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The Poetics and Politics of Polyphony: Towards a Research Method for Interactive Documentary

Judith Aston and Stefano Odorico

Abstract: *This article stems from a panel we jointly convened at the* i-Docs 2018 *Symposium, where we presented a series of provocations with a view to generating a new theoretical framework for i-docs. These provocations were inspired by all aspects of Mikhail Bakthin's concept of polyphony, from both a theoretical and a practical point of view. This article presents these provocations and reflects further on them. A number of key issues are documented, expanded and commented upon, as a potential framework for further research, including multiplicity, the chronotope, dialogism and interaction. We propose that these lead to new ways of approaching complexity. With the aim of using juxtaposition, nonlinearity and layering to break down binaries, the article demonstrates how complexity can be embraced and, crucially, how the simplicity within it can be revealed. In other words, a key proposition here is that we should accept and celebrate complexity as the natural order of things, without needing to deny simplicity. By investigating several theoretical aspects of Bakthin's wider idea of polyphony, this article identifies some areas for potential development and offers input for further research, particularly in relation to the concepts of heteroglossia, carnival and aesthetics.*

This article is an expanded version of our "provocations", a series of ideas and stimuli designed to provoke debate and set the scene for a collaborative panel session on "The Poetics and Politics of Polyphony". We organised and hosted this session at the *i-Docs 2018* Symposium held in Bristol, UK on 21–23 March 2018, based on our combined long-term and ongoing research into the subject (Aston and Odorico).[1] In the spirit of the Russian philosopher Mikhail Bakhtin, our provocations were designed to start a dialogue between us, our guests and the audience, through which we endeavoured to create an equal and open platform for the generation and exchange of ideas. A number of key issues came out of this dialogue, which we document and comment upon here as framings for further research.

The structure of this article is based on the order in which we presented our provocations, using our set of six slides from the symposium, followed by a list of keywords that emerged from the ensuing discussion. As we use this structure to talk through our ideas, this is not a typical linear essay, but a series of inputs for further analysis, with certain aspects focussed on in more detail. The article also includes a few additional slides, where we have expanded upon points we first made at the symposium. Overall, the aim of the article is to explore areas of synergy with Bakhtin's thinking on polyphony, and to begin to reflect on the theoretical and practical contribution of a dialogic approach to the field of i-docs.

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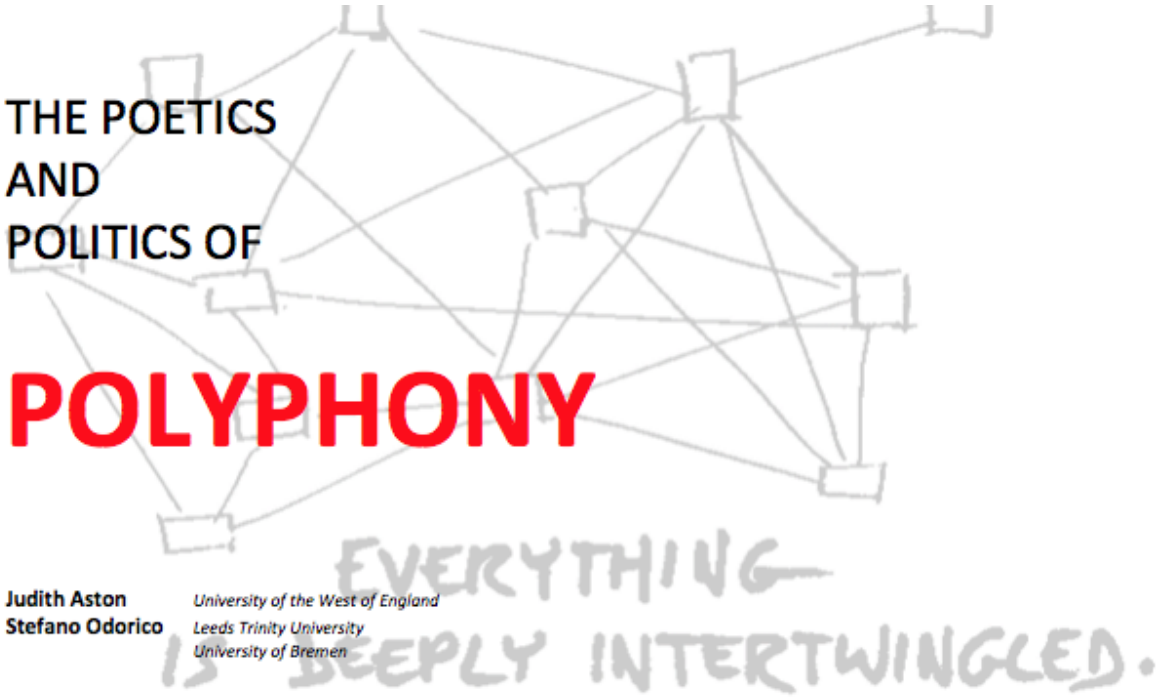


Figure 1: "The Poetics and Politics of Polyphony" Panel Slide 1. Judith Aston and Stefano Odorico, *i-Docs 2018*. Background image: *Intertwingled* by Ted Nelson.

A Definition and a Framing

Quoting Judith Aston, Sandra Gaudenzi, and Mandy Rose, i-docs may be defined as "any project that starts with the intention to engage with the real, and that uses digital interactive technology to realize this intention" (1). The notion of the real within this definition is expansive and "embraces the breadth of lived experience" (Aston, Gaudenzi, and Rose 1), thus taking on board Clifford Geertz's position that "rocks and dreams are both of this world" (qtd. in Aston, Gaudenzi, and Rose 1). In this article, we are interested in the capacity and potential of i-docs to embrace the complexity of the world and to incorporate, within their structures and production processes, multiple voices that "utter" together in the creation of content. This leads us to what Bakhtin has written about the polyphonic and multivocal novel, which, he claims, "is constructed not as the whole of a single consciousness, absorbing other consciousnesses as objects into itself, but as a whole formed by the interaction of several consciousnesses, none of which entirely becomes an object for the other" (*Problems* 18). Bakhtin wrote this in response to the Russian novelist Fyodor Dostoevsky, who, he claimed, created a totally new kind of novel. Relating it to musical theory, Bakhtin called this the "polyphonic novel", in that it consisted of independent voices which are fully equal, and which become subjects of their own right, without needing to serve the ideological position of the author.

Bakhtin's concept of "polyphony" (*Problems* 59) is directly related to the idea of "dialogue". The message for him is the output of a process of cocreation, coreflection and cointervention, which has also been successively analysed and theorised by Roland Barthes where he writes that "a text is made up of multiple writings, drawn from many cultures and entering into

mutual relations of dialogue" (148). Bakhtin argued that the dialogic nature of Dostoevsky's novels meant that different social styles are presented through the characters, as opposed to there being an all-pervading style dictated by the author. In so doing, he was recognising that the author and the characters in the novel were in dialogue with each other. He was also keen to stress that historical and social context were important sources of meaning, as one person can speak in different registers according to the context of their "utterance". Bakhtin explains the generation of meaning in this way as the "primacy of context over text", and defines this process of allowing the coexistence of, and conflict between, different types of speech as heteroglossia (*Dialogic* 428). His argument is that heteroglossia challenges the monological authorial voice and enables the novel to draw the authoritative into question, allowing what was once considered certain to be debated and open to interpretation. For him, the strength of the novel is not only that it can function through heteroglossia, but that it must promote it; to do otherwise is, in his view, an artistic failure.

Our proposition here is that Bakhtin's approach to polyphony and heteroglossia in the novel aligns well with many of the core principles that lie behind a significant set of methods that have already been applied to the production of i-docs. Whilst we are not in any way claiming that i-docs as a field has a unique claim to polyphony and heteroglossia, we are saying that it is well suited to it, and hence worthy of further investigation.

A Note on Keeping I-Docs Open

The 2018 symposium was built around the theme of opening up of the "i" in i-docs. This was in acknowledgement of the issues surrounding the nomenclature of "interactive documentary", a notoriously slippery term which is not only hard to define but also loaded with contested meaning (Gifreu-Castells; Aston, "What Does"; Gaudenzi "Why Do"). Judith Aston and Paolo Favero had already confronted this problem (or should we say this possibility, from a polyphonic point of view) in their panel on i-docs at the 2017 RAI – International Festival of Ethnographic Film held in Bristol, UK. Furthermore, Patricia Zimmermann wrote the following as part of her review of *I-Docs: The Evolving Practices of Interactive Documentary*:

> The "i" (in i-docs) represents a vortex of ideas spanning "information", "interactive", "immersive", "intention", "innovation", and "indeterminacy". This process flips the traditional vertical structures of media production into horizontal, iterative, never finished modes that reify the user as a participant and co-creator. ("Judith")

This articulation resonates deeply with the convenors of *i-Docs*' ongoing discussion and desire to keep the space fluid and open (Aston and Gaudenzi), and this article continues in that spirit. Here, we use the term "i-docs" to denote a constantly evolving set of forms and practices and "interactive documentary" to focus in on one of the core themes that i-docs can embrace: namely complexity, as it plays out through nonlinearity and of course polyphony.

In this sense, we see our articulation of "interactive documentary" as being a subset of i-docs and as a way of "doing documentary" (Wiehl) which has synergies with Bakhtin's core principles of polyphony. This way of "doing documentary" can be seen as combining the several modes of presentation articulated through the classic linear documentary form (Nichols,

Representing and *Introduction*; Odin) with the interactive applications of digital media, which allow for new degrees of user participation in the construction of meaning. The intention is that this combination, which can also incorporate other modalities beyond film, will apply equally well to Patricia Zimmerman and Helen De Michiel's framing of interactive documentary as "open space new media documentary", to Brian Winston's preference for the term "docmedia" (60), to Adrian Miles's framing of "computational nonfiction" (104) and to Anna Wiehl's concept of "networked/networking media". "Intertwingled" (Nelson, *Computer Lib*) is also at play in the "i" in i-docs, an important concept, at the root of hypertext, which will be discussed later in this article.



Figure 2: "Polyphony" Panel Slide 2, Aston and Odorico, *i-Docs 2018*.
Background image: Carny Ville Bristol, October 2010.

As the slide in Figure 2 shows, the aim of our panel was to be provocative, and to inspire practitioners and wider communities, as well as academics. It argued for Bakhtin's relevance to i-docs with reference to his engagement with Dostoevsky's novels as "a plurality of independent and un-merged voices and consciousnesses, a genuine polyphony of fully valid voices" (*Problems* 6–7). The panel was about excitement, as we believe that, in this moment of growing inequality, we need to be excited about polyphony as a means through which we can productively engage with complexity. It was also about passion, intended not only in philosophical, semiotic terms, but also about physical, human passion that will hopefully lead to constructive conversations, controversies and debates. Namely, our provocation was that, if we are going to engage with polyphony, we should be enjoying ourselves and we should be passionate about what we do. Even if we are engaging with urgent issues of the day, we do not have to be serious all the time about what we do and how we do it. This was a direct response to Bill Nichol's conceptualisation of documentary as being about a "discourse of sobriety", a serious endeavour which is aligned with disciplines such as science, economics, politics and history (*Representing* 3–4). Given that

documentary film straddles the categories of fact and fiction, art and document, entertainment and knowledge, our provocation was in opposition to this concept of sobriety.



Figure 3: "Polyphony" Panel Slide 3, Aston and Odorico, *i-Docs 2018*. Background image: *Question Bridge* (Chris Johnson, Hank Willis Thomas, Bayete Smith and Kamal Sinclair, 2012). Screenshot.

The slide in Figure 3 makes the important point that i-docs are often multifaceted: there are many different avenues into them, and they often play out across varying and ongoing timeframes, as well as across different platforms. Indeed, there is a strong intention behind the approach to i-docs that we are investigating here to break down binaries, using juxtaposition, multiplicity, nonlinearity and layering to embrace complexity and, crucially, to still be able to celebrate the simplicity that can be found on the other side of it. This can be seen as a form of resistance to the growing trend towards nationalism and protectionism in response to a wider backlash against globalisation and international cooperation. In the commonly quoted phrase, Albert Einstein said that the three rules of work are: "1) Out of clutter find simplicity; 2) From discord find harmony; 3) In the middle of difficulty lies opportunity" (Wheeler 2). For us, as with Einstein, this should not involve retreating back into oversimplistic binaries and setting up a dichotomy between winners and losers. Instead, it should involve accepting and celebrating complexity as the natural order of things, an order within and beyond which we can still find simplicity.



Figure 4: Complexity. Aston and Odorico.

There are many ways to think about polyphony in relation to i-docs, and these were the keywords that we brainstormed as a starting point: *philosophy, literacy, educational strategy, style, composition, carnival, intervention, complexity*. The point that we want to make is that polyphony within i-docs involves much more than we might initially think. In fact, it is important to approach polyphony with an open mind, in such a way that polyphony itself can be embraced through polyphonic means. This we see as being essential to the dialogic approach that lies at the heart of the concept. The backdrop for our third panel slide is an image from *Question Bridge* (2012), a project that facilitates a dialogue between black men from diverse backgrounds and creates a platform for them to represent and redefine black male identity in America. It is an excellent example of polyphony in practice within an i-docs project.[2]

Generally, polyphony (even if not always named as such) is thought about mainly in terms of collaboration and participation, especially in the field of i-docs (O'Flynn; Rose, "Not Media"; Zimmerman and De Michiel). It is also a term that has been appropriated by various quarters and that now circulates, somewhat clumsily, around contemporary dialogue, as a kind of utopian ideal that sees individuals belonging to a wider whole whilst still retaining their individuality (Miekus). By anchoring the term to Bakhtin, we would like to explore the concept in more depth, and encourage its use by practitioners, scholars and the public. Indeed, we believe that polyphony can be identified not only as a theoretically useful term in relation to i-docs, but as a tool and method to define and frame the field further, using a wider set of elements than has hitherto been the case. In other words, polyphony, as this article will show, is a key concept and its use within i-docs needs to be expanded. We believe that it points to much more than just collaboration. It also speaks to questions of style, composition and the idea of carnival as an intervention, and can be seen as both an educational strategy as well as a philosophical approach.[3]

And this is where Bakhtin can help. Although his work has already been mentioned in relation to polyphony within the literature on i-docs (Daniel; Aston, "Direct"; Aston and Matthews), to date these thoughts have been with reference to specific aspects or projects, as opposed to a more general framing for the field.[4]

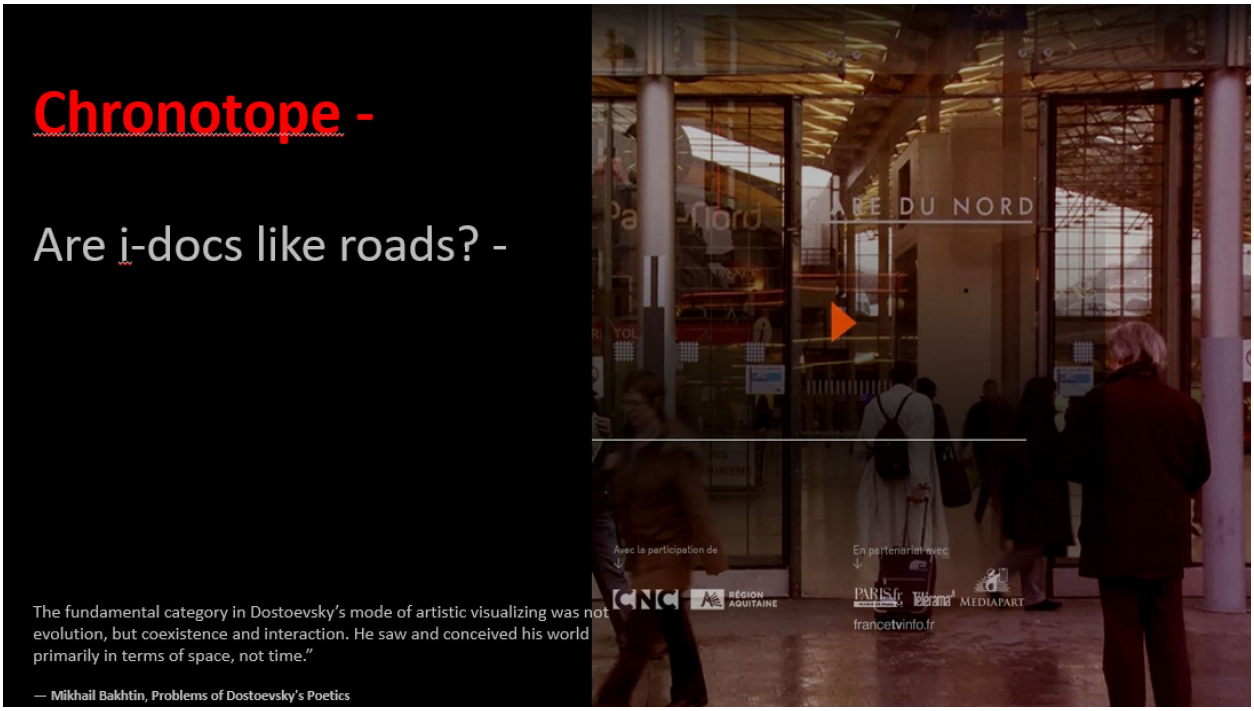


Figure 5: "Polyphony" Panel Slide 4, Aston and Odorico, *i-Docs 2018*. Background image: *Gare Du Nord* (Claire Simon, 2013). gare-du-nord.nouvelles-ecritures.francetv.fr. Screenshot.

The slide in Figure 5 articulates how "the fundamental category in Dostoevsky's mode of artistic visualising was not evolution, but co-existence and interaction. He saw and conceived his world primarily in terms of space, not time" (Bakhtin, *Problems* 28). Within the broad term "polyphony", Bakhtin talks about the chronotope as a "road" where different components and subjects of projects can meet and interact in a process of "branching out". The road is a perfect chronotope in which "time, as it were, fuses together with space and flows in it" (*Dialogic* 243–44). This road is a place of encounters, across class boundaries and probabilities, a place where anything becomes possible. Bakhtin furthermore points out that the road functions as a native place, "one that passes through familiar territory, and not through some exotic alien world" (*Dialogic* 245).

Our provocation here is that the concept of chronotope helps us to think of i-docs as roads where journeys take place. These are "roads" where different components and subjects of projects can meet and interact in a process of "branching out". Furthermore, it is important to understand how space is represented within i-docs in relation to time. There are many examples of i-docs in which physical and digital space come together.

Sometimes these i-docs can only be experienced through live performance (e.g. *Choose Your Own Documentary – CYOD* [2013], an interactive cinematic experience with a live narrator, inspired by the interactive adventure book format). Sometimes the i-docs are presented both online and as a physical installation (e.g. *Bear 71* [Leanne Allison and Jeremy Mendes, 2012], a web documentary and traveling installation that tells the story of a tagged female grizzly bear in Banff National Park). Other times there is a dynamic flow between a physical and virtual manifestation of the project (e.g. *Priya's Shakti* [2014], an Indian comic book which uses augmented reality to

tell the story of Priya – India's first female superhero who is also a survivor of rape), and at other times the projects are shown in community settings to stimulate discussion and debate which feeds back into the project (e.g. *Hollow Interactive* [Elaine McMillion, 2013], a web-based documentary and participatory project that examines the future of rural America through the residents of West Virginia's McDowell County). There are also instances where the project could only exist, in terms of its mapping of physical space and the communities that it brings into dialogue, in the digital realm (e.g. *Gaza Sderot* [Alexandre Brachet, 2008], a web-documentary that reports on the day-to-day experiences of men, women and children on both sides of the Palestinian-Israeli border; and *Jerusalem, We Are Here* [Dorit Naaman, 2016], an interactive documentary that digitally brings Palestinians back into the Jerusalem neighbourhoods from which they were expelled in 1948).

Is this interplay between physical and digital space the same in traditional linear films? Whilst linear films can also marry physical with digital space, for example through participatory filmmaking processes, through "meet the director" Q&As, or through the immersive and participative cinematic experiences of Secret Cinema (*Secret*), we believe that i-docs offer a lot more scope for this. In fact, we believe that, among other characteristics, i-docs are digital platforms that represent, synthesise and bring together the majority of cinematic forms, strategies and performances that are dedicated to bridging the gap between spaces of vision, interaction and action. In this regard, Aston has proposed the term "emplaced interaction", which "marries the digital with the analogue to create shared experiences with elements of face-to-face and site-specific experience at their core" ("Emplaced"). This draws on Nicholas Bourriard's thinking around "relational aesthetics", foregrounding locality, place and the uniqueness of the live event as a strategy through which the collective encounter can contribute to meaning. It also opens up the possibility for these collective encounters "to create interventions which might help to inspire audiences to become active citizens, as opposed to passive consumers" (Aston, "Live" 234). "Might" is, however, the operative word here because none of this can be in any way assumed or taken as a given, as Claire Bishop has so appositely put in her critique of participatory art practices.

Since as far back as the early 1990s, from an anthropological perspective, Marc Augé talking about supermodernity has argued that: "we need to relearn to think about space" (36). With the advance of supermodernity (a term used to define the period more commonly known as late modernity), and the strong impact of resulting changes, Augé has suggested that the world we believe we live in does not necessarily coincide with the world that we inhabit and belong to. Hence, we need to learn how to see this world and to relearn how to think the space around us. One of the major concerns of ethnology "has been to delineate signifying spaces in the world" and societies identified themselves as "universes of meaning, of which the individuals and groups inside them are just an expression, defining themselves in terms of the same criteria, the same values and the same interpretation procedures" (Augé 33). Hence, nowadays it is impossible to exclude the digital space from the signifying spaces around it.

In this context, i-docs as digital spaces (and in contrast with more traditional media) are not simple, stable containers of events and relationships; they are not easy to "map", and do not have precise borders; rather, they are a dynamic net of temporal relationships. Furthermore, with i-docs the figure of the user/interactor is key in order to understand what happens in terms of modifications, alterations and interventions in the "space of action" of a specific project; in other

words, the user is a "figure that interacts with elements of the audio-visual text, building a context that is a space in which action, interaction, participation and communication take place, concurrently creating or altering the text itself" (Odorico, "Between" 218).

Time, space and relationships are interconnected variables that define a plurality of places (polyphony) in which we exercise our everyday practices, realised by the relation of proximity and negotiation (Certeau; Korsakow). This fits well with the idea of thinking about the role of i-docs as open systems, "which facilitate the ongoing process of creative improvisation that is everyday life" (Aston, "Live" 234; Ingold and Hallam).

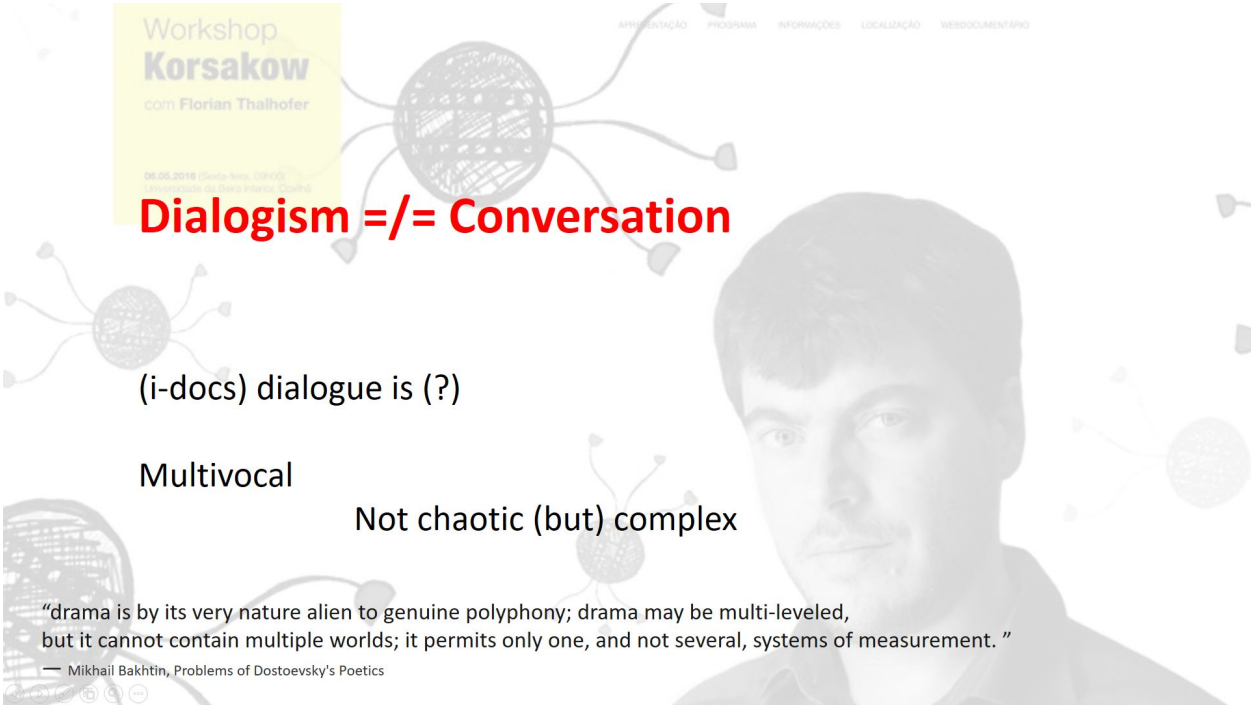


Figure 6: "Polyphony" Panel Slide 5, Aston and Odorico, *i-Docs 2018*.
Background image: *Korsakow* (Florian Thalhofer, 2000), korsakow.tv. Screenshot.

The slide in Figure 6 refers to Florian Thalhofer (in profile), and his keynote for the 2016 *i-Docs* symposium. As the inventor of the Korsakow system, Thalhofer passionately believes that drama is by its very nature alien to genuine polyphony. For him dramatic narrative, in particular Hollywood film, is having a detrimental effect on the way in which we see and understand the world around us and, as a consequence, on the way we create and tell stories. His opinion is that the linear and sequential nature of mainstream cinema has helped to fuel an over-reliance on causal thinking, which has not set us up very well for confronting the complex problems of the twenty-first century. Thalhofer's fear is that the dramatic structures that lie behind mainstream films, and the way in which the news is reported on TV, encourage us to see the world in terms of conflict. For him, this sets up an "us" and "them" narrative which risks entrenching us into the comfort of our own knowledge base, as opposed to making a genuine attempt to engage with complexity. This was the main tenet of his *i-Docs 2016* talk and a key intervention in the wider debates around i-docs as "tools for thought" at that symposium (Aston, "What Does").

As articulated on our slide, this leads us to the idea that i-docs dialogue is multivocal, not chaotic but complex. It builds on Bakhtin's view that "drama is by its very nature alien to genuine polyphony, drama may be multileveled, but it cannot contain multiple worlds; it permits only one, and not several, systems of measurement" (*Problems* 34). In this sense, we can say that it is the predominance of certain tropes, such as that of the hero's journey (Campbell, *Thousand*) and the three- or five-act structure that have become both the greatest strength and the greatest limitation of mainstream filmmaking.

Whilst some would use Levi-Strauss's conception to argue that the hero's journey is a "deep structure" (*Structural*) common to all humanity, it could also be argued that it is in fact a "surface structure". This approach could see the hero's journey as a form of cultural imperialism (albeit a successful one) that Hollywood, the BBC and beyond have enthusiastically embraced. It could certainly go on to say that there are other ways to look at narrative, other literacies that can be learnt, and other tools that we can use to engage with narrative. Such a view is not to deny the power of hero-journey narratives, such as for example the *Star Wars* saga (Campbell, *His Life*), nor is it to say that they are intrinsically bad. It is, however, to say that there are other ways too, and that they all have their place in the mix of available strategies, tools and techniques.

Whatever the case, our provocation here, in line with Florian Thalhofer, is that i-docs have more capacity than linear film to contain multiple worlds, opening up more possibilities for movement across different perspectives, both within and between texts. I-docs can also be a powerful means through which to facilitate a shift between self and other, and between the subjective and the objective. If we see these concepts as being less about opposites or binaries and more about intertwingled connections, then it might help us to find new ways to understand the world and our place within it.

Sharon Daniel has also written about this in relation to the idea of "doing cultural democracy", in which she references Catherine Stimpson's introduction to *Whose Art Is It?* saying that "doing cultural democracy demands … the incessant recognition of the moral, cognitive and cultural lives of others" (165). She goes on to say that "the participant's statement is a self-articulation that unfolds in a polyphony of speaking subjects" (166). This commitment to polyphony, as a means through which to enact democracy, is at the heart of much interactive documentary practice and is a key point to acknowledge when looking at the philosophical underpinning of much of the literature that surrounds it. We too align ourselves with democratic principles and are enthusiastic about Habermas's concept of the "public sphere", though we do acknowledge that, at a "meta" level, a truly polyphonic approach would put democracy into dialogue with other systems. We should also note that Bakhtin, who was originally writing against the backdrop of Stalin's Russia, was not formally introduced to Western discourse until the 1960s.

The new slide in Figure 7 was introduced to further develop a key point about interrogating the multiple. At the *i-Docs as Research Method* workshop held by the University of Bremen and organised by Stefano Odorico in May 2017, Ersan Ocak, drawing on Umberto Eco's concept of open work, discussed the need for embracing multilinear and plurivocal tracks in conducting research, as well as the need to engage in participatory, cocreative, scientific collaborations. He suggested that also the single scientist should give up her/his disciplinary authority. In other words,

this is a call for bridging borders in research methodologies and ways of approaching processes of conducting research.



Figure 7: "Interrogating the multiple". Aston and Odorico. Background image: *Highrise* (initial release 2010) by Katerina Cizek, NFB. Screenshot.

In this regard, the cocreational, interactive potential—the shift from the representational paradigm to an experiential paradigm—becomes an asset. This shift enables the user/interactor to enter into a dialogue with material: all interactants are pushed to more "performative engagement"—a process in which all become cowriters, coauthors, cocreators, comakers, coeditors and, in the end, coresearchers.

The Open Work by Umberto Eco is significant, in terms of i-docs, for its powerful concept of "openness" (39)—in other terms, the artist's decision to leave some components of a project to be modified or created by the public or by chance—which anticipated two major themes of contemporary literary theory: multiplicity and plurality in art, and the interactive process between reader and text (a key factor in the field of i-docs).

How Complex Are Complex Systems? by Herbert Simon characterises complex systems in terms of similarity: "Systems in which there is much interdependence among the components are generally regarded as more complex than systems with less Interdependence among components. Systems that are undecidable may be regarded as complex in comparison with those that are decidable" (507). It is important to remember that (very) often we define complexity in terms of structure only. However, "complexity may lie in the structure of a system, but it may also lie in the eye of a beholder of that system. Even when a system is 'inherently' simple" (Simon 508). In other words, in some cases the complexity is just in the human mind.

What is interesting and useful is to define the concept of complexity in relation to the subjects/actants of a specific project. In general, in each i-doc and at a dialogical (Bakhtinian) level we witness an "intertwingled" dialogue between all elements of an i-doc; however, this dialogue is not chaotic. In other words, the dialogical act brings order into this complexity and facilitates what we can call intervention, knowledge exchange and so forth.

The psychologist and designer Donald Norman also makes the point that complexity does not have to be complicated (*Living*). This is a crucial point when designing and working with complex systems. For Norman, bad design complicates things unnecessarily and confuses us, but good design can tame complexity without needing to deny its existence. This distinction between the complex and the complicated is a key factor to consider when thinking about to design i-docs which embrace polyphony and heteroglossia.

Furthermore, this additional slide drills deeper into the concept of multiplicity as a way of analysing multivocality. Within the i-docs field of work this could be identified in a number of different ways, including: multiplicity of aesthetics; multiplicity of narratives; multiplicity of authors; multiplicity of realities; and multiplicity of screens.

In relation to the *multiplicity of aesthetics*, identity and structure that characterise i-docs, it is fundamental to acknowledge that it is the Bakhtinian dialogism that recognises the multiplicity of perspectives and voices. Dialogism is also referred to as "double-voiced" or "multi-voiced" and is a principle that often becomes the main referent of a particular aesthetic field. According to Bakthin, each subject has his/her own world, but it relates to and interacts with those of other characters. In other words, aesthetics is deeply connected to interaction. The aesthetic experience of an i-doc is a product of the relationships among all the different elements that compose it (polyphony). Our role as active participant (at any level of participation) in any system we enter, or we are part of, introduces a nonlinear and unpredictable input that generates a predictable result: complexity (Kemp).

In relation to the *multiplicity of narratives*, it is important to consider also the concept of pluralism (as a number of different options). This duality pluralism/multiplicity allows the author to create stories with multiple narrative patterns, which is a common characteristic in i-docs. From a postmodern perspective, in an attempt to deconstruct existing fixities and rules, the author also creates multiple narrative styles of representation.

The Bakhtinian concept of dialogue is pivotal in differentiating monologic narrative from polyphonic narrative. The former can be described as a narrative that unifies several consciousnesses through the structured interaction of their relationship in the function of one, single consciousness. The polyphonic narrative implies that the unity of several consciousnesses is constituted by their interdependent interaction in relation to each other and as independent entities, of which the consequent diversification is the unifying totality (Malcuzynski).

The *multiplicity of authors*, widely discussed throughout the article, is another key issue within i-docs. It is often described as the mere collaboration between authors, or the complete freedom of authorship, or no author at all. The Bakhtinian novel (one of the few media he could analyse) is a fixed form which ultimately gives primacy to the author. What would Bakhtin have

made of the possibilities of i-docs, where the author can genuinely become a context provider or even an enabler? In these terms, orchestration and responsibility are still required to give artistic integrity and coherence. A good example of this, as mentioned before, is the interactive project *Question Bridge*, which has a collaborative model of authorship and provides a very clear set of guidelines for contributors to create and upload content on the project's website.

The *multiplicity of realities* is another concept that needs to be considered. In a "documentary studies" context, through the use of interactive digital media we are able to create documentary experiences that capture multiple visions of reality (which include all of Nichol's modes of describing documentary) or, using Gaudenzi's words, "multiple reality" ("Exploring") that characterise our contemporary world. In other words, the multiplicity of reality helps us to generate a dialogical sense of truth by presenting a multilayered reality. In *Problems of Dostoevsky's Poetics*, Bakhtin describes how in the novel, instead of a single objective world held together by the author's voice, there is a plurality of voices and consciousnesses, each with its own world. Hence, the reader is not exposed to a single reality as presented by the author, but, rather, to a number of realities depending on how they appear to each character of the story/stories.

Traditional linear documentaries embody a physical and emotional perception of the moving pictures seen on the screen. For interactive documentaries designed mainly for the web, the screen differs from the traditional cinema screen. This is not only in terms of size, location or use but, above all, in the different approach that the user/viewer has to it. A computer screen and increasingly numerous portable device screens are more personal than collective (as the old term Personal Computer suggests); they are technologies that, unlike TV sets or cinema screens, need and indeed "imply physical interaction" in order to operate (Odorico, "Documentary" 242). The *multiplicity of screens*, in this context, resides in the multitude of available screens and the possibility of using one or more at the same time. I-docs can juggle multiple devices, using them in a way that does not limit or confuse the process of vision but, on the contrary, implements and completes it.

In general, multivocality and multiplicity can both be associated with, and derived from, multitude. However, we have to make clear, especially through the lens of provocation, that this multitude must be contextualised within complexity and not defined as conformism, sameness or unity. Rather, it operates in a sort of "common condition" that requires "that no differences of nature or kind divide the multitude" (Negri and Hardt 105–6). In other words, it is a democratic polyphonic system that generates dialogue among different systems.

Back to the panel itself, as part of the opening of the "i" in i-docs, the slide in Figure 8 proposed the term "intertwingled" as an expression of the complexity of interrelatedness of human knowledge with which i-docs can and should engage. It comes from the American philosopher, sociologist and pioneer of information technology Ted Nelson, who also coined the term hypertext.

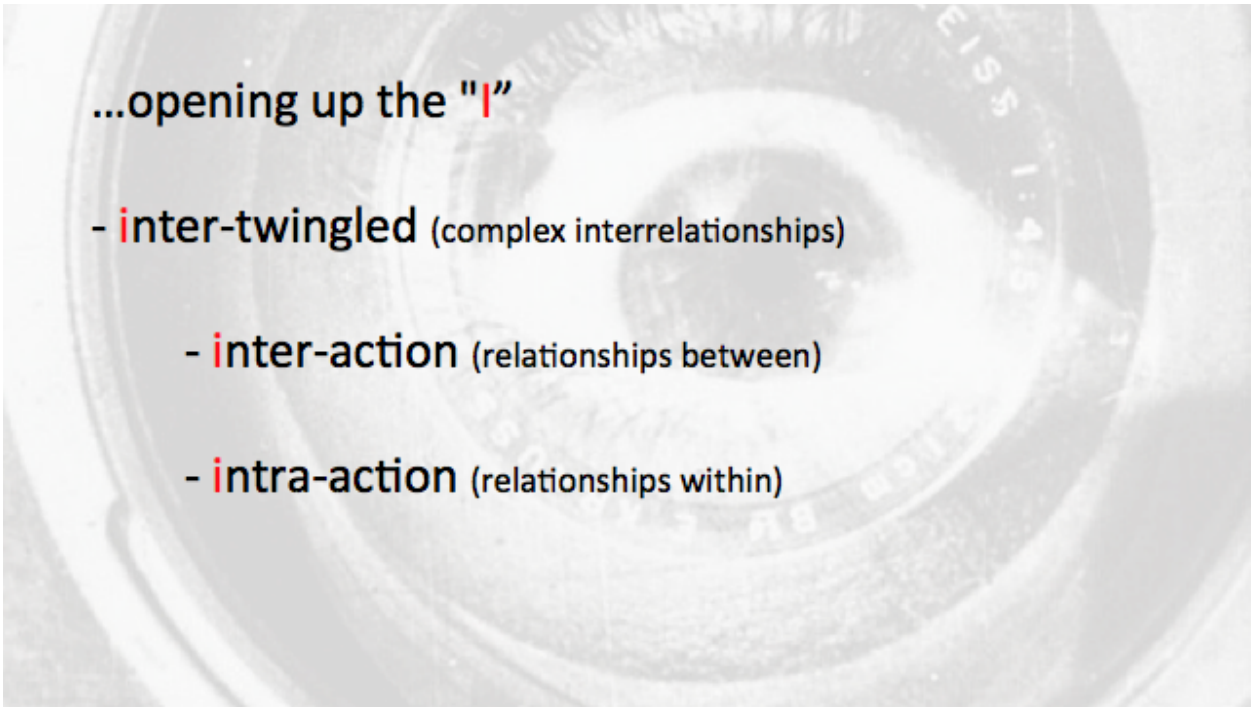


Figure 8: "Polyphony" Panel Slide 6. Aston and Odorico. *i-Docs 2018*.
Background image: *Man with a Movie Camera* (Dziga Vertov, 1929).

Nelson wrote in *Computer Lib/Dream Machines*: "EVERYTHING IS DEEPLY INTERTWINGLED. In an important sense there are no 'subjects' at all; there is only all knowledge, since the cross-connections among the myriad topics of this world simply cannot be divided up neatly" ("Computer Lib" 45; emphasis in the original). He added the following comment in the revised edition: "Hierarchical and sequential structures, especially popular since Gutenberg, are usually forced and artificial. Intertwingularity is not generally acknowledged—people keep pretending they can make things hierarchical, categorizable and sequential when they can't" (*Computer Lib* 31, rev. ed.).

Nelson's lifelong endeavour has been to create *Project Xanadu*, a digital repository scheme for worldwide electronic publishing that could change the world and the way we see, access, and connect information. Key to this is the idea of "WYSIWYNK" (What You See Is What You Could Never Know) as opposed to the current use of "WYSIWYG" (What You See Is What You Get) (*Computers*). WYSIWYNK for Nelson makes the links between information visible as opposed to hidden. Werner Herzog interviewed him about his vision in *Lo and Behold* (2016), his film about the reveries of the connected world, and Nelson's *Computers for Cynics* series expands on this.[5] Whilst Nelson takes credit for inventing the "back button" in the interview with Herzog, his Xanadu system goes much further.

Our proposition here is that two interconnected terms "interaction" and "intra-action" should sit underneath intertwingled, with the one not precluding the other but, on the contrary, with both working together synergistically. Interaction, which refers to Ted Nelson's original vision for hypertext ("Interactive"), can be seen in terms of a conversation, a cyclic process in which two actors alternatively listen, think and speak, while intra-action refers to Karen Barad's

concept of mutually entangled entities, which leads to collective agency along with a loss of cause and effect, individual agency and subject–object duality. In the spirit of being able to shift perspectives within an i-doc, in fact, we see no reason why the two cannot work together. Each concept impacts on the other in various ways. In general, and especially for an i-doc, when we navigate an interactive project, platform or environment we intra-act in response to our interactions. This is because our actions make the different elements of the project intra-act with each other, with this process affecting, and often dictating, how we approach subsequent interactions. In relation to interactive software, Lev Manovich asserts that:

> On the one hand, interactive software adds a new set of capabilities shared by all these media types: editing by selecting discrete parts, separation between data structure and its display, hyperlinking, visualization, searchability, findability, etc.) On the other hand, when we are dealing with a particular digital cultural object, its "properties" can vary dramatically depending on the software application which we use to interact with this object. ("There Is")

Elsewhere, he also explains that, "[w]hen a user interacts with a software application that presents media content, this content often does not have definite finite boundaries … Its content changes and grows over time" (Manovich, "How to").

We see this as relating directly to Ted Nelson's definition of interactive software as "events on the screen that affect the hearts and minds of the user and interact and have consequences" ("Computers"). Hence, it is useful to break down the term intertwingled into two main conversational areas of analysis: inter-action and intra-action.

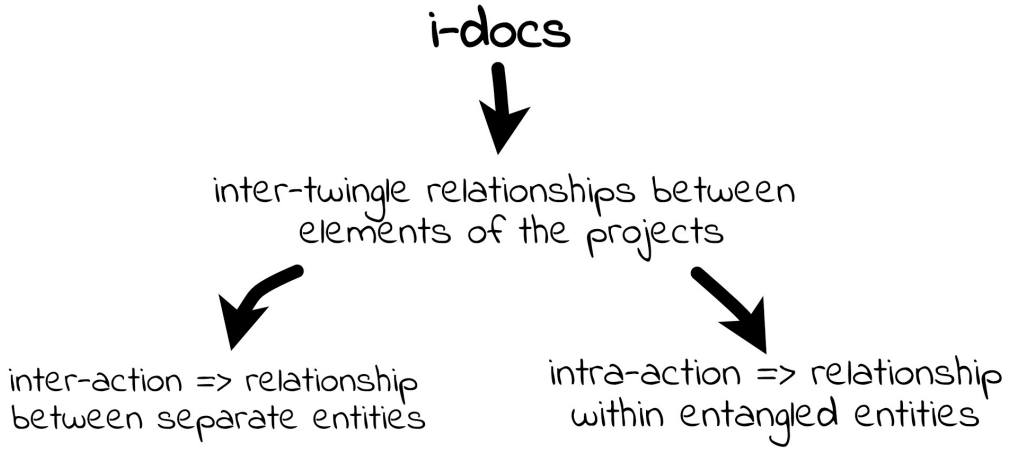


Figure 9: Inter-twingle, inter-action. Aston and Odorico.

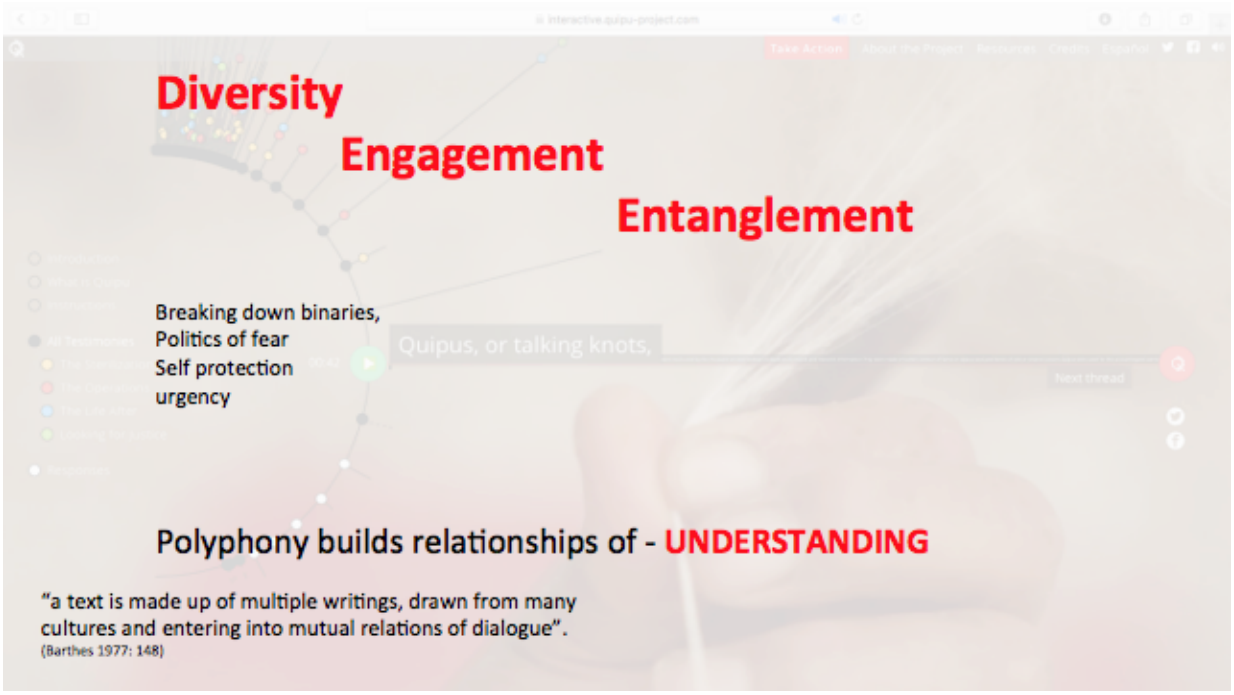


Figure 10: "Polyphony" Panel Slide 3. Aston and Odorico, *i-Docs 2018*. Background image: *Quipu* (Chaka Studio, 2015) interactive.quipu-project.com. Screenshot.

Following Bakhtin's path on polyphony and its multifaceted nature, there are three other related aspects that we would like to bring up, again as provocations:

- Diversity
- Engagement
- Entanglement

These three terms refer directly back to the concept of heteroglossia, the main purpose of which is to draw special attention to the process of utterance as socially, politically and historically entangled with the voices of others. All this is also about building relationships of understanding within a specific complex system and environment. What we would like to point out here is the idea of urgency in our contemporary society; urgency for a need for diversity and for an understanding in terms of inclusion.

Polyphony and heteroglossia build relationships of understanding, as do i-docs projects. I-docs contain elements of all three of these keywords, which work together in complex digital systems in order to support and often improve the narrative structure. Going back to the "road", the Bakhtinian chronotope expresses this entanglement as an inescapable fact of social existence. It is the "bridge" between two worlds, one of authorial reality and the other of the imagined time-spaces of the created text (Clark and Holoquist 279).

In these terms, it is interesting to notice that maps are often present in i-docs: geographical maps, mind maps, interfaces, interactive menus (which "map" the website/project), etc. in other words, any diagram or collection of data showing the spatial arrangement of something over a specific area of engagement. They help on the chronotope-ical "road"; namely, they help the interactors in seeing, perceiving and navigating the space, encompassing both physical and virtual space.

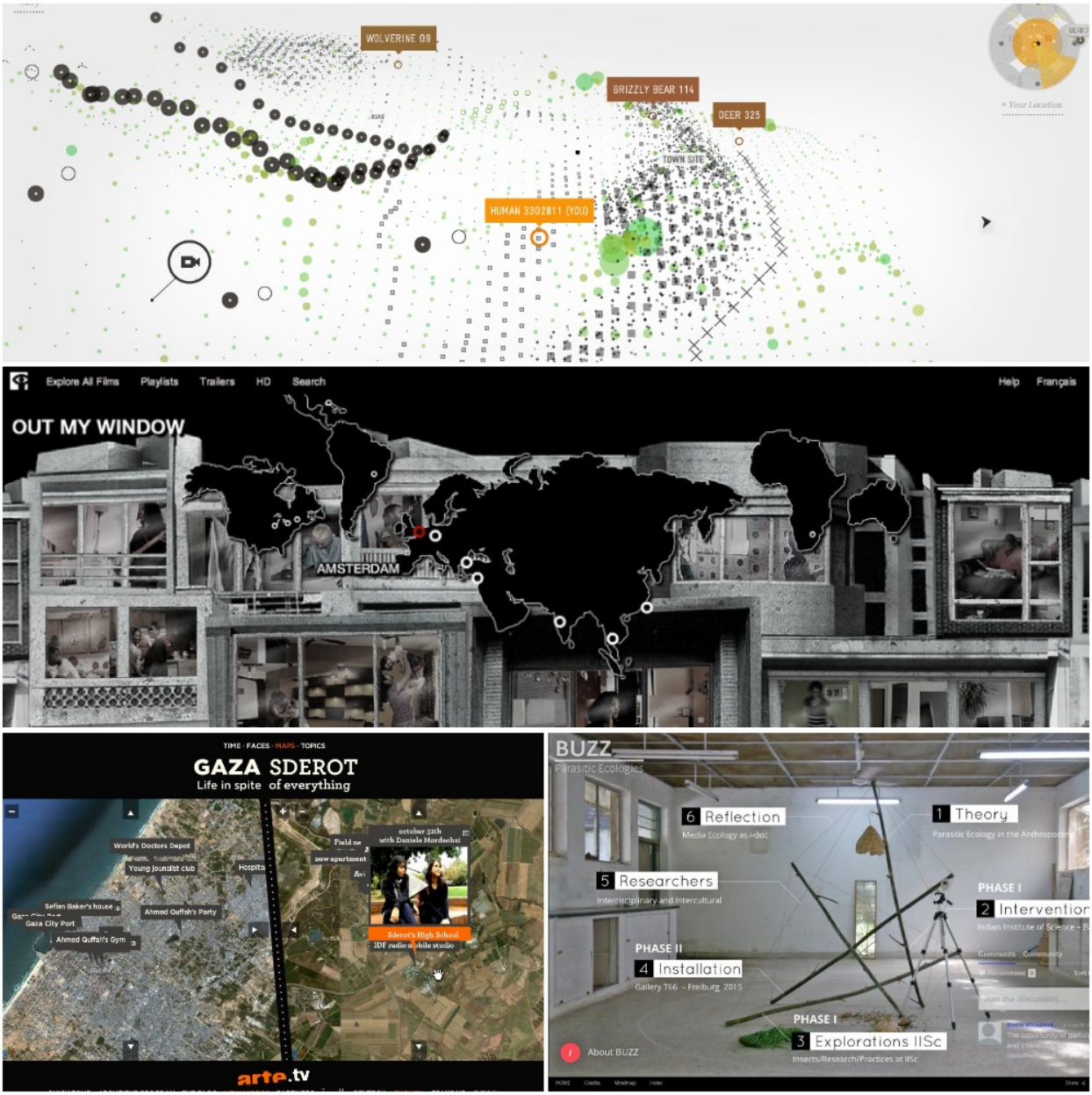


Figure 11: Collage of i-doc maps. Top: *Bear 71* (2012); middle: *Out My Window* (2010); bottom left: *Gaza/Sderot* (2008); bottom right: *BUZZ* (2015). Screenshots.

Or, simply, "maps" are substructures that facilitate the navigation within complex i-docs; making them comprehensible, as opposed to overwhelming. To be more precise here, i-docs can be considered not only as "roads" but as the "crossroads" of many kinds of media experiences. It is also worth remembering that i-doc projects present the user interactor with a space to be traversed, to be mapped out by moving through it. As Manovich points out, this is common in videogames (Manovich "Navigable").[6]



Figure 12: "Polyphony" Panel Slide 8, Aston and Odorico, *I-Docs 2018*.
Background image: Book cover of Ted Nelson's *ComputerLib* (1974).

Figure 12 is an image from Ted Nelson's 1974 book *ComputerLib*. In it, Nelson urged people to understand computers now, as one day they would be as important as the Gutenberg Press in terms of the new ways of thinking, doing and being that they would enable. In line with Douglas Rushkoff's more recent comments on how we tend to apply the skills we have learnt from engagement with previous media to our engagement with new media, Ted Nelson's great disappointment is that, thus far, hypertext is more like paper than computing. In other words, the hypertext that we know is a bi-dimensional entity with a limited structure of possibilities based on old media design (Herzog).

Nelson's original vision, alternative to the concept of hypertext, is what he calls "transclusion" (Wolf). In Xanadu's structure, a link is a connection between elements that are different, while a transclusion is a connection between elements that are the same. This is somehow similar to how the Korsakow system described previously works in terms of links and internal structural connections. In general, in books, cinema, television, radio and most forms of traditional media, the truth is dependent on a good and positive story. Convincing lies are remembered (see the problem of fake news, for instance) while factual and less sensationalistic refutations are easily

forgotten. However, according to Nelson, in Xanadu this problem is solved: "Transclusion and freedom to link are crucial to social progress, the programmers argued, because otherwise, the constant mutation of a discussion 'would destroy selection by leaving criticisms behind'" (Wolf).

As mentioned before, at the end of our session at *i-Docs 2018* we invited a number of practitioners to enunciate their own personal "provocations". From the ensuing open discussion between us, the practitioners and the public, we identified a list of keywords that we consider vital in order to further develop a theoretical approach (not exclusively in relation to polyphony) within the field of i-docs. Our intent is to relate this theoretical approach back to practice, to engagement with making and producing/designing i-doc work, and to considerations of what impact this can have on the world.

These keywords are:

Responsibility - Negotiate Change - Accept Complexity - Exclusion - Methodology - Juxtaposition - Context - Storytelling - Equality - Cacophony - Understanding - Agency and Power - Censorship - Power of Sound - Public Intervention - Mobilisation - Economics of Polyphony - Compromise - Audience - Form and Style - Reality and Truth - Technology - Visual Culture.

These keywords, which begin to consider the problematics as well as the possibilities of polyphony within i-docs, will be referred to below.

Conclusion and Pointers for Further Research

As previously mentioned, this article does not aim to be an exhaustive analysis or even a direct application of Bakthin's concept within an i-docs context. It is rather intended as a collection of well-thought-out ideas on how Bakthin's philosophy, from a very broad perspective, can essentially be applied in its entirety to the i-doc form to create a stronger theoretical framework of analysis for it and, as a consequence, to generate new methodologies for research.

Starting with the keywords, several of them address a key problematic that was articulated around the application of polyphony to i-docs. This relates to issues of responsibility, exclusion, equality, agency, power and the economics of polyphony. These issues refer to the unequal power relations that often exist within i-docs projects. Whilst the intention behind polyphony is to create "a plurality of unmerged voices and conciousnesses" (Bakhtin, *Problems* 6), the idea that these voices are in equal dialogue with the author/s was felt (quite rightly) to often be an ideal as opposed to an actuality. This is because there is always context behind who gets to initiate i-docs projects, who is able to participate and/or collaborate in them, how these production processes play out, and how the results (ongoing or otherwise) are disseminated.

This opens up many further questions about authorship within i-docs, for instance, who the orchestrators of a project are, and whether these orchestrators need a degree of power in order to actually make the projects happen. It also brings i-docs into dialogue with well-established debates within relational and dialogical art practices (e.g. Grant Kester) and was the reason why Claire Doherty, as founder Director of Situations (one of the UK's foremost producers of public art

projects that grow out of place) was invited to deliver a keynote on her work at *i-Docs 2018* (Bristol, UK, 21–23 March 2018). Doherty is a firm believer that successful projects very often do require an orchestrator or a core group of orchestrators ("Imagine"), and within the i-docs world, there is an abundance of examples of this (e.g. *Highrise*, launched in 2010, a series of interactive projects from the National Film Board of Canada about vertical living, orchestrated by Kat Cizek; *Question Bridge*, a participatory investigation into black male identity in contemporary America, orchestrated by orchestrated by Chris Johnson, Hank Willis Thomas, Bayete Smith and Kamal Sinclair; *The Shoreline* [2016], an interactive documentary about the dramatic changes playing out along our global coasts orchestrated by Elizabeth Miller). This dialogue with relational art practice feels very fruitful and we hope that it will continue, as these issues need careful appraisal when considering the application of polyphony to the i-docs field. As such, it is a crucial issue for further interrogation.

This also relates to the implicit sharing of values that underlies much i-docs practice: the desire to celebrate diversity and openness, and to find a forum for dialogue which promotes democracy and the concept of the public sphere. This issue came up through keywords like public intervention, reality and truth, and mobilisation. It should be acknowledged that these values come from documentary intent, as much as from the medium being used, and that whilst i-docs may lend themselves to these approaches, they most certainly should not claim an exclusive right to it. Also, i-docs can be used in other ways too, and a genuinely polyphonic approach should recognise this. As ever, much depends on context and on the nature of the collective encounter. "Filter bubbles" within social media have shown us that we may think we are engaging with diversity and multivocality when in fact we aren't at all (Pariser). We can all too easily labour under the illusion that we are open minded and accepting of plurivocality when in fact our version of plurivocality can be much more monovocal and reinforcing of power structures than we may care to admit. Whatever the case, these are questions that require a degree of honesty and openness, not to stop us from acting but to keep ourselves in constant check around the problematics as well as the possibilities of polyphony as they relate to i-docs.

Another important keyword that problematised the possibilities of polyphony within i-docs was cacophony; namely, the idea that the openness and multivocality of i-docs needs careful orchestration if its interventions are to be meaningful to audiences beyond those who are already involved in the project. Amir Husak's response to this during the panel is worth quoting in full:

> As a practitioner when I think about polyphony specifically, one of the main features of polyphony is that it maintains the independence of its individual voices and merges them without actually blending them. Then, there always exists a problem which I'm facing in my practice: (again I'd use the musical analogy here) that it becomes cacophony not polyphony. It's very difficult to distinguish between what's a signal and what's noise, especially for someone who is engaging with these types of projects I feel that there's a fine line there. Maybe I would understand this practice as something that Fredric Jameson, 20 years ago, called cognitive mapping—understanding the totality actually. We're looking for this aesthetic, to be able to understand this matter through this polyvocal engagement, so to say. I would understand it still as a search for this aesthetic. (In Aston and Odorico)

As with linear documentary making, the role of an editor could be crucial here, as well as the need for sympathetic design which works with the content, bearing in mind leading i-docs producer Alexandre Brachet's comment during the *i-Docs 2011* Symposium that design is an integral part of the content (Aston and Gaudenzi 130). The importance of audience research was raised as a key point too, building on Kate Nash's research into how audiences engage with i-docs in ways that are often far from what was intended by the authors/orchestrators ("Strategies"). Whilst the user-centred design model helps to pre-empt this problem, it is still fair to say that many i-docs fail to engage a good number of their end-users. Perhaps this is down to poor design or perhaps it is because we are thinking about them in the wrong way. As tools for thought, or hybrid research tools through which we can explore complex ideas as opposed to expecting to be delivered a specific ideas or arguments, is perhaps where the power of a polyphonic approach to i-docs lies. If this is the case, then perhaps we should not be comparing them with great works of literature or with our favourite films, as they serve a different purpose—one that is closer to the community engaged relational model of art practice.

This obviously raises issues in relation to Bakhtin, who was writing about the power of the novel. It puts i-docs into a different context, which can draw on Bakhtin but which needs to extend and develop his ideas to establish their usefulness and relevance to the i-docs field. This is clearly an area for further research that we hope this article has begun to open up.

In response to these keywords and problematics, we wish to close by proposing three main areas for further research in the field of i-docs from a more theoretical perspective: "heteroglossia", "carnival" and "aesthetics". We believe that this will help the field to develop further and to extend the dialogue between theory and practice, with a view to creating stronger synergies and fruitful ongoing discussions. Furthermore, we see this as an opportunity for collaboration, reflection and creation. We hope that these three areas of research will be embraced, analysed and utilised by and beyond the i-docs community in potential future discussions.

Heteroglossia

> Heteroglossia, like mirrors that face each other, each reflecting in its own way a piece, a tiny corner of the world, force us to guess at and grasp for a world behind their mutually reflecting aspects that is broader, more multi-leveled, containing more and varied horizons than would be available to a single language or a single mirror. (Bakhtin, "Discourse" 414–15)

In this article we have articulated heteroglossia as building relationships of understanding within a specific complex system and environment. This builds on Bakhtin's point that "no word is without its intense sideward glance at someone else's word" (*Problems* 202). It was this that led Bakhtin to develop his ideas about polyphony into a more general theory of "heteroglossia" to denote the presence of a multiplicity of voices and a diversity of social speeches and styles in polyphonic and dialogic forms of the novel (*Dialogic*).

While in this article we did not go in any depth into the relationship between polyphony and heteroglossia as it might be applied to i-docs, we believe this is an area for further exploration and research. Given that Bakhtin's heteroglossia relates to the "primacy of context over text"

("Dialogic" 428) drawing the authoritative into question and allowing what was once considered certain to be open to interpretation, this is surely a perfect match with i-docs.

Indeed, pertinent examples of heteroglossia, can be found in several i-doc projects. In particular it is worth mentioning: *Quipu* (an interactive documentary which provides the tools for the people affected by a brutal forced sterilisation program in 1990s Peru to tell their stories in their own words), *Filming Revolution* (an experiment in translating complex experience created by Alisa Lebow, which refuses to frame and box in any simple notions of the Egyptian revolution of 2011) and *Korsakow* (a software tool for engaging with complexity through the creation of browser-based dynamic documentaries). In *Korsakow*, the orchestrators that take the narrative decisions, once the content is put into the system, can be a combination of both humans and the computer itself. It is up to the human designer of the system to decide on this balance and an interesting research development of this could be the use of Bakthin's power structures to examine how the orchestrator's levels of control can affect interaction and intra-action.

It is also worth mentioning here that the author has, at the same time, to "speak" (produce) and to receive one or multiple utterances, responding to them and anticipating future ones. In this participative process, "any understanding is imbued with response and necessarily elicits it in one form or another: the listener becomes the speaker" ("Speech Genres" 68)

Carnival

> Carnival is not a spectacle seen by the people; they live in it, and everyone participates because its very idea embraces all the people. While carnival lasts, there is no other life outside it. During carnival time life is subject only to its laws, that is, the laws of its own freedom. It has a universal spirit; it is a special condition of the entire world, of the world's revival and renewal, in which all take part. Such is the essence of carnival, vividly felt by all its participants. (Bakthin, *Rabelais* 7–8).

For Bakhtin, carnival is passion, laughter and openness leading to a type of communication that is aimed at creating an "atmosphere of freedom, frankness and familiarity" (*Rabelais* 15–16). The carnival, therefore, innovatively constitutes "a place for working out, in a concretely sensuous, half-real and half-play-acted form, a new mode of interrelationship between individuals" (*Problems* 123). His carnival is complex and multivocal, it "brings together, unifies, weds, and combines the sacred with the profane, the lofty with the low, the great with the insignificant, and the wise with the stupid" (Bakhtin, *Problems* 123).

His account of carnival is criticised by some authors, such as Max Gluckman, Victor Turner and Roger Sales, for ignoring carnival's temporary character. For such critics, carnival is a kind of safety-valve through which people let off steam. It ultimately sustains, and is functional for, the dominant system. It might even reinforce dominant values by contrasting them with their opposites. James Scott responds that, if this were the case, the powerful would be more sympathetic to carnival than was actually the case. Also, carnivals did, in fact, sometimes pass over into rebellion. And rebellions often used symbolism borrowed from carnival.

Indeed, we believe that carnival can inspire people and be a trigger for ongoing transgression, when needed—even if only through small acts of subversion in everyday life from within. Or, put more liberally, that carnival is an essential part of a democratic/"open" society, where barriers of age, gender, nationality, class and so forth can be broken down, if only for a short time. This creates a spirit of openness, a sense of equality, and an ideal scenario through which Bakhtin's ideals around polyphony and heteroglossia can be rehearsed and played out in life as opposed to fiction. I-docs surely have a contribution to make to this discussion about carnival, one which is absolutely worthy of further development as an ideal that might never be fully achieved but which is worth pursuing nonetheless.

Aesthetics

As a final note, it is obvious that "aesthetics" is a key element that deserves further research development within the i-docs field. Bringing it back to the main theme of polyphony, the link to Bakhtin here is very clear. Bakhtin offers a theory of singularisation that relies on the interaction between aesthetic "reality" (as perceived), ethics and the "real world". In the 1920s, he mentioned it as "ethico-aesthetic kindness toward the other" ("Art" 56). From this, aesthetics becomes (also thanks to Félix Guattari's proposition of the "aesthetic paradigm") a wider field of production of value, and not only meaning, as often we tend to treat it. In this search for an aesthetic understanding of i-docs, or more precisely interactive documentary, the digital perception opens the way to new forms of aesthetic experience. This is, in other words, an evolving aesthetic sense that spreads within our society, giving birth to new cultural manifestations. This aesthetic sense also linked to evolving literacies and is surely an urgent and important topic for further investigation in these volatile times.

Notes

[1] Aston has been working with polyphony through her ongoing collaboration with the Oxford anthroplogist Wendy James (Aston, *Interactive*; Aston and James; Aston, "Direct"; Aston and Matthews) and through her curatorial work as a founding director of *i-Docs* (*i-docs.org*). Odorico has been working with polyphony, collaboration and i-docs since his PhD (Odorico, "Documentary"; "Interactive"; "Between") and his latest research project will culminate with the publication of a book on the aesthetics, issues of distribution (and preservation) and polyphonic methodologies of research for the i-docs form.

[2] See Rose ("Not Media") for an in-depth analysis of this project.

[3] In *Rabelais and his World*, Bakhtin explains the concept of carnivalesque ("folk-humour") as a speech-genre/form that takes place within a number of different of cultural contexts and reality, in particular in carnival (as we know it) itself. A carnival is an event in which things are permitted. It is a performance, a communal one with no boundaries between performers, audience and the performance itself. In some contexts it becomes a ritual and, in general, is used to send a positive message and vision (no hierarchies, satire, equality etc.). However, notwithstanding, our acknowledgement that contemporary, or post-modern, carnival is not the same as Rabelais's

medieval carnival, as the context has changed. Given this, aspects of contemporary carnival can be seen as a carefully orchestrated money-making machine or indeed an instrument of state control.

[4] Stefano Odorico's forthcoming book *The Interactive Documentary Form: Aesthetics, Practice, and Research* points the way towards addressing this, with our collaboration aiming to consolidate and extend these common interests.

[5] See Ted Nelson's *Computers for Cynics*.

[6] "In contrast to modern literature, theater, and cinema which are built around the psychological tensions between the characters and the movement in psychological space, these computer games return us to the ancient forms of narrative where the plot is driven by the spatial movement of the main hero, traveling through distant lands to save the princess, to find the treasure, to defeat the Dragon, and so on. As J.C. Herz writes about the experience of playing a classical text-based adventure game Zork, 'you gradually unlocked a world in which the story took place, and the receeding edge of this world carried you through to the story's conclusion.' Stripping away the representation of inner life, psychology and other modernist nineteenth century inventions, these are the narratives in the original Ancient Greek sense." (Manovich, "Navigable").

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