brothwell (1981; 1989) provides valuable information on age-related wear of the molars. However, archaeological specimens are hugely variable and there are limitations to applying his method to these individuals. Both Brothwell (1989) and Lovejoy (1985) caution that aging by means of dentition can only provide an approximation or range of ages at best. Attrition in archaeological samples is commonly observed and can provide bioarchaeologists with information concerning diet and the use of teeth as a tool which has been seen in Neolithic samples (Jackes 2009) and contemporary populations like hide-chewing Inuit populations (Pedersen 1949) and kat-chewing individuals in Yemeni populations (Evison 2002).

The prediction of age using teeth may be affected by many factors such as, but not limited to: missing teeth, caries, overall dental hygiene, malocclusion, and intentional deformation (Wilkinson 2004, 74). Older individuals have the possible characteristic of becoming edentulous as unhealthy dental conditions exist in past and present societies. As the presence of the teeth perpetuate the structure of the mandible and maxilla in their alveolar sockets, their loss would cause a decline in presence of this skeletal material (Petrokovski *et al.* 2007). This is a prime illustration of the importance of the foundation of the skeletal structure to the appearance of the soft tissue countenance.

Aside from osteological development, in the soft tissue aspect of the facial skeleton, increased age and exposure to outdoor elements makes the quality of elasticity in skin decrease (Neave 1998; Taylor 2001; Wilkinson 2004). This leads to prominent lines or creases in the face commonly called wrinkles. This illustration of age is not seen on the underlying bony material (or has yet to be investigated through research). Taylor noted that within a reconstruction age should be indicative of the alterations of appearance of the eyes due to age stating, “eyes in younger individuals should appear subtly set more forward, while older people usually have more deeply set eyes...younger eyes may appear more open and alert, while older eyes often have sagging of the tissues of the upper eyelid or around the eye area” (2001, 441). Typically, children’s eyes appear larger and further apart than those of an adult. This is only relative to the rest of the size of the facial skeleton (Enlow and Hans 1996). Older individuals appear to have sunken eyes due to the resorption of adipose tissue at tissue at the orbits with thinner surface tissue. Accelerated by environmental factors such as sun exposure, alcohol consumption or smoking age can affect the overall cutaneous appearance of the face (Yin *et al.* 2001; Morita 2007).

1.1.3 Ancestry

The terms race and ancestry is not to be confused with the conceptions of ethnicity, or the “cultural group or affiliation that usually speaks the same language” (Taylor 2001, 59; Konigsberg *et al.* 2009), that are prevalent among our understandings of others. I believe this distinction is made in literature because of anthropology and archaeology’s anxiety concerning its disciplinary origin in racism. The concept of ancestry is important for the

practice of facial reconstruction, not only due to its vital impact upon the craniofacial form, but as well of the globalised status of populations in contemporary societies. Owing to the transfer of peoples around the world, classifying people on the basis of probable ancestry is full of potential errors as, “genetic mixing may be the rule rather than the exception” (Wilkinson 204, 83). While the analysis of ancestry is of the utmost importance in forensic cases and this aspect of cranial morphology has clear implications even within the archaeological setting, but it will only be discussed in brevity here.

Ancestral groups commonly used among practitioners of facial reconstructions are the following: Australoids (Australian Aborigines, Pacific Islanders, Fijians and Papuans), Caucasoids (including Europeans, Asians from the Indian sub-continent, North and East Africans, Arabs and Mediterraneans), Mongoloids (Asiatics, Inuits, and Native Americans), and Negroids (South and West Africans) (Wilkinson 2004). However, individuals are not fully labelled as so. Instead, a consistent phrase to overcome placing racialised terminology would be to assert, “the individual with Caucasoid traits” or the “male with Mongoloid characteristics” and so on. This an unfortunate vestige from the tainted history of the beginning of anthropology, but is beneficial when facial reconstructions are utilised in order to lead to an identification of an individual.

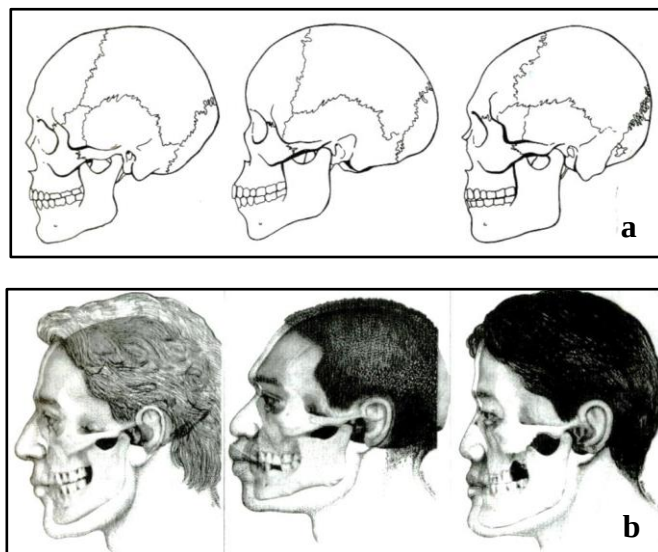


Figure 1.129a-b: **a)** Cranial variation of Caucasoid, Negroid, Mongoloid individuals (Taylor 2001); **b)** Caucasoid, Negroid, Mongoloid Cranial Variation with corresponding soft tissue appearance (Taylor 2001)

The nineteenth century saw research into the differences of these races in relation to their vault size associating with mental capabilities (Gould 1996). False in their assertions, scientists like Broca and Morton tested many skulls from differing ancestry to illustrate that Caucasoids (mainly deriving from European samples) had the biggest vault capacity and therefore increased intellectual capabilities with the lowest belonging to Negroid samples (Morton 1839). The discipline of craniometrics and its impact upon the field of bioarchaeology and the understanding of races and skeletal material has previously been illustrated (chapter 2.2.1). The following description of the various groups of race and their craniofacial skeletal material are modified from Wilkinson (2004) and augmented with descriptions (table 1.1) from Iscan and Steyn (2013). Figures 1.4a and 1.4b illustrate the hard and soft tissue relationship which manifests the various appearances of racial types.

Individuals with Caucasoid skulls have a rounded shape with variable occipital curvature. Skeletal material shows narrow, steepled nasal apertures with prominent nasal spines. Their moderate brow ridges, a narrow interocular distance, sharp lateral orbital margins, depressed glabellar region, and an obvious frontonasal junction lead to the appearance of a steeper forehead. Tortuous cranial sutures in individuals where these have not be obliterated by fusion, is also indicative of this category. With mild or no prognathism these individuals display an orthognathic profile with a prominent chin.

	Caucasoid			Negroid	Mongoloid
<i>Dimensions</i>	<i>Nordic</i>	<i>Alpine</i>	<i>Mediterranean</i>		
Skull length	Long	Short	Long	Long	Long
Skull breadth	Narrow	Broad	Narrow	Narrow	Broad
Skull height	High	High	Moderately high	Low	Middle
Sagittal contour	Rounded	Arched	Rounded	Flat	Arched
Face breadth	Narrow	Wide	Narrow	Narrow	Very wide
Face height	High	High	Moderately high	Low	High
Orbit	Angular	Rounded	Angular	Rectangular	Rounded
Nasal opening	Narrow	Moderately wide	Narrow	Wide	Narrow
Lower nasal margin	Sharp	Sharp	Sharp	Guttered	Sharp

Nasal profile	Straight	Straight	Straight	Downward slant	Straight
Palate shape	Narrow	Moderately wide	Narrow	Wide	Moderately wide
General impression of the skull	Massive, rugged, elongated, ovoid	Large, moderately rugged, rounded	Small, smooth, elongated, pentagonoid to ovoid	Massive, smooth, elongated, constricted, oval	Large, smooth, rounded

Table 1.14: Description of the “stereotypical features of the three main races” (from Krogman 1955, after Iscan and Steyn 2013)

According to Enlow (1996), Caucasoids are most likely to display dolichocephalic head shapes due to the likely exhibition of a protrusive upper face and retrusive lower portion creating a convex profile. Therefore, the palate will be long and narrow with a large frontal sinus and the tendency to have either an overjet or underbite as their dental occlusion.

Populations with Negroid traits are observed to have a long head shape with rounded occipital base and rounded forehead. The most identifying feature of this ancestry classification is the long interocular distance and the wide breadth of nasal aperture. Enlow (1996) stated Negroid examples are likely to display dolichocephalic attributes as well. This nasal skeleton provides a lower nasal bridge giving a wider, flatter nose which is much less protrusive than the Caucasoid example. The lower face is prognathic due to the broad mandibular ramus causing the maxillary region and dentition to jut forward as well. With this protrusive lower face, individuals with Negroid traits often times have the widest mouth with largest lip and vermillion heights.

Mongoloid skulls can be observed to have a round cranial shape with simple sutures and a medium wide nasal breadth (wider than Negroid types, but narrower than Caucasoid) with a tented, straight profile appearance. The very rounded orbits and broad zygomatics provide a very wide flat facial appearance. Upright, bulbous forehead, shorter nose and shallow orbits all characterise this category of ancestry. Enlow (1996) takes the position that these individuals’ facial forms range from brachycephalic to mesocephalic.

Australoid individuals have pronounced supraorbital ridges, a low, flat nose with a profile prognathic in nature. Produced by a flat sagittal suture, low nasal bones, large brow ridges, and the protrusive lower face (Lanarch 1978; Pounder 1984). Individuals with

characteristics leading to an Australoid type have robust cranium proportions regardless of sex and are commonly found solely in the Pacific Islands and Asiatic theatre.

As Wilkinson stated, “classifying groups on the basis on facial appearance is fraught with danger” (2004, 83). This is a certainty when applying racial/ancestral terms to individuals. However, here they do not serve as an indicator of culture nor as a limitation for societal or individual potentials. They are described here as included in facial reconstruction methodologies because they serve to narrow down the field in which an unidentified individual can be recognised.

1.2 Literature Review of Soft Tissue Prediction Methodologies

It is evident that the appearance and proportion of facial features are integral to the accurate approximation of the face as a whole (Stephan 2002; Stephan and Arthur 2006; Stephan and Cicolini 2008; Gordon and Steyn 2012). The importance of the parts equates to capture the whole perception of the countenance in question. This being, the following section is not concerning the methodological construction of the reconstructions; it is instead a literature review that encompasses the many studies and investigations which have led to the contemporary methodologies that dictate this research. Afterwards, the chosen methodologies from this literature review for producing facial reconstructions are illustrated. Through separate analysis on facial features, this body of literature supplies practitioners and the field of facial reconstruction with the foundation for expansion and further future discourse.

1.2.1 The Relationship between the Orbit and the Eye:

The prominent portion of the mid-region of the face and its overall composition, the appearance of the eyes and brows are essential toward the reconstruction of an individual’s countenance. The eyes are a vital part of the whole-ness of the face, being an anchor for people’s gazes as well as the origination of the outward gaze of the individual. Proper approximation of this feature is essential for a connection to be made between the audience/viewer and the re-produced reconstruction. Other than age and sex related status,

the morphology of this area in healthy subjects is contingent upon the factor of ethnicity which alters the facial region significantly (Sforza *et al.* 2009).

Gerasimov's (1971; 1975) large involvement and contribution toward the practice of facial reconstruction advanced the understanding of re-presenting this facet of the human countenance. Having noted that the anatomical structures surrounding the orbits are directly associated with morphological and developmental status of the orbits and thus correlate in a manner to the shape, position and projection of the eyeballs on an individual. Therefore, "it is only by taking into account all these details that a correct reproduction of the outer form of the eye is possible" (Gerasimov 1971, 60). Consequently, the following portions regarding the features of the eye, such as: diameter of eyeball, tangent of the eye fissure, position and protrusion of the eyeball, eyelid patterns, and brow ridge appearance and the investigations into their appearance will be discussed.

Diameter of Eyeball

Sforza and colleagues' (2009) study of eight hundred and eighty eight healthy Italian Caucasians found that sexual dimorphism plays a large role within the appearance of the orbital region of an individual. However, a constant of this feature unconditioned by sex and race is the diameter of the eyeball. Imai and Tajima (1993) and Furuta (2001) demonstrated that eyeball size is constant from maturation onwards. Wolff (1933) established the mean male diameter to be 24.6mm with the female mean of 23.9mm with agreement from other studies (Stenstrom 1946; Gray 1973; Tian *et al.* 2000). Conversely, Gerasimov (1971) indicated differences in eyeball diameter with correlation to orbit size according to ancestry, discovering Caucasoids have the largest eyeballs and medium sized orbits, Negroid individuals have medium-sized eyeballs with the smallest orbits, and Mongoloid had the smallest eyeballs with the largest orbits (Wilkinson 2004). Contemporary standards agree with Wolff's (1933) stance of a 24mm diameter eyeball and is therefore utilised in reconstructions within this body of work.

Tangent of eye fissure

To create a justifiable decision on the line of the eye in the orbit, based on the skeletal remains, “the position of the two canthi is almost precisely determined, the inner by the naso-lacrymal duct (lacrimal fossa) and the outer by a slightly but definitely indicated “malar tubercle,” to which attention has been recently directed by Whitnall” (Wilder 1912; Wilkinson 2004, 110). It was Whitnall first, a demonstrator of anatomy at Oxford in the early twentieth century, that defined the presence and attributes of the malar tubercle (Stewart 1983). He surveyed a large number of human skulls and a select range of anthropoid skulls to find that the malar tubercle was present in all but 4.5% of humans and 2.8% of anthropoids (Stewart 1983).

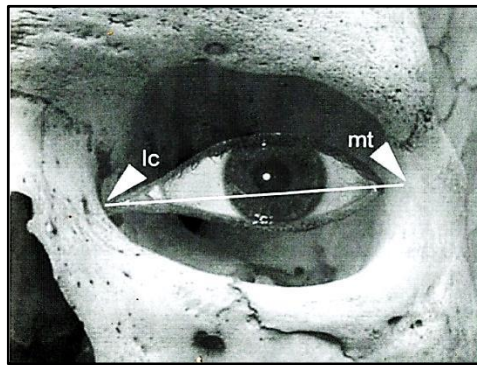


Figure 1.130: Position of lacrimal crest (lc) and malar tubercle (mt) for eye fissure placement (Wilkinson 2004)

Stewart’s (1983) investigation into the attachment of the palpebral ligaments for facial reconstructions echoed Wilder’s findings in that the anterior surface of the lacrimal crest is, “best represented by the level of the medial angle of the eye fissure” (Wilkinson 2004, 110). These skeletal markers, lacrimal crest and malar tubercle, are consistently observed throughout samples of age, race, and sex with exception of juvenile individuals who might not have formed this facet. Although obscured by tissue, most individuals’ lateral portion of the eye at the malar tubercle is a few millimetres higher than its associated end at the lacrimal crest for the practical design for drainage of tears (Taylor 2001).

The eye fissure when observed from the skeletal material of the lacrimal crest and malar tubercle can be assessed and manifested as an appearance type of either horizontal, downward slanting or upward slanting. This invisible tangent created through the hard

tissue markers (figure 1.5) will interact with the subsequent orbital characteristics to assume an increased accuracy in the re-production of an individual's ocular region.

Position and Protrusion of the Eyeball

The placement and protrusion of the eyeball within the orbits of an individual highly affects the overall appearance and is an important consideration when placing the plasticized reproductions of eyes within a reconstruction. Indicative of the skeletal structure beneath, the protrusion of eyes is dependent upon the supra- and infra-orbital ridge while the placement and diameter of the eyeball should readily remain constant among populations and individuals within their respective orbits.

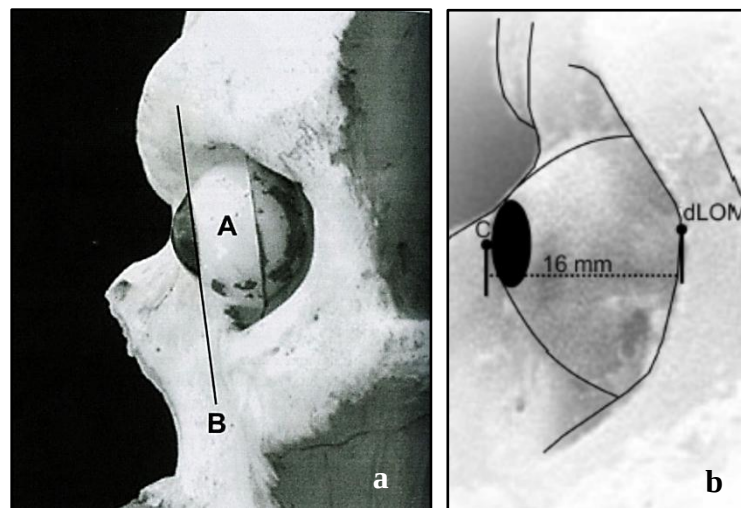


Figure 1.131**a-b**: **a**) Eyeball projection with the iris touching a tangent from the mid-supraorbital point to the mid-infraorbital point (based on Wilkinson and Mautner 2003 in Wilkinson 2004); **b**) Projection of eyeball within the orbit where dLOM (deepest point on the lateral orbital margin) and C (cornea) are illustrated (from Stephan *et al.* 2009 in Iscan and Steyn 2013)

Stephan and colleagues' investigation provided the conclusions that the eyeball positions in analysed cadavers were found to be, “closer to the orbital roof and lateral wall” (Stephan *et al.* 2009, 268; Stephan and Davidson 2008) than previous recent scholarship concluded. This repeatable find across individuals of a more superior and lateral positioning of the eye is useful in facial reconstructions as well as the process of craniofacial superimpositions. Problematically, this study had a very small sample size, but however is supported by previous studies (Goldnamer 1923; Whitnall 1932; Wolff 1933; Stephan and Davidson 2008). This strong support, at least for Caucasoid samples, could be generalised for

application to larger populations and strongly support the abandonment of the centrally positioned eyeball in craniofacial identification or reconstruction practice (Stephan *et al.* 2009). Indeed, this placement of the eyeball has been regarded as the most correct form for re-producing the orbital features.

Goldberg and colleagues' study (1999) investigated seventy-nine axial and sagittal MRI scans of the globe and orbit to determine aspects of the position of the globe in relation to its bony foundation. Their work focuses on an individual's display of scleral material and relation with lower eyelid. This protrusive trait is due to the orbital morphology but also due to the overall appearance of the maxillary sinus, which is an innovative perspective rather than looking towards the supraorbital rim that other scholars have focused on.

Protrusion of the eyeball has undergone many changes in facial reconstruction artistic guidelines throughout the twentieth century. Enlow and Hans (1996) posited that due to shorter anterior cranial fossa, brachycephalic headforms have shallower orbit depths, therefore displaying more protrusive eyes. In his early research, Wolff's theory (Bron *et al.* 1997) stated the eyeball should be in the orbit in a manner that the cornea is in a flush tangent to the orbital borders. Fedosyutkin and Nainys (1993) illustrated the importance of the depth of the orbital cavity in relation to eyeball protrusion with the examination of the vertical inclination, thickness and degree of overhang of the orbital margins.

It is Wilkinson and Mautner (2003) that provided practitioners a formula for skeletal-soft tissue correlation. In their study, thirty-nine white adult patients, ranging in late adult age, and their MRI scans were analysed with specific regards to the measurement of orbit depth and cornea protrusion (figure 1.6a). Important to the re-presentation of the eyeball, Wilkinson and Mautner found results that demonstrated, "Wolff, among others, was incorrect in stating that a straight edge placed against the superior and inferior orbital margins will just touch or miss the front of the cornea" (2003, 3). They went on to determine that, "the eyeball can be positioned in the orbit so that a tangent taken from the superior to the inferior orbital margin touches the iris, rather than the cornea" and posit eyeball protrusion can be calculated using the following formula:

$$\text{eyeball protrusion} = 18.3 - (0.4 \times \text{orbit depth}) \text{ (2003, 4).}$$

In their paper, Stephan and colleagues (2009) assessed not only the positioning of the eyeball in relation to the orbital borders but also the protrusion like many of the preceding investigations into the association between soft tissues of the ocular region. The small study using cadavers asserted the deepest point of the lateral orbital rim is around 16mm from the apex of the cornea (figure 1.6b) which closely associate with this feature observed in living individuals (Stephan *et al.* 2009).

Eyelid Patterns

In association with the tangent of the eye fissure and the appearance of the brows, the pattern of eyelids can be determined through analysis of the craniofacial morphology of the orbital region. The supraorbital ridge determines the structure of the eyelid fold (Fedosyutkin and Nainys 1993; Balueva *et al.* 2009). Generally following the formation of the supraorbital rim, there are indicators that will predict a certain appearance of the eyelid fold (figure 1.7a).

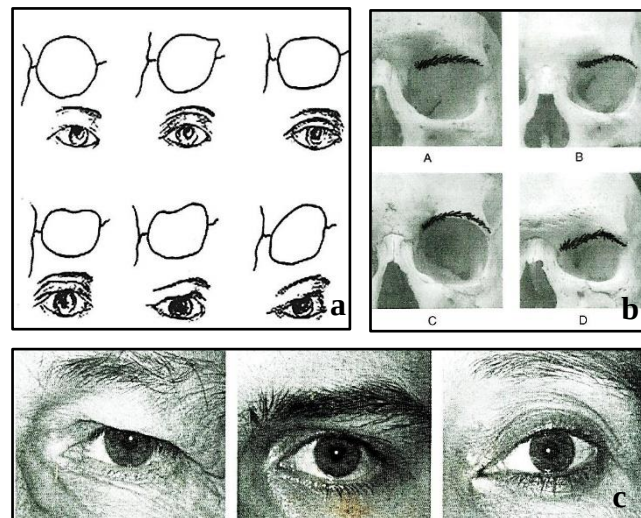


Figure 1.132a-c: **a)** Relationship of eyelid fold and brow pattern to the bony orbit (Rynn *et al.* 2012); **b)** Eyebrow patterns (modified from Fedosyutkin and Nainys 1993 in Wilkinson 2004); **c)** Medial, central, lateral eyelid patterns (Wilkinson 2004)

For instance, the eyelid pattern will be laterally placed if the lateral rim is thickened and slanted upwards and posteriorly. While, if the orbital rim dips in the middle of the margin, the fold of the eyelid will be located in the middle of the overhang creating what is termed a central eyelid fold. The medial eyelid will appear when there is a high orbit paired with a low or medium-height nasal root and long lacrimal fossa (Wilkinson 2004, 111). The soft

tissue appearance of the eyelid pattern (figure 1.7c) illustrates the combination of the skeletal aspects of the mid-facial region and the importance of the supraorbital rim in affecting this particular feature.

Brow Ridge Appearance

The form of an individual's eyebrow pattern is a combination of the skeletal features of the nasal root and the supraorbital ridge with considerable contribution of the musculature markers. Fedosyutkin and Nainys's (1993) evaluation of this attribute gave practitioners much of the knowledge surrounding brow prediction. Four broad categories are outlined (figure 1.7b): strong margin and strong brow ridge creates a downward shifted brow, lying a couple millimetres beneath the supraorbital rim; a low nasal bridge and weakly developed brow indicates the medial third of the eyebrow is found just beneath the supraorbital ridge with the other two-thirds rising and resting upon the supraorbital rim; a weak brow ridge coupled with a high nasal root creates the appearance of an gracefully arched brow that follows the rim of the orbit; and finally when there is a thickened lateral rim and strong brow ridge the eyebrow is predicted to appear triangular in nature (Wilkinson 2004, 113-4).

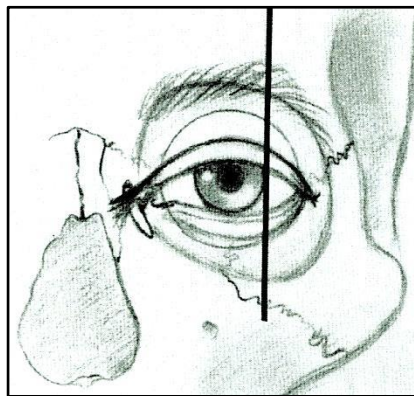


Figure 1.133: Lateral iris border with supraorbital arch tangent (Taylor 2001)

It has also been noticed that the lateral border of the iris will coincide with the arch of the eyebrow (Taylor 2001). This is an especially useful notation for the two-dimensional methodology of facial reconstruction (figure 1.8). The framing aspect of the eyebrows as a soft tissue feature is an important trait to be able to re-produce with respect to accuracy of the countenance of an individual and as it has been seen can take on a variety of forms due to the underlying skeletal landscape.

1.2.2 The Relationship between the Bony Nasal Aperture and the Nose

The nose is one of the most distinguishable and recognizable features of the face. The structural nature and overall position of the nose seems to have evolved in order to maintain the olfaction sense (Rynn *et al.* 2012). Its appearance is in association more so with the lower face than that of the upper (Rynn *et al.* 2012). The prediction of the nose within facial reconstruction discourse has undergone many phases of development (Rynn and Wilkinson 2006). These theories surrounding the approximation of the shape of the nose from the correlation of bony to soft tissue is due to the significant importance the nose plays in recognition and the composition of a facial reconstruction to the living individual (Tandler 1909; Wilkinson 2004, 103).

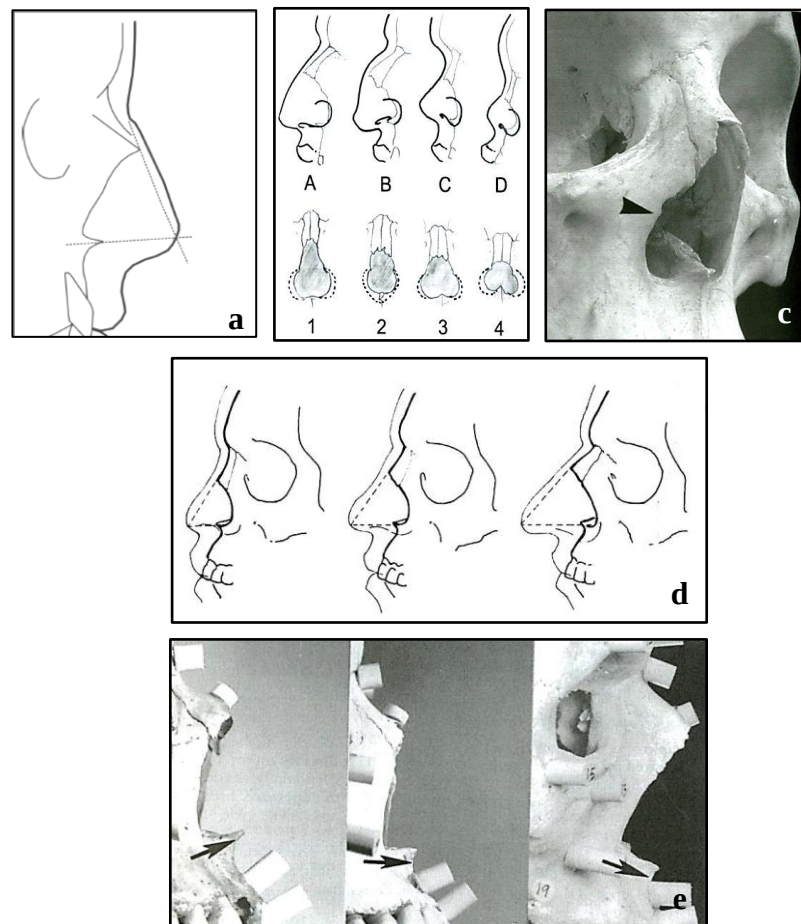


Figure 1.134a-e: **a)** Gerasimov's two tangent theory for nasal prediction (from Rynn and Wilkinson 2006 in Iscan and Steyn 2013); **b)** Correlation between nasal skeleton and soft tissue appearance. A = straight nose, B = hawk-like nose, C = snub nose, D = upturned nose. 1-4 illustrate nasal apertures and their respective alae forms (modified from Gerasimov 1975 in Wilkinson (2004)); **c)** Arrow indicating change in direction of the piriform contour which designates height of the alae (Wilkinson (2004); **d)** Nasal spine predicting angle of columella (illustrated by Neave in Wilkinson (2004)); **e)** Arrows indicating different nasal positions: upturned, straight, downward pointing (Taylor 2001)

The nose is difficult to predict due to the structure of the soft tissue and lack of substantial bony material. Although Tandler (1909) stressed the importance of the nose in facial approximations, his studies did not illustrate that there was a correlation between the contour of the bones at the root of the nose and this feature's soft tissue appearance. Additional early twentieth century research studied the association of nasal spine prominence and nasal protrusion with variations in soft tissue thickness (His 1895; Birkner 1907; Virchow 1912; Wilkinson 2004).

However, it was after these previous investigations, that Schultz (1918) discovered there was indeed a strong correlation between the measurement of the external nose to the corresponding skeletal markers (figure 1.9b). Along with Virchow (1912), he discovered the breadth of the soft tissue nose exceeded the width of the piriform aperture, but concluded that there was no standard correlation between nasal breadth and nasal aperture due to the wide presence of variation observed. Later in the historical trajectory of investigations into the feature of the nose, more research (Rynn *et al.* 2010) has performed rigorous investigations not only validating the accuracy of past research, but also proliferating their own. Schultz postulated the level of prognathism/retrognathism to be linked to the nasal profile (figure 1.11), having suggested that more prognathic faces appear to exhibit shorter, flatter, wider noses because with pronounced prognathism, these populations commonly have wider teeth in a larger palate, which in turn allows for extra space for the structures of the oropharynx without displacement or remodelling to maintain function; while retrognathic head shapes present longer, more projecting, narrower noses (Rynn *et al.* 2012).

When osteologically intact, the nasal aperture is a wealth of information concerning the look of an individual. The aperture can tell us how wide and long the nose appears, or if there are any traumas or pathologies affecting the region. Another facet discussed later is the nasal spine which provides information fulfilling the semblance of this feature. Even the contours of the piriform aperture (nasal aperture) can be of use when observing and postulating the re-construction. When the change in direction of the lateral aperture is found, the height of the alae (nostrils) can be determined (figure 1.9c). Also in relation to the maxillary portion of nasal morphology, Glanville (1969) found that through the

examination of a large portion of Caucasoid and Negroid skulls that increasing prognathism was in association with noses that appear increasingly broad and short.

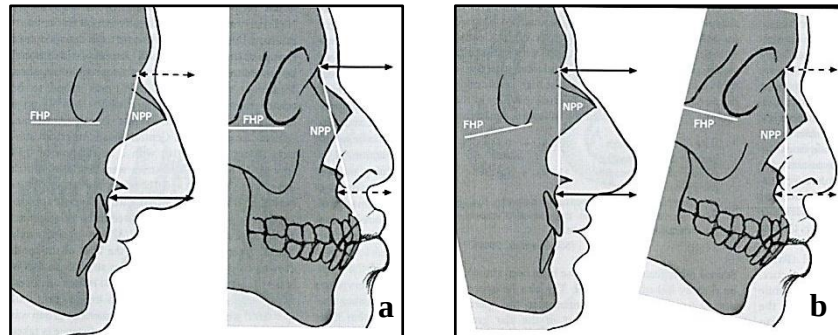


Figure 1.135a-b: **a)** Retrognathic and prognathic profiles in the FHP. **b)** Same profiles in the nasion-prosthion plane (NPP). Alignment in NPP enables fairer analysis of nasal projection (Rynn *et al.* 2012)

A useful article by Rynn and Wilkinson (2006) critically examined the traditional and recently proposed methodologies for the prediction of the appearance of the nose in profile. This paper also evaluated studies through the twentieth and twenty first century such as: Krogman and Iscan (1986), Gerasimov (1955), Prokopec and Ubelaker (2002), Macho (1986), George (1987), and Stephan *et al.* (2003). Rynn and Wilkinson used these past studies and evaluated them through their own practical engagement of a sample set of 102 lateral head cephalograms. The study found that Gerasimov's (1955) two tangent theory regarding nasal prediction (seen in figure 1.9a and 1.9d) provided the most accurate results (Rynn and Wilkinson 2006, 372) and the method by George (1987) was most useful when the skeletal material of the nose is incomplete (Rynn and Wilkinson 2006, 373) while Krogman and Iscan (1986) performed the worst (Rynn and Wilkinson 2006, 371).

Krogman (1962) placed emphasis upon the measurement of the nasal spine for prediction of the lateral view of the nose, having postulated that the length should be multiplied by three and added to the soft tissue depth marker of the subnasale. The nasal spine also plays an important role in the direction of the columella. Spines that point upward are associated with noses that are upturned in appearance while the others correlate straight or downwards (figure 1.9e). Consideration of this facet is often times difficult in archaeological specimens as this piece is fragile and is not present many times. However, it is a key portion for the reconstruction process of the nose.

The most useful formulae and data set for the nasal prediction in recent years comes from Rynn and colleagues (2010). Using CT scans of seventy-nine North Americans pooled with sixty European cephalograms, Rynn and his peers produced a set of regression formulae with certain sets of bony landmarks (figure 1.11). These equations restricted potential sources of error in the “two-tangent” method and in the overall prediction of this feature. The study concluded that: the lateral view of the nose is echoed or mirrored in the morphology of the nose, the lateral borders of the nasal aperture will dictate how shallow or deep the alae creases are, septum deviation toward either the right or left indicates a nose which deviates to the slightly respective side, reinforces the purpose of the nasal spine in pointing direction of the columella, and in profile the alar crease should be placed 5mm anterior and inferior to the aperture border (Rynn *et al.* 2010).

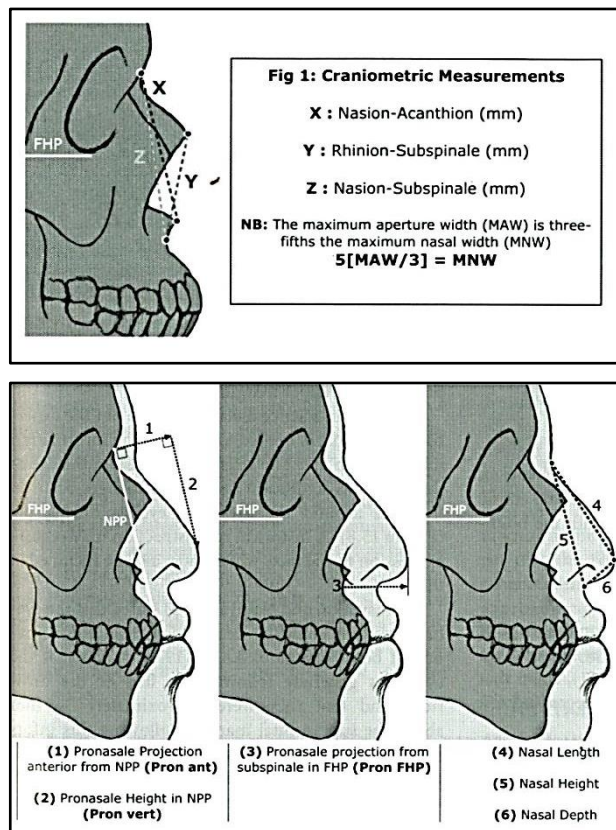


Figure 1.136: Nasal prediction based on Rynn (2009)

As the nose is perhaps the most difficult feature to predict in regards to its potential for recognition and correct appearance, the discipline of facial reconstruction has put many efforts into the knowledge base of quantifying its morphology. Although there are different manners in which to construct the nose of a past individual, Rynn and Wilkinson articulated

most clearly that techniques relying on the expert understanding of functional relationships and known growth patterns of this feature would benefit nasal projection more so than regression formulae due to their applicability to a broader cross section of the population (2006, 373). The literature for the prediction of the nose and the investigations into this issue has a century of progress emphasising the importance of this feature in the production of facial reconstructions. Endeavours to perfect the approximation of the nasal area illustrate the vibrant discourse within the field of facial reconstruction and the presence of the scientific method of replicable and experimentally driven investigations.

1.2.3 The Relationship between the Teeth, Mouth, and Chin

The relationship between features of the teeth, mouth, and chin in association with their relationship with the skull are vital to the entirety of the appearance of the lower face. This understanding of dental features is essential for the re-presentation of this facial region, as Gerasimov (1975) noted that the combination of factors such as the occlusion of teeth, dental pattern, the morphology of the jaw and the facial profile all aid in observing the potential mouth form (Wilkinson 2004). The manner in which the bony structure affects the soft tissue is drastic and should be accounted for when approximating the countenance of the individual. This portion of the face undergoes the most growth therefore a drastic change in appearance from infancy to adulthood (Rynn *et al.* 2012). There exists a positive correlation between bony prominences of the brow and increased depth of the local soft tissues (Gerasimov 1955), but according to Utsuno and colleagues (2010) this is conversely demonstrated in the shallower soft tissue overlying the maxilla and mandible.

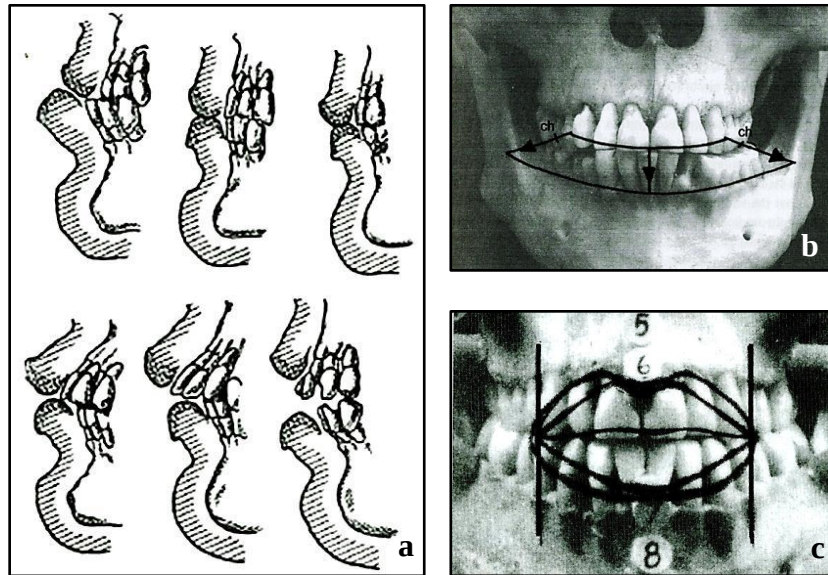


Figure 1.137a-c: a) Dental occlusion and corresponding appearance of mouth, lips, and chin (Rynn *et al.* 2012); b) Mouth width prediction (Wilkinson 2004); c) Mouth width prediction (Taylor 2001)

The most important aspect of the form of the mouth is due to the skeletal structure and dental occlusion (figure 1.12a). The occlusion is the union of the maxilla and mandible. This union can result in three traits: overbite, underbite, and normal occlusion. Other malocclusions include: edge-to-edge occlusion, crossbite, and overcrowding (Rynn *et al.* 2012). Rather than considering malocclusions as abnormal, Enlow and Hans (1996) suggested these are actually solutions to the evolutionary predicament of the changing structure of the lower face by relieving the pressure on the mandible and oropharynx (Rynn *et al.* 2012).

The width of the mouth in rest position corresponds to the radiating lines originating from the lateral borders of the canines and can be reconstructed from noting this skeletal association (1.12b). In consideration of function, the appearance of the mouth is associated with the different types of bite (i.e. incisor bite vs. canine tearing action). Earlier reconstruction methods considered the mouth a flat plane (figure 1.12c), but in actuality and closer to the anatomical form, practitioners such as Wilkinson illustrated the proper radiating lines the trajectory of the mouth actually follows (figure 1.12b).

The thickness of the lips is not a constant variable and is highly modified through individuals as well as through global populations. There is no skeletal marker for the vermillion line (the line of the lips) so its appearance must be postulated on the skeletal

features that are present that will affect their form. The lips are not a constant feature as they change with age and vary with racial populations. The thickest of lips have been accorded to the individuals with traits of the Negroid category, mainly due to their prominent display of prognathism (Wilkinson 2004). Wilder (1912) postulated that the meeting of lips sits along the line of dental occlusion. However, other scholars disagree and put forth that this slit is positioned at the lower third or quarter of the maxillary incisor (Gerasimov 1975; George 1993; Greyling and Meiring 1993; Ferrario *et al.* 2000). Wilkinson and colleagues (2003) suggested the correlation between maxillary teeth height (for upper lip thickness) and mandibular teeth (for lower lip thickness) in formulae (table 1.2). They also offered different formulae for ethnicities that would have a variation in vermillion line appearance.

For White Europeans:	For Asians from the Indian subcontinent:
Upper lip thickness = $0.4 + 0.6 \times (\text{upper teeth height})$	Upper lip thickness = $3.4 + 0.4 \times (\text{upper teeth height})$
Lower lip thickness = $5.5 + 0.4 \times (\text{lower teeth height})$	Lower lip thickness = $6 + 0.5 \times (\text{lower teeth height})$

Table 1.15: Equations for the prediction of lip thickness (Wilkinson *et al.* 2003)

Fedosyutkin and Nainys (1993) utilised another set of terminology used to describe shape of the upper head determined by the cranial vault: rounded, square, oval, and triangular. While in consideration of the appearance of the lower face, the shape is applicable to the formation of the contour of the mandible (figure 1.13). Where the gonial angle is over 125° and the coronoid process is high the lower face can be projected to be narrow manifesting in an oval or triangular shape. Conversely, if the gonial angle is less than 125° and the coronoid process is low, the shape would be rounded or rectangular.

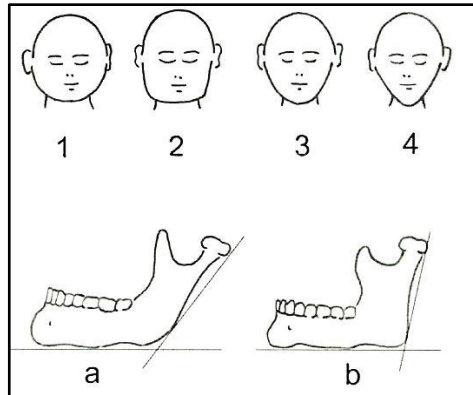


Figure 1.138: A = obtuse gonial angle leading to an oval or triangular face (3,4); B = acute gonial angle creating a round or square face (1,2) (modified from Fedosyutkin and Nainys 1993 in Wilkinson 2004)

When observing the skeletal remains of the mandible, if the frontal part smoothly runs inwards without any groove, there will be no definite crests or roughness of the soft tissue appearance of the chin. If, however, there are grooves in the bone, there will correspondingly be the presence of a cleft chin. These grooves are actually muscle markers which arise from the attachment of the *mentalis* muscles. Mandibles from males tend to have more observable robust muscle markers while female mandibles would be generally gracile with one point on the chin instead of the broad two points of the males.

In consideration of the effect of age or health of an individual, the absence of dentition has a large impact upon the appearance of the lower face. Edentulous mandible and maxillas make for a smaller lower face for individuals missing multiple teeth. Determined by analysis of the remains, ante-mortem or post-mortem tooth loss illustrates when the individual lost their teeth and represents an overall health indicator. Missing teeth will create the appearance of a smaller lower face through decreased space between chin and nose.

1.2.4 The Relationship between the Skull and the Ears

The soft tissue structure of the ear, namely the cartilage (pinna), is similar to the tip of the nose in that its morphology is not wholly contingent upon skeletal structure in determining its appearance. There is a large variance in the shapes of this feature as well as projection from the head. Gatliff (1984) and Angel (1978) stated form, size, and projection are all very difficult to estimate due to the very few clues the skull offers, while Gerasimov

(1971), Fedosyutkin and Nainys (1993) and Skiles and Randall (1983) all considered the skeletal material to be of the utmost importance when regarding the appearance of the ears.

Difference of opinion concerning ear placement permeates the practice of facial reconstruction. Many of the standards that practitioners have concerning the creation of this feature come from artistic guidelines and are not legitimized through quantified studies. An intuitively re-constructed portion of the face, the artistic cannon of ear proportion states it is roughly associated with the height of the nose. Although this has not been confirmed through quantitative investigations or research, it is a model of approximation used in reconstructions and some scholars suggest this association in past research (Gatliff and Snow 1979; Charney and Coffin 1981; Fedosyutkin and Nainys 1993; Taylor 2001).

As important as a feature such as the nose is to the recognition of an individual in the process of facial reconstruction, the “importance of ear size and shape in facial recognition is unclear” (Wilkinson 2004, 121). With the re-production of this feature, an unusual appearance that distracts from the whole should be avoided. Even if the prediction of the ears may contribute less than other features to recognition of facial reconstructions, “evaluation of these prediction guidelines is important as auricles nevertheless are required for overall correct gestalt appearance of the face” (Guyomarc’h and Stephan 2012, 1427). The first assessment of ear prediction was undertaken by Welker (1883). His primary study on this feature suggested placing the ear more posterior and superior than the external acoustic meatus, which was later criticized by Montagu (1939). Furthermore, Welcker (1883) was first to posit that the main axis of the ear is associated with the angle of the mandibular ramus (figure 1.14a).

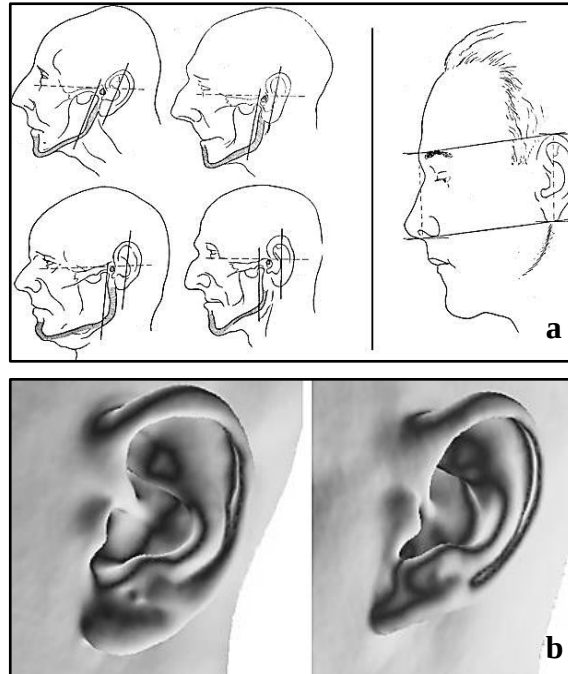


Figure 1.139**a-b**: **a**) Ear prediction (modified from Gerasimov in Guyomarc'h and Stephan 2012); **b**) Illustration of lobed ears (left) and attached lobes (right) (Guyomarc'h and Stephan 2012)

Always astute and aware of skeletal structural implications upon soft tissue, Gerasimov (1955) proposed that the height of the ear (or length) is equivalent to the height of the nose, measured from the base to the glabella and later altered with measurements from subnasale to glabella (plus 2mm). Much later, Jordanov's (2003) investigation utilised the empirical evidence of one hundred and sixty one individuals and concluded that Gerasimov was indeed correct with only 'slight differences'. Moreover, Gerasimov (1971) noted that the bony material provides many details for the position and appearance of the ear. He suggested that the breadth of the ear will be approximate to half its length. However, most importantly for the positioning of the ear, he restated Welcker's suggestion of the ear's axis as parallel to the axis of the jaw line.

In their exceedingly informative text, Fedosyutkin and Nainys (1993) detailed their proposals for ear prediction in a similar attitude to Gerasimov by examining the skeletal structure's (particularly the temporal bone and mastoid processes') impact upon soft tissue. Observing the role of the mastoids has traditionally illustrated either the traits of lobed or attached ears. Mastoid processes pointing forward are characteristic of attached (adherent)

and conversely, those pointing in a general downward direction supposedly illustrate lobed ears (figure 1.14b).

Skiles and Randall's (1983) examination into the axis of the ear and its relationship with the bridge of the nose by Preeyanont (1995) additionally investigated this same association and found that in six hundred and nineteen Thai women that this axis was not parallel to this nasal feature. The study also concluded that the angle of the ear, differing in regards to ancestry, should be positioned an exact 19.3° to achieve the most pleasing appearance. Taylor (2001) proposed instead that ears rest at a 15° backward angle, but also suggests similarly to Gerasimov that the ears should sit behind the angle of the jaw.

Perhaps the most influential paper since Welcker's first attempt at undertaking the ear's structure in relation to the skull comes from a recent paper by Guyomarc'h and Stephan (2012) which asserted that the many standards or guidelines of ear prediction have not been quantified through empirical validation. Examination of previous research into the prediction of ear position as well as contributing their own data to this subject, Guyomarc'h and Stephan outlined and tested previous research such as Gerasimov (1955), Jordanov (2003) and Welcker (1883). The following is a brief version of their results:

- that the angle of the mandibular ramus is *not* parallel to the orientation of the ear and that these two variables are not correlated
- the previous thought of equivalent nose and ear height is *not* correct. The height of the nose underestimated the ear height
- the 2mm addition Gerasimov suggested for the subnasale and glabella measurement produced additional error in ear height prediction
- the medio-lateral orientation of the mastoid process did *not* correlate with the size and orientation of the outer ear
- the breadth of the ear was *not* equal to half its length; however, length and width were correlated
- development of the supramastoid crest was *not* related to the upper protrusion of the ear. However, the protrusion of the crest is significantly linked to ear height and orientation at its insertion

- the morphology of lobes in individuals (free or attached) was *not* related to the mastoid form or other ear measurements
- the main axis of the ear was *not* parallel to the angle of the soft or hard nose

Guyomarc'h and Stephan's (2012) article has been an important study for the information pertaining to the prediction of the ears and is a significant contribution for this feature. Their research did not only regard past studies' prediction methods, but progressed to put forward valid projections of standards on the ear. Such guidelines dictate firstly that faces of non-Asians should be constructed with free earlobes because there are no valid indicators for attached lobes as of yet, lobed ears are the more dominant phenotype among this population, and supramastoid crests are associated with free earlobes. Secondly, orientations of the ear should follow quantified studies. Third, ear length should be predicted using the proper regression equation this study has provided. Ultimately, the mean width illustrated in this research should be used for prediction of ear width.

1.2.5 Soft Tissue Prediction Critique

Reconstructions at their best are a similar likeness to the individual – with sufficient semblances to achieve recognition or a response. Through the intensely varied and unpredictable presence of the human face, the attempt to study and define these characteristics appears as a set of standards and guidelines. The field of facial reconstruction has evolved, and will in future generations. Clement and Marks (2005) echoed this point when stating that even if the practice of facial reconstruction was completely structured around soft-tissue prediction rules and methods, there would still always be errors because of the face's complex nature. Furthermore, if there is a conglomeration of soft tissue prediction rules (eyes, nose, mouth), the impact of error expands to accumulate more inaccuracies. Thus even by using empirical guidelines, accurate reconstruction of the face will be difficult to achieve.

Despite calls for caution by some authors (von Eggeling, 1913; Suk, 1935; George, 1987; Haglund and Reay, 1991; Stephan 2002, 2003), the ability and validity of facial approximation methods has frequently been and continues to be overemphasised. This may be particularly easy to do in archaeological context where the constructed faces can never

be proven to be correct or incorrect, for no evidence exists of the living facial appearance of those individuals whose faces are constructed (Ullrich 1966; Stephan 2005). Clearly this does not give credence to the archaeological construction of faces from skulls, yet methods continue to be employed in such instance and broadcast in the media without homage paid to method limits” (Stephan 2005, 298).

As Gatliff (1984) stated, “the outcome [of facial reconstruction] is uncertain in every case”. Resonated in Stephan (2005, 200), the extremely difficult task to produce a face from a bare skull gains much controversy due to the few specific, known relationships of the hard and soft tissues (as has been the case in the past: Haglund and Reay 1991; Henneberg and Stephan 2001; Stephan 2002, 2003; Suk 1935; von Eggeling, 1913). It is through the vitality and diverse nature of facial reconstruction research and collective scholarship that potential sources of error and human variation are understood to a greater degree.

Through the difficulties of the reconstruction process, these subject-objects are still being produced with the aim of engaging and attract audiences toward archaeological sites and, in forensic cases to capture contemporary viewers’ attention to the recognition of an individual. There comes a time in producing an archaeological reconstruction that the options arise of how to bring the creation to a fuller life. Archaeological facial reconstructions belong to a different realm of structures and meaning than their forensic counterparts (Wilkinson 2010). More potential areas for projection of subjective imagination exist in these faces. Most practitioners seek to realize the reconstruction in its entirety by referring to scholarship concerning the specific time period or location.

1.3 Methodological Standards for Facial Reconstruction

In the previous section the relationship between the hard bony surface of skeletal material and the soft tissue appearance of the face has been discussed. This has included accounting for the vast discourse among many scholars past and present of how the face and isolated features are to be approximated. As that would appear more as a literature review, this section is now focused solely on discussing and explaining these in the methodology of producing reconstructions within this body of research. The scope of the following

methodologies only refers to the practical element of the discipline of facial reconstruction. It excludes any philosophical or theoretical procedure.

The area and practice of facial reconstruction whether in the archaeological or forensic realm is (and should be) based solely on justifiable decisions from the examination and observation of the skeletal material and its suggested correlating soft tissue. While there is an inherent subjective dimension to the production of a reconstruction, the methodology throughout the discipline has attempted to be as objective and stringent as possible aligning itself with the scientific method.

Due to the archaeological nature of all of the materials used in this investigation, the ability to gain information from the residual soft tissue that many forensic investigations rely on, is absent. This makes the examination and methodology of approximating the skeletal material that much more important and the reasons for providing a soft tissue appearance justifiable in its production. There are obvious examples of samples in which information about soft tissue can be gleaned due to their desiccated state of tissue such as bog bodies or naturally or intentionally preserved mummies.

Before starting the reconstruction itself, an analysis of skeletal remains and the facial features is required to assess the possible soft tissue appearance with respect to age, sex, and race. These skeletal suggestions arise through the careful empirical and ethnographic studies of practitioners within the field of facial reconstruction. Dedicated to the global standardisation of the field of osteo- and bioarchaeologists, Buikstra and Ubelaker's (1994) *Standards for the collection and Analysis of Human Remains* is an important resource for examining these materials in a consistent manner. Observations of the correlation between hard and soft surfaces have provided the field with literature and formulas which aid accuracy in the reconstructions of the skull. For a consistent analysis of facial features, a recording sheet was created. The skulls that were reconstructed by the author were previously analysed and published in archaeological site reports focusing on the skeletal remains. Consequently the methodologies used to determine age, sex, and ancestry can be found in the osteobiography of each individual in their respective chapter.

1.3.1 Terminology

There is a noted difference in terms used when discussing the process of producing an individual's countenance. There are factions that prefer other terminology such as, "facial or craniofacial reconstitutions, restitution, restoration" (Quatrehomme and Subsol 2005, 16; Quatrehomme and İscan 2000) or 'facial approximations' as 'reconstruction' seems misleading in that it gives the false notion of exact, reliable, and scientific methods (Stephan 2009). In their overview of the historical development of the discipline of facial reconstruction Vanezis and Vanezis (2000) also noted the debate in terminology citing specific publications preferring certain terms over other such as restoration used in Farrar (1977) or reproduction in Caldwell (1981), Rhine (1990), and Ubelaker and O'Donnell (1992). In this body of research, the term 'facial reconstruction' will be utilised throughout with the conscious understanding of this debate over correct terminological nomenclature for these countenance productions.

1.3.2 Three Dimensional Clay Reconstruction

The main schools and methods of facial reconstruction have been discussed in depth previously (see chapter three). The main method used within these three dimensional clay reconstructions is the Manchester method. Also called the Combination method, this process uses approaches from both American soft tissue (morphometric or sculptural method), and Russian anatomical (morphological or morphoscopic method) schools to produce accurate approximations (Quatrehomme and Subsol 2005, 24). Based on the schematic representation of musculature in a manner similar to the anatomical method's meticulous procedure, the Manchester method also takes into consideration the soft tissue depth markers that are associated with the depicted individual's age, sex, and race. Associated mainly with clay reconstructions, this methodology of layering muscles in regards to specific tissue depth markers extends into other mediums as has been seen in the discussion of two dimensional drawing and three dimensional computerized reconstructions.

Re-assembly

In many cases, the skulls that require reconstruction are not intact or might need to be reassembled in a manner befitting their damage. In situations where there is absence of a feature that is bilateral in nature, the side missing is recreated based on the present material. However, this does cause false symmetry of the face (Gatliff 1984; Wilkinson 2004). Taking into consideration natural human variation of skeletal remains, the majority of individuals have slight asymmetry in their skeletal structure. Gerasimov (1971) was keen in the observation of asymmetry, noting that asymmetry of the skull shows itself in the asymmetry of the face. He suggested this basic element is natural of human variation and any reconstruction will define it further. Copying an existing portion of this can be a potential source of error in a reconstruction and must be noted in the final report. Re-assembly can be performed in numerous ways depending on what needs to be made complete. The use of wax is a common source of connective material. Care must be taken when re-assembling the skull as to avoid warping or misalignment of the bone. It is natural for one to assume to re-build the skull from one point and continue outwards. This is incorrect as it leads to the misconstruction of the facial skeleton.

The skulls which constitute the materials within this body of research did not require massive amounts of re-assembly or re-creation of absent skeletal material. With the author's own reconstructions there are certain individuals that were fragmented or needed completion. In these cases, the skull was reassembled under the supervision of Nieves Fernandez of the National Museum of Ireland Conservation Department using a Paraloid B-72 resin and Japanese Paper to connect the fragments of skeletal material in anatomical position without disturbance or warping of the overall shape of the cranium and mandible.

Moulding/Casting

The casting and moulding of the individual crania was completed at the National Museum of Ireland, with exception of those individuals from Ballinderry, Co. Kildare, Owenbristly, Co. Galway, and Dooley, Co. Donegal which were produced by the author. The care of the skulls during this process was the primary concern due to the stress of the casting and moulding process upon skeletal material. The moulding/casting process can be a dangerous

procedure in which skeletal material is duplicated. It should be noted that each individual cranium is a distinct case due to the unique manner in which it was interred (the microenvironment, mortuary practices, etc.) and the taphonomic condition of the bone. These aspects affect the overall process and the preparation preceding the making of a skull cast directly. The objective of this process is to create a direct duplication of the original skeletal material with no damage incurred during the replication process. The following is a methodological account to how this collection of skulls was reproduced.

A three percent Paraloid B-72 resin was used to consolidate the archaeological skeletal surface of the skull. Paraloid B-72 is a thermoplastic resin used often by conservators/restorers as a durable, non-yellowing adhesive and in chemical nomenclature is called an ethyl-methacrylate copolymer. With its transparent versatility, this Paraloid cover will solidify any bone surface which is porous or cracked that would then be affected by the materials used in the moulding process. In the case of this methodology, the Paraloid B-72 resin was paired with acetone as the solvent. With this material, there are different proportions of Paraloid to solvent altering the working time, hardness, and flexibility of the resin. This solvent (examples such as acetone, ethanol, or toluene) will evaporate leaving the Paraloid to harden the surface. To choose which proportion of acetone to Paraloid for these reconstructions, a small sample of bone was taken from each skull and applied with different levels (three, five, and eight percent) until the desired saturation level was achieved. The porosity of the bone would dictate which resin to utilize during this step of the overall process. After the correct proportion of resin was realised for this research's reconstructions, the entirety of the skull was coated with this substance. The three percent Paraloid B-72 resin was applied to the skulls with a small brush allowing the surface to retain the mixture. The surface was not physically altered except for a minute sheen on the bone from this application. After the entirety of the skull's surface was saturated with the mixture, it was allowed to dry overnight.



Figure 1.140: Burial 2 from Annagh, consolidated with Paraloid resin and Japanese Paper (Fernandez 2014)

Subsequent to the Paraloid B-72 resin was applied directly to the surface of the bone. Acting as a conserving barrier for any phase in the process hereafter, the next step in securing the bone from the moulding process is to cover the whole surface with Japanese Paper/Tissue (figure 1.15). This paper, normally used in the conservation of paper or manuscripts, has become popular within archaeological conservation of a variety of material objects. Chosen for its strong fibrous structure, this material comes in a variety of densities and colours. A very thin weave with a light weight was chosen for this collection and methodologies. The Japanese Paper is used as another protection against the resin used in the moulding process. This material was applied to the whole surface of the skull using a three percent Paraloid B-72 resin.

The Japanese Paper is thin enough, yet of strong support to show skeletal details needed for the anatomical portion of the reconstruction process. In the consideration of the many undulating curves and cuts the skull's surface offers such as fomania, fossae, or for instance the tooth absent aveolar process, the Japanese Paper can be applied within these curves allowing for the detail to show through the cast as well as protecting these depths from the resin used during the casting process.

When applied with this three percent Paraloid B-72 resin, it is then allowed to dry and harden. Following this initial layer of Japanese Paper, it is determined if certain areas of the skull need a higher percentage of Paraloid B-72 resin. This would be utilized on certain features of the skull, such as the orbits, nasal cavity, and magnum foramen where the Japanese Paper would have little support behind its application. The thicker resin will coat the already applied Japanese Paper and stiffen this layer for the eventual moulding/casting

process. In this instance, an increased resin of eight percent Paraloid B-72 is applied in the same manner as the lower percentage before and allowed to dry and harden over the previously laid Japanese Paper.



Figure 1.141a-e: Reconstruction process of cranium and mandible from Burial 2 from Annagh, Co. Limerick (photographs courtesy of Nieves Fernandez NMI)

With the skeletal surface of the skull now intact and protected from materials of the moulding process, the creation of producing a mould begins (figure 1.16). The mould of the cranium is created in two parts with the bottom half of the skull moulded first and then the upper portion (figure 1.16a, 1.16b). The mandible is cast in two portions as well (figure 1.16h and 1.16i). The resin is poured onto the consolidated skeletal surface with attention to constructing keys in the material which guide the second half of the mould to create an interlocking location for the upper portion of the mould (figure 1.16d). As the resin is not rigid enough to keep its original shape, it is covered in plaster for stability and less opportunity for alteration of the mould's proportions of the skeletal material (figure 1.16c).

Once dry, the skull is turned over to mould the upper portion of the skull (figure 1.16d). This skeletal portion has many orifices such as the orbits and nasal aperture which must be treated carefully. This is done after the first layer of resin is applied by putting small pieces of sponge within these areas to support the weight of the substances used during the moulding process (figure 1.16f). Afterwards a synthetic net covers these areas and another layer of moulding resin is applied, securing this material below (figure 1.16g). After this resin has dried, plaster is overlaid and set to dry. With this the mould is created and can be opened easily due to the creation of the interlocking keys previously made in the resin and the skeletal material is removed with no alteration to its structure or surface. As previously stated, the mould of the mandible is created in two portions and follows the same methodologies and utilises the same materials. The sole divergence is the lack of orifices (alveolar roots already covered by Japanese Paper) and use of sponge and netting. It is carefully extracted from the mould as well when the exterior plaster support has been completed.

With the mould created, the cast of the skull and mandible can be produced by filling the void left by the removed skeletal material. Filled with plaster and left to set and harden for a period of time, the mould can be opened again with the replicated skull complete. When the cast has been extracted from the mould, it is examined and measured in comparison to the skeletal material. If the re-production is found wanting, any flaws can be amended through the addition of wax or clay if a feature was absent or on the other hand, any surplus of plaster can be sanded or removed to the scale of the original material. This is an essential part of the reconstruction process as it validates the proportions of the cast in relation to the original skull. Afterwards the Japanese Paper can be removed with acetone and the skeletal material will revert to its initial consolidated state.

There are many various mediums one can use for creating the cast for the skull. In many of the following reconstructions, the cast skull is constituted of plaster although there is the choice to use wax for a lighter, more malleable skull. The resin/plaster mould can be reused for further casts and replicas. After the cast has been finalized, it is documented through pictures positioned in the Frankfurt Horizontal Plane (FHP) upon a stand of the practitioner's choice.

As stated above, the moulding/casting process can be hazardous to the osteological remains. There is an ethical decision when approaching this subject: does the potential amount of damage outweigh the process and final result of producing a cast for a facial reconstruction? The National Museum felt that they were best suited to the process and therefore took control of this portion of the methodologies, when in actuality stalled any production of casts and hampered the larger collection of re-constructions seen in this research.

Soft Tissue Markers/Pegging

With close assessment of skeletal material, the application of soft tissue depths and their markers to the hard tissue surface is the portion preceding the modelling of the anatomical musculature. Particular markers on the skull (figure 1.17) are the site for the placement of pegs indicating particular soft tissue depths and are those used within the reconstructions produced by the author. Due to some variance within practitioners, reconstruction process, their use of soft tissue depth placement, and value the following are illustrated for the respective pertinence for this study (table 1.3).

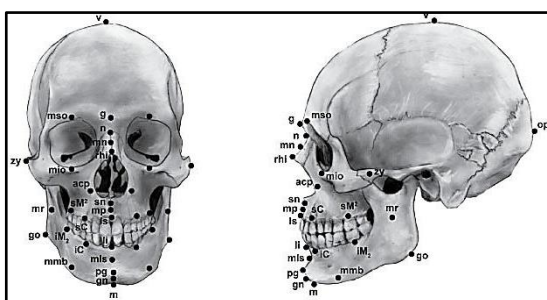


Figure 1.142: Cranial landmarks (Stephan and Simpson 2008)

The soft tissue data utilised for reconstructions were derived from Stephan and Simpson (2008) and provides an overarching review of the history of the measurement of soft tissue depth's historical progression and an integral study into the pooled data of soft tissue depths for adults with notation of weighted means and standard deviations.

Skeletal Landmarks	Definition
Opisthocranion (op)	The point on the occipital bone which lies on the sagittal plane with the furthest distance measured from the glabella
Vertex (v)	The highest point of the skull and thus, not fixed
Glabella (g)	The most prominent point between the supraorbital ridges in the midsagittal plane (MSP)
Nasion (n)	The midpoint of the suture between the frontal and the two nasal bones
Mid nasion (mn)	Skeletal point located midway between the nasion and the rhinion
Rhinion (rhi)	Midline point at the inferior end of the nasal suture
Sub nasale (also called nasospinale) (sn)	The point where a line drawn between the lower margins of the right and left nasal aperture is intersected by the midsagittal plane
Mid philtrum (mp)	Midline point on the anterior portion of the maxilla located in between the base of the nasal spine and the prosthion
Labrale superius (upper lip margin) (ls)	The midpoint on the vermilion line of the upper lip
Labrale inferius (lower lip margin) (li)	The midpoint on the vermilion line of the lower lip
Mentolabial sulcus (chin – lip fold) (mls)	Deepest point on the midline in the groove superior to the mental eminence
Pogonion (mental eminence) (pg)	The most anterior point in the midline on the mental protuberance
Gnathion (gn)	A constructed point midway between the most anterior (pogonion) and most interior (menton) points below the chin
Menton (beneath chin) (m)	The lowest point on the mandible (also considered as the most caudal point in the outline of the mental symphysis in lateral views)
mso mid supraorbital	The most superior point on the margin of the supraorbital
mio mid infraorbital	The most inferior point on the margin of the infraorbital
acp alare curvature point	The most lateral point on the alar contour
Gonion (go)	The most lateral point of the jawline at the mandibular angle
zygomatic arch (zy)	The most lateral point of the cheek (zygomaticomalar) region
Supracanine (sC)	The superior point of the maxillary canine
Infracanine (iC)	The inferior point of the mandibular canine
Supra M ² (sM²)	The point superior of the second maxillary molar on the alveolus root

Mid ramus (mr)	Point at the centre of the mandibular ramus
Mid mandibular border (mmb)	Marker on the inferior corpus of the mandible between the pogonion and the gonion
Infra M ₂ (iM₂)	The point inferior of the second mandibular molar on the alveolus root

Table 1.16: Skeletal landmarks used in soft tissue depth measurement as well as during the reconstruction process and their osteological definitions (Stephan and Simpson 2008)

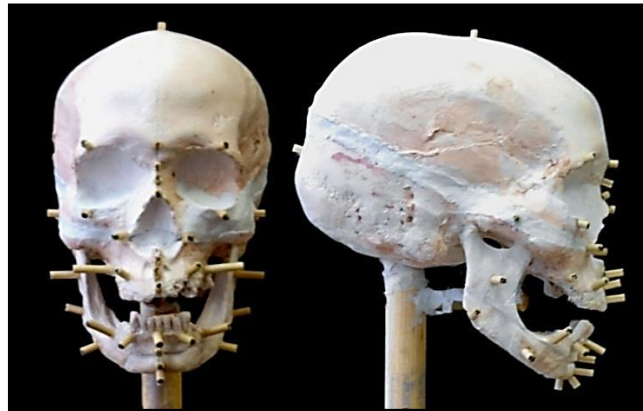


Figure 1.143: Example of a plaster skull cast (Ballinderry, Co. Kildare skeleton 208) with completed soft tissue depth markers

In the process of reconstructing an individual from archaeological material, the pegging of soft tissue depths is more of a guideline because of this data's origin from contemporary populations. There is a probable problem when using averages of soft tissue data in what has become known as “the average face” (Stephan 2005, 200). This is a problem when attempting to approximate a particular individual because it only alludes to the overall appearance and is not population specific. An additional difficulty in these soft tissue depths from modern and contemporary samples, is the attribute of body mass which differs drastically with evolving global diet. Therefore the sculpting of the final countenance is subjective in that it does not strictly follow the depth of these soft tissue depths.

In the reconstructions produced by the author, wooden dowels (4.5mm diameter) are used in the application of tissue depth markers (figure 1.18). These are cut to the specified measurements (table 1.4) of the individual and carefully positioned onto the respective skeletal markers in a manner strictly perpendicular to the surface of the bone. They are applied with a strong adhesive to the surface of the skull cast.

Soft Tissue Depth Measurement	Total Weighted Mean	<i>n</i>	Weighted Mean for <i>s</i> Studies	<i>s</i>	<i>n</i>
Median Points					
op – op'	6.0	1877	6.0	2.0	1596
v – v'	4.5	1888	5.0	1.5	1557
g – g'	5.5	6986	5.5	1.0	5649
n – n'	6.0	7419	6.0	1.5	5705
mn – mn'	4.0	1272	4.0	1.0	918
rhi – rhi'	3.0	6646	3.0	1.0	5472
sn – sn'	13.0	2248	12.5	2.5	1650
mp – mp'	11.5	6724	11.0	2.5	5131
ls – ls'	11.5	6037	11.5	2.5	5107
li – li'	13.0	5791	13.0	2.5	4882
mls – mls	11.0	6979	10.5	2.0	5715
pg – pg'	11.0	7937	11.0	2.5	6073
gn – gn'	7.0	970	7.0	3.0	806
m – m'	7.0	5196	7.0	2.0	4357
Bilateral Points					
mso – mso'	6.0	3435	6.0	1.5	3006
mio – mio'	6.5	3498	6.5	3.0	3070
acp – acp'	9.5	1625	9.5	2.5	1475
go – go'	11.0	5264	11.0	6.0	4376
zy – zy'	6.5	5303	6.5	2.5	4193
sC – sC'	10.0	3781	10.0	2.0	3756
iC – iC'	10.5	1373	10.5	2.0	1346
sM² – sM²'	25.0	2082	25.0	5.5	1849

iM₂ – iM₂'	18.5	1560	19.0	4.5	1327
mr – mr'	18.0	3552	18.0	4.0	3331
mmb – mmb'	11.0	1153	10.5	4.5	766

Table 1.17: Soft tissue depths utilised for reconstructions in this body of research (Stephan and Simpson 2008)

Clay modelling

The face is a totality of parts, so it cannot be and is not useful when these features are isolated. Throughout individuals of various races, ages, and sexes, the muscles re-created remain consistent; it is in the variation of the skeletal markers of origins and insertions that the differentiation of appearance originates. This founding assumption that there is variation in skeletal material formulates the reason why individuals appear in innumerable forms.

Within the three dimensional reconstructions produced for this research, the medium of clay is used to re-present the anatomical structure of an individual's face. Clay is an ideal medium due to its pliable and malleable nature that can withstand alterations and layering of this process. A basic, smooth clay with no temper was chosen as any inclusions within the material would be distracting to the audience and allows for ease in the process of sculpting.

Deviating from the anatomical method, which painstakingly recreates all muscles, ligaments, tendons, and glands, the Manchester Method chooses to re-present a more simplified version of the complicated human anatomical structures present in the face. The muscles of the face and head (figure 1.19) are categorized as mimetic muscles which are further subdivided as: muscles of the scalp, muscles in the region of the eyelids, muscles of the nasal region, muscles of the mouth region (Platzer 2004, 318). The muscles represented and the order in which they are sculpted upon the skull, the sternocleidomastoid being the very first to ultimately the parotid gland, will subsequently be discussed. Furthermore, each muscle in anatomical terms is additionally explained as to its importance within the face's overall appearance.

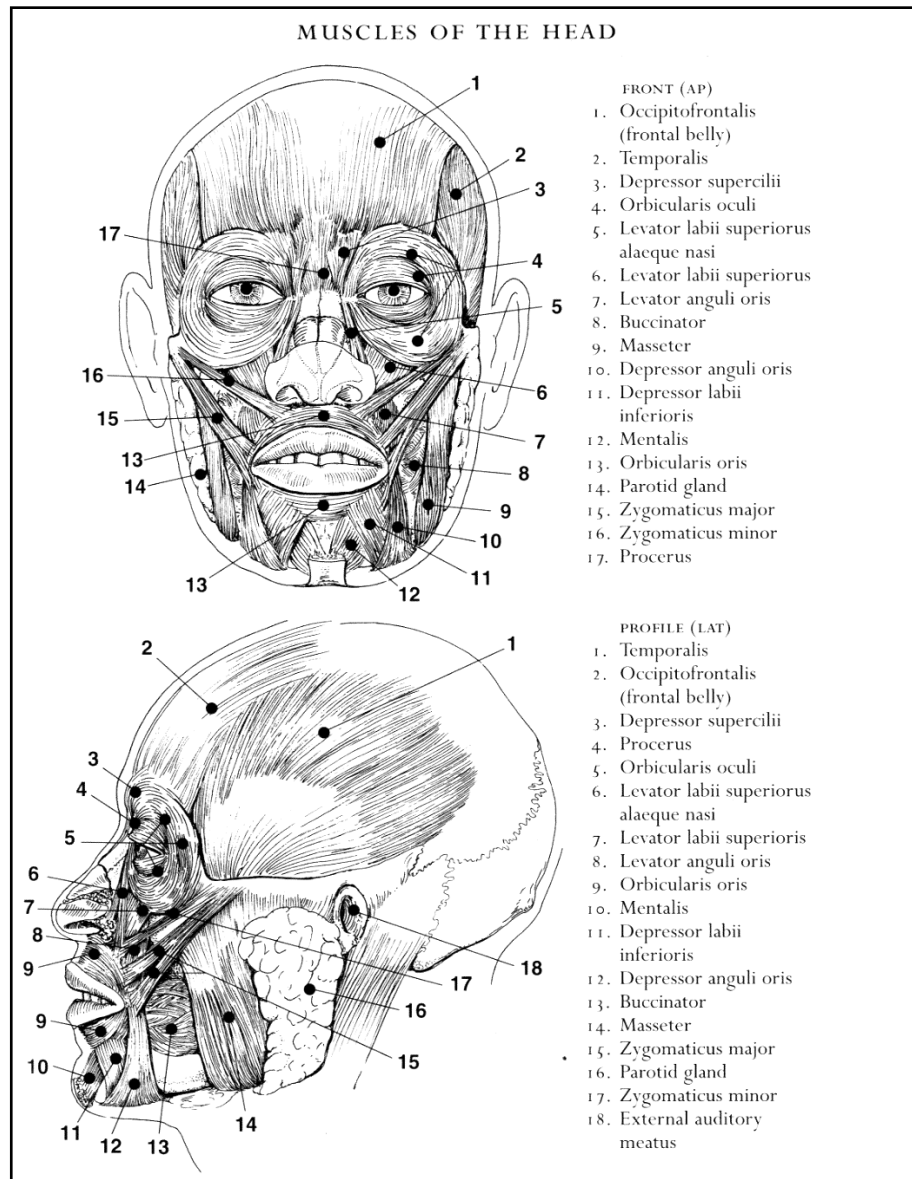


Figure 1.144: Illustration of anatomical musculature used during the reconstruction process (Prag and Neave 1997)

Sternocleidomastoid

The first section to be modelled on the reconstruction, this thick musculature of the neck, supports the cast of the head and gives proportion to the production. Anatomically this muscle is a thick, rope-like muscle with two heads. The medial head originates at manubrium sterni, while the lateral head originates at the manubrium sterni. They conjoin to insert at the mastoid process and the superior nuchal line (Platzer 2004 328). This muscle's actions provide the ability to tilt and rotate the head. The re-presentation of this anatomy correlates with the muscle markers apparent on the occipital.

Temporalis muscle

This fan-shaped muscle provides the curve of the side of the head providing the actions of elevating the mandible and closing the mouth. This strongest elevator of the lower jaw (Platzer 2004 324), originates from the inferior temporal line and inserting at the coronoid process and the anterior surface of the ramus of the mandible. Many times, it is clear to see the extent of this muscle by observing the skeletal material of the frontal and parietal bones and the faint line caused by this strong muscle's attachment to the bone.

Masseter

Providing the curve of the side of the jaw, this large rectangular muscle originates at the zygomatic process of the maxilla and lower border of zygomatic arch and inserts at the ramus of the mandible. As part of the anatomy of mastication, it is a well-built muscle which is divided into a strong superficial part with oblique fibres and a deep part whose vertical fibres arise from the inner surface of the zygomatic process of the temporal bone and from the temporal fascia" (Platzer 2004 324). Its main duties are to close the jaw by elevating the mandible and occlude teeth.

Orbicularis Oris

Appearing as a circular muscle, this muscle actually consists of four parts and provides the action of opening and closing the lips. These parts smoothly integrate and run around the orifice and blend with other muscle fibres at the corners of the mouth. The shape of the mouth is determined by this muscle's tone and the shape of the underlying bone of the dental occlusion and the teeth, in particular the morphology of the canines (Platzer 2004 322). When in strong contraction, the lips appear puckered and protrude, while in weak contraction the lips remain in mere contact or closed.

Buccinator

This quadrilateral musculature is called the trumpeter muscle as, "it enables air to be blown out of the mouth, pulls the angle of the mouth laterally and keeps the mucous membrane of the cheeks free of folds. It is involved in laughing and crying, and, when contracted, produces a facial expression of satisfaction" (Platzer 2004, 322). Originating at the alveolar processes of the mandible and maxillary molars, it inserts at the modiolus.

Mentalis

The strength and shape of this conical anatomy may be determined by skeletal detail. It originates at the incisive fossa of the mandible and inserts into the skin of the chin. Its duties are to produce a chin-lip wrinkle associated with the mimetic muscles in the region of the mouth and expressions.

Depressor Labii Inferioris

Drawing the lower lip down, this muscle originates at the oblique line of the mandible and inserts at the skin of the lower lip. The quadrilateral muscle runs across and above the *mentalis*.

Depressor Anguli Oris

As a muscle in the mimetic region of the mouth, the *depressor anguli oris* is able to pull down the corners of the mouth. This fan shaped muscle originates at the oblique line of the mandible and inserts at the modiolus. Muscle fibres run across and above *depressor labii inferioris*.

Orbicularis Oculi

The main muscle of the mimetic muscles in the region of the palpebral fissure, this circular anatomy opens and closes the eyelids. According to Platzer (2004 320), it consists of three parts: orbital, palpebral, and lacrimal. The orbital portion is thickly arranged around the circularity of the orbit and is attached to the palpebral ligament, the frontal process of the maxilla, and the anterior lacrimal crest. This is concerned mainly with the firm closure of the eyelid. The palpebral section of this muscle is more delicate and lies immediately on the eyelids and also extends to the palpebral ligament, providing the blink reflex. The lacrimal part arises from the posterior lacrimal crest and is thought to expand the lacrimal sac or to expel its contents. The edges of the muscle can be determined by the shape and size of the orbit, brow, and maxilla. Due to the intimate relationship between the skin and this musculature group, radial folds on the lateral canthus are produced, which are commonly referred to as “crow’s feet”.

Levator Labii Superioris Alaeque Nasi

Raising the nasal wings and upper lip as well as flaring the nostrils, these muscles run down the side of the nose. Simultaneous contraction results in the raising of the nasal tip. Originating alongside the lateral nasal bones and attaching the medial branch at the alae and nasal skin while the lateral branch inserts at the upper lip.

Nasalis muscle

This is a flat muscle consisting of transverse and alar parts. The transverse portion is thin and broad and is joined by a flattened tendon to the opposite side while, the alar section of the *nasalis* radiates into the skin on the nasal wing (Platzer 2004 320).

Levator Labii Superioris

Originates at the lower border of the orbit and zygomatic bone and inserts at the upper lip. Associated with the *levator labii superioris alaeque nasi*. Crucial in forming the nasolabial crease, this musculature acts as the motivator to lift and protrude the upper lip.

Levator Anguli Oris

Within the group of anatomy that constitute the mimetic muscles in the region of the mouth, this section's origin is at the canine fossa and infraorbital margin and inserts at the corner of the mouth. Similar to *levator labii superioris*, it lifts the corners of the mouth.

Zygomaticus Minor

A strap muscle that offers the elevation of the upper lip and forms the nasolabial crease, this anatomy originates at the lateral surface of the zygomatic bone behind the zygomaxillary suture and inserts at the upper lip. Associated with the *zygomaticus major* muscle.

Zygomaticus Major

Originates at the zygomatic bone in front of the zygo-temporal suture and has insertions at the modiolus. Similar to the *zygomaticus minor*, its duties are to lift the corner of the mouth. Both *minor* and *major*'s morphology are determined by the shape of the individual's zygomatic bones and the bony surface.

Corrugator supercilii

This brow muscle responsible for the expressive potential of furrowing one's brow originates at the supra-orbital margin and inserts into the skin of the eyebrow. While an important marker often observable on fully robust specimens, it is often not included as a specific muscle for reconstructions.

Procerus

Akin to the *corrugators supercilii*, this muscle is not necessarily included in the Manchester method's simplified anatomical representations. It generates a transverse fold across the root of the nose as it "arises from the dorsum of the nose and radiates into the skin of the forehead" (Platzer 2004 320).

Occipitofrontalis

The frontal belly portion of this scalp muscle lacks an origin situated in the skeletal material and instead arises from the skin and the subcutaneous tissue of the eyebrow and the glabellar region (Platzer 2004 318).

Parotid Gland

This gland is, "an irregular, lobulated mass, lying below the external auditory meatus...it projects forward onto the surface of the *masseter* muscle and a small part of it lies below the zygomatic arch" (Wilkinson 2004 190). This is an important insertion to the reconstructed anatomy because it fleshes out the concavity of the lateral aspect of the mid-region of the face.

While these muscles are sculpted onto the bony surface and the contours and markers of the skeletal material below are taken into consideration, elemental features such as eyeballs, the nose and ears are added before the addition of the skin layer (figure 1.20). All of this anatomy that is modelled onto the skull should be in accordance with the soft tissue depth pegs. However, the musculature should appear several millimetres below the pegs to account for the space taken by the final inclusion of the skin. The skin is added as a

smoothly rolled out layer of clay which goes on top of the muscular surface going minutely above the surface of the soft tissue markers.



Figure 1.145: Rendered musculature in the fashion of the Manchester method on skeleton 208 from Ballinderry, Co. Kildare (note: parotid gland not present)

Specifically for the standards of methodology for this research's reconstruction, each three dimensional clay reconstruction uses 24mm diameter eyeballs (per Wolff's 1933 standards). Generally used as doll's eyes, these are ideal for the replication of this portion of the human anatomy. The colour of the eye was chosen based on the individuals' county location within Ireland in conjunction with the detailed study by Hooton in the physiology of the early twentieth century Irish in his famous Harvard Mission to Ireland (1955). This offered at least some justifiable, legitimising character to the choice of this feature. The placement of the eyeball in the orbit is based upon the guidelines of Stephan and Davidson (2008) to place the eyeball more laterally and superiorly in the orbit. Eyeball protrusion from the socket arises from the line that runs between the supra- and infra-orbital margins (Wilkinson 2004).

The choice in nasal prediction comes from the scholarship of Rynn and colleagues (2010) in which measurements and formulae are used, while standards on predicting the direction of the nose observing the direction of the nasal spine come from Taylor (2001) and Wilkinson (2004). The tip of the nose is predicted by inverting the curve of the lateral curvature of the nasal aperture, while the width of the mouth and the thickness of lips comes from Wilkinson (2004) and Wilkinson and colleagues (2003) respectively. The

prediction of the ears stems from Guyomarc'h and Stephan's (2012) article and their tested guidelines for the appearance of this feature.

The final layer that represents the skin is placed above the anatomical features and in association with the facial features of the eyes, nose, mouth and ears. This is the surface which the subjective layer of the practitioner embeds their own understanding of the subject being reconstructed. Therefore, with archaeological specimens, this skin layer is open to interpretation mainly involving the portrayal of age. The creases and wrinkles added upon the cutaneous surface can at times be found in the osteological material with the strong muscle markers, but there are not certain qualifiers for the presence of these features. As such, the last stage in finalising the countenance is difficult and should be made with as many defensible reasons as possible and in the reconstructions to follow in this research are only made in consideration of the skeletal material, archaeological or historical documentation in adornment and use of documents such as the Harvard Mission to Ireland (1955) that could possibly aid in soft tissue appearances.

1.3.3 Two Dimensional Facial Reconstructions

The method of creating a two dimensional drawing is a further approach in the endeavour to produce a reconstruction. This procedure is extremely useful in preparation of a three dimensional clay reconstruction to predict certain appearances of the investigated face. This type of image is not in competition with three dimensional imaging, but instead is in fluctuating dialogue offering different facets of appreciation for the bony landscape beneath the soft tissue. A two dimensional reconstruction is ideal in cases of extremely fragile preservation of remains, damage that prevents the casting and moulding process, or photographs of reinterred remains. This accounts for the inclusion of this type of reconstructions within this research in regards to the reinterred remains of the men of Gallen Priory, Co. Offaly (chapter six).

To create this type of reconstruction, a two dimensional image of the skull is obtained of the skeletal material. It is important that the images, likely photographs, are taken at least six feet (1.8m) away to avoid the distortion of features which achieves an accurate perception of the skull. It should be positioned in the Frankfurt Horizontal Plane (FHP)

where the infraorbital margin is level with the external acoustic meatus. This picture is then imported into Adobe Photoshop CS3 and brought to 1:1 scale. This is performed by engaging with the ruler element which will measure two points on the image to fit the corresponding measurement from the original skeletal material.

The scaled photograph is printed out and taped to a large drawing board with two layers of transparent paper placed on top. Pencil and charcoal were used for the sketching and drawing of musculature and facial features. The photography of skull must be 'pegged' with the appropriate data concerning soft tissue depths before proceeding with the reconstruction. Just as in three-dimensional clay productions, these pegs allow for the acknowledgment of the texture of the musculature of the individual's anatomy. The soft tissue depth data used is the same as used for three dimensional reconstructions and has been previously noted (table 1.4). These are measured from the skull's surface with callipers and drawn on the photograph of the skull. Subsequently, the muscles are drawn on in layers onto the first layer of highly transparent paper that allows visibility of the skull beneath (figure 1.21). Once the musculature, nose, and eyes are placed in the orbit with consideration of slant position (malar tubercle to lacrimal crest) then the next layer of transparent paper is added. This second layer of transparent paper is where the countenance is produced and illustrated in its final form. This process remains the same for the lateral/profile perspective as well. The profile view of the individual is beneficial as it provides another perspective of features that would be flattened in the frontal view such as the nose and ear/mandible alignment.

The process of two dimensional reconstructions is a basically a flattened version of the three dimensional reconstruction process with the similar precise notation of the skeletal surface for soft tissue predictions for facial feature appearances. Thus, similar guidelines and the necessity for justifiable reasoning for choices in appearance is still an important constitution of this reconstruction formed in a different medium. When completed the drawings are scanned back into the computer and into Adobe Photoshop CS3 for inclusion as images within the following body of research.

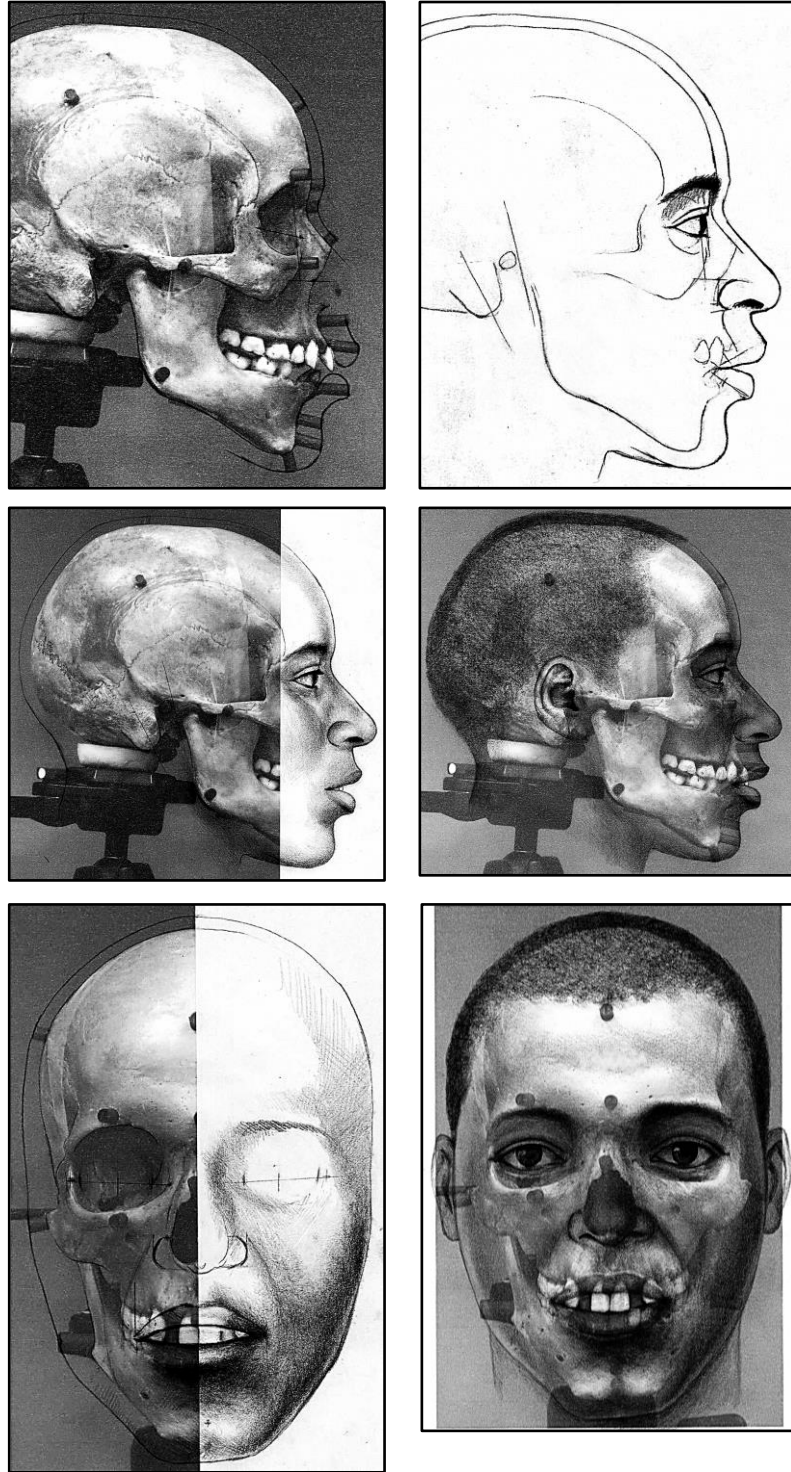


Figure 1.146: Methodological progression of two dimensional facial reconstruction with lateral and frontal views of the same individual (Iscan and Steyn 2013)

1.4 Materials

The practical core of this research derives from Irish skeletal material. The human remains were chosen for their application to the diachronic nature of this archaeological examination. Each broad time period examined within the research (prehistoric, early medieval, late medieval, and post-medieval) is represented with at least one facial reconstruction either in two- or three-dimensional form. Additionally, the most important factor for the choice of material would be its state of preservation and skeletal completeness. This aspect of entirety aids in the overall process of reconstruction in the case of producing an accurate replica of the skull with proportions similar to the skeletal material and completion which aids in the prediction of soft tissue features.

Time Period	Site Name and Skeleton Number	Method of Archaeological Facial Reconstruction
Prehistoric (8000 BC – 400 AD)	Annagh, Co. Limerick	
	Burial 2	Two-Dimensional
Early Medieval (400 – 1169 AD)	Dooley, Co. Donegal	
	Skeleton 41A	Three-Dimensional (Clay)
	Owenbristly, Co. Galway	
	Skeleton 23	Three-Dimensional (Clay)
Late Medieval (1169 – 1600 AD)	Gallen Priory, Co. Offaly	
	Skeleton 1	Two-Dimensional
	Skeleton 8	Two-Dimensional
	Skeleton 12	Two-Dimensional
	Skeleton 60	Two-Dimensional
	Skeleton 73	Two-Dimensional
	Skeleton 95	Two-Dimensional
	Skeleton 137	Two-Dimensional
	Ballinderry, Co. Kildare	
	Skeleton 208	Three-Dimensional (Clay)
	Spike Island, Co. Cork	
Post-Medieval (1600 – 1800 AD)	Skeleton 318	Two-Dimensional
	Skeleton 507	Two-Dimensional

Table 1.18: List of materials reconstructed within this body of research

In the following body of research, each reconstruction and its skeletal material is prompted by an illustration of the site history and osteological profile of the skull's features. Access was also a further qualifier for the inclusion of the chosen material for this study. With

exception of Annagh, Co. Limerick, held by the National Museum of Ireland in Swords, Co. Dublin, the collections chosen for reconstruction are held at the Department of Archaeology, University College Cork, Ireland.

Skulls from Ballinderry, Co. Kildare, Owenbristy, Co. Galway, and Dooey, Co. Donegal were replicated through the moulding and casting process by the author. However, the additional three dimensional reconstructions relied on casts were completed by Nieves Fernandez of the National Museum of Ireland Conservation Department. Due to the time constraints at the National Museum, no casts for three-dimensional re-constructions outside of the three produced by the author were provided for this research. With no control over the moulding/casting process, it was out of the author's control to produce any additional casts.

The limitations placed on facial reconstructions in Ireland are puzzling. The National Museum of Ireland took control of the production of moulds and casts for replicas of skulls intended for reconstruction. This decision was made due to contrasting opinions on methodologies used for the moulding/casting process between myself and the individuals within the Conservation Department. These differences of opinion resided in the materials used in the process, which with their high costs, the Conservation Department had the funding to acquire and I did not. However, these casts never came to fruition and therefore constrained the sample I was able to present. This also dictated the creation of two-dimensional re-constructions which appear less sophisticated than those produced in three-dimensional clay. Whether this is a question of bureaucracy or not, the topic of note here is the hesitation of the National Museum of Ireland towards research into the production of facial reconstructions. This is odd as facial reconstructions do exist within Ireland, such as the Clonycavan Man featured at the National Museum of Ireland, Kildare Street, Edmund Rice in Co. Waterford, and a Viking Woman in Dublinia Museum, Dublin. Sanders noted that after the re-locating of an object from site to museum the moment of authenticity vanishes and thus an obligatory purpose of archaeology and one of its didactic qualities is in fact to restore and re-establish this access to the past (2009, 199).

Ireland is rich in bioarchaeological material because of the large amount of material available with additional ability to access these skeletal remains at the National Museum's warehouse in Swords, Co. Dublin and various universities throughout the country like University College Cork. Due to this high presence of human remains available to researchers, there are more opportunities for facial reconstruction of individuals in the Irish bioarchaeological record.