Chapter 1 – Rethinking Interactive Practices as Cultural Artifacts

This introductory chapter outlines this dissertation's object of study—interactive practices about migration—and proposes a specific methodological approach. I suggest studying interactive practices as "cultural artifacts." This methodology encourages us to see how the archaeological work of excavating a site might be helpful in rethinking how we analyze and understand the media ecology of interactive practices about migration. In contrast to traditional media archeological approaches, I do not engage with the materiality of what is discontinuous, and perform a Foucauldian operation of finding ruptures within taken-for-granted, "progressive" narratives about media history. I am not trying to find the new in the old by studying early cinema nonfiction practices; nevertheless, media archeologists' previous findings already tell us that interactive practices concerning migration are not a completely new form. After delineating my methodology, I will provide an overview of current scholarship, which focuses on interactive practices such as interactive documentary (i-docs), webdocs, serious games and newsgames, and interactive maps and data visualizations. More specifically, I will engage with those thinkers that first identified practices at the intersection of new media, games and documentary practice.

1.1 The Importance of Context

Artifacts, explain archaeologists, are "humanly made or modified portable objects" (Renfrew and Bahn 2004, 53). When we analyze these artifacts using the methods of classical archaeology, our engagement with the physical object itself—such as a piece of pottery—is just one part of our work. That is, "ecofacts" like soil composition, its layering (the archaeological record) and the discovery of any other biological remnants and traces, are as important to the process as the recovery of pottery, stones, or other building materials.[1] While focus is placed heavily upon artistic or physically valuable findings—such as coins, statues, jewelry, documents, etc.—archaeologists also make use of cameras, GPS systems, and physical and chemical analysis methods and tools to understand context.[2] And the meaning of this context has been central to the development of archaeology.

In Italy, the discipline, which was initially a branch of philology, and later developed in art historical institutes, found new terrain in the 1970s, when a number of young archaeologists began to develop new methodologies. Andrea Carandini, for example, was the first[3] to work on and study context. He did not discard any artifact or finding, but instead focused on what was found "under, in front, behind or around the

1 Colin Renfrew and Paul Bahn in their manual about Archaeology explain that "the work of Grahame Clark and other pioneers of the ecological approach has demonstrated [that] there is a whole category of non-artifactual organic and environmental remains, sometimes called ´ecofacts´- that can be equally revealing about many aspects of past human activity." (2004, 53)

2 The context is understood as a composition of matrix (the material which encloses the "artifact"), the provenience (how the finding is positioned in the matrix) and the association with other findings. (Renfrew and Bahn 2004).

3 Here I refer to the Italian´s academic scene. Carandini was a pupil of Ranuccio Bianchi Bandinelli at the Università la Sapienza in Rome. Together, they proposed excavating and studying materials discarded by conventional scholarship. They were inspired by neighboring disciplines studying protohistory and from other scholars working in the British context. Carandini talks about his experiences in a book entitled *La forza del contesto* (2017).

artifact." (Carandini 2017, Premessa, my translation) The discipline was further broadened by the adoption of other methodologies, like typology, stratigraphy, and topography. Archaeologists began to understand that they had to apply a different analytical process to each finding, and the artifact itself determined this choice. In so doing, they used their material findings as the basis with which to reconstruct the dynamics of a site[4].

As others have pointed out, traditional archaeological methodologies are useful to the study of film and media.[5] For example, in a recent volume on media archaeology published in Italy, Diego Cavallotti and Simone Dotto argue that both media archaeology and classical archaeology share an interest in the everyday use of media/artifacts (2019). They trace back the use and meaning of an "archaeology" of media by redrawing Thomas Elsaesser's position, and distinguish efforts in scholarship to excavate media masterpieces from the past that have been forgotten or left unseen, and the intention to bring to light whatever is emerging from the "dust". They discuss Carandini's archaeological methodology and argue that an excavation of the past must begin by acknowledging that "each finding has its own materiality" (2019, 33, my translation). This operation, argue Cavallotti and Dotto, suggests that no media should be discarded. In this way, their understanding of media archaeology is less Foucauldian than it is classical. This means performing an archaeology which aims to understand the cultural ecology of a past culture, its material conditions, and the relationships between productive processes and a habitat (ibid). The authors foreground the materiality of media, and view it as a way of:

4 In anthropology around the same time Clifford Geertz would also popularize a similar approach for research using the concept of "thick description." ([1973]2008)

5 See, for example, *Media Archaelogies* (2017), in which Piccini collects essays by both media archaeologists (such as Wolfgang Ernst, Jussi Parikka, and Wintrhoup-Young) and classical archaeologists, in order to compare their practice of study and object analysis.

> renewing media history, focusing on technical/technological materiality issues, the materiality of conditions of production and consumption, and the materiality of the media environments where interactions between agents take place. (Cavallotti and Dotto, 2019, 36, my translation)

Their work privileges the materiality of culture, and moves further toward a broader understanding of the "…ecology of a past culture" (ibid., 34). In sum, taking their cues from classical archaeology, the authors call for the integration of an ecological perspective into the study of media, that combines cultural artifacts—an object's material production—with the broader conditions of and different processes within a habitat.

Similarly, other scholarship in film and media studies has looked beyond the aesthetic value of a media object, and instead considering its use, as well as the context in which it is found (Hediger 2005). As Vinzenz Hediger and Patrick Vonderau argue, industrial films, for example:

> …cannot be divorced from the conditions of their production and the contexts of their use. Far from constituting self-sufficient entities for aesthetic analysis, industrial and utility films have to be understood in terms of their specific, usually organizational, purpose, and in the very context of power and organizational practice in which they appear. (Hediger and Vonderau 2009, 10)

If we consider a media object as a cultural artifact—that is, a product of cultural and material production—and thus as simply one discourse among many, it follows that we should, paraphrasing Carandini, look at what is "around, above and in front of it." (2017, Premessa, my translation) In short, an archaeological excavation combines different forms of analysis in order to compare an artifact with other findings and other excavations of historical sites. This, in turn, provides the archaeologist with a map of what the economy, the aesthetics, the culture and the social formations of a place looked like at the time. Over the last few years at the University of Mainz, and in the research group Configura-

tions of Film at the Goethe University of Frankfurt, I have integrated different approaches and methods. The attempt is to go beyond the notions of canon, index and *dispositif*, and instead focus on configurations that do not fall into the trap of dichotomies, such as quality vs. amateur, or artistic vs. commercial. In a similar manner to the work of archaeologists like Carandini, this approach not only opens up new fields of research, but also offers the possibility of new and more tailored methodologies, specific to the research objects in question. Works like *Useful cinema* (2011), or, in its German iteration, *Gebrauchsfilme* (Hediger 2005; Schneider 2004; Zimmermann 2011) overcome these binaries and concentrate on the context of production rather than simply the object and its aesthetic value. They argue that the role of institutions in generating discourses and other forms of knowledge circulation, the study of formats, and the role of media infrastructures are fundamental to understanding media. In my view, interactive practices are part of a habitat, as the media "archaeo-ecological" perspective of Cavallotti and Dotto suggests (2019). In short, my purpose here is not to show the value of a singular media object, but to uncover how these same objects frame social, cultural and economic practices and form a complex media ecology.

My work, then, which is reminiscent of an archaeological excavation, is not limited to past media cultures. I will show that such analysis can be performed on contemporary and recent media ecologies, such as interactive practices concerning migration. In this work I look at a contemporary cultural production that is in a state of continuous redefinition, and is in danger of becoming obsolete. This production is not artistic in nature: it does not aim to revisit the old[6], but rather to be "useful" in its production of a certain discourse about migration.

If archaeologists are concerned with "processes that determine, over long periods of time, what is left and what is gone forever." (Renfrew and Bahn 2004, 53) then my objects of study are also fragments of the processes that determine what, even over short periods of time, are likely to disappear forever. In my work, I am not only interested in the aesthetic

6 as Erki Huhthamo (1995) does in "Resurrecting the Technological Past."

value of what is left behind—the domain, typically, of art historians and philologists—but also in the use and materiality of everyday media—especially that which is outside of the canon and/or what is about to be discarded. Although I will focus on very recent cultural products, interactive practices are, by virtue of their design, ephemeral, and caught in a cycle of transformation and decay. Consequently, we can view them as evidence of a historical and cultural process.

1.2 Interactive Practices as Cultural Artifacts. How to Examine Context

In the field of media studies, the use of the term "cultural artifact" is not new. For example, Jonathan Sterne, in his study of the audio format mp3 as a "cultural artifact," argues that an "mp3 is a crystallized set of social and material relations." (Sterne 2006, 826). When we look at interactive practices from the perspective of their materiality as software, an attention to format-specificity is also useful. These standards are often the result of economic, institutional, and technological relations. Therefore, in order to understand interactive practices as cultural artifacts, I will study them as both material and technological artifacts. This means not only viewing them as media objects, but also as part of a broader media ecology. In other words: "context."

In this vein, the school of cultural analysis looks at cultural artifacts as products of a complex process. As Mieke Bal argues "cultural production is a process" which includes "cultural artifacts" as its resulting products (2013, 8). Bal further notes that the question of context is often invoked in the study of cultural artifacts. She thinks in terms of "framing." (2013) She writes:

> Context is primarily a noun that refers to something static. It is a 'thing,' a collection of data whose factuality is no longer in doubt once its sources are deemed reliable. 'Data' means 'given,' as if context brings its own meanings. The need to interpret these data, mostly only acknowledged once the need arises, is too easily overlooked. The act of

> framing, however, produces an *event*. This verb form, as important as the noun that indicates its product, is primarily an *activity*. Hence, it is performed by an agent who is responsible, accountable, for his or her acts. […] 'framing' as a verb form points to process. (ibid. 6)

The school of cultural analysis teaches us that, if we wish to understand the complex process of cultural production, we must start with the object. However, I want to argue that we might persist with the concept of "context." Archaeologists know that what they are looking at in their layers of excavations is not a static context, but a dynamic and temporary coagulation of events. Correspondingly, when we study contemporary media ecologies, our understanding of context itself is a dynamic process. That is, if I want to study interactive practices as cultural artifacts, it is imperative that I consider how they frame and how they are framed by different discourses and material and social infrastructures.

Media ecology is also concerned with the notions of context and infrastructure. This perspective, whose origins date back to the work of Harold Innis and Marshall McLuhan, argues that we need to study media as systems. For example, Innis uncovered the role of communication in the development of empires and societies (1951). "Context" from this viewpoint, then, indicates a set of relationships and infrastructures, and a dynamic system in which media objects form only one part (Granata 2015). I concur with John Durham Peters' analysis of media, which emphasizes habitats: "Media are our infrastructures of being, the habitats and materials through which we act and are." (2015a, 15)

To understand this system—or "context"—it is therefore crucial to investigate the deeper or hidden dynamics of a media object's circulation, as well as the economic discourses and structures that surround it. This is not simply a question of format and software, then, but also the discursive infrastructures in which media objects are embedded. As Parks and Starosielski point out: "media infrastructures are material forms as well as discursive constructions. They are owned by public entities and private companies and are the products of design schemes, reg-

ulatory policies, collective imaginaries, and repetitive use" (Parks and Starosielski 2015, 5).

To study interactive practices about migration as cultural artifacts means viewing them both as media objects but also as part of a larger context and broader media ecology. Indeed, when studying interactive practices about migration, we need to question the consequences of using a specific technology—and how that affects circulation and access—as well as understand how this broader ecology is shaped and made part of a larger humanitarian infrastructure. This is why the study of infrastructures is useful in understanding cultural artifacts in their dynamic context.

Durham Peters terms this "infrastructuralism," (2015a, 30) and defines infrastructures as being both "hard and soft." (Ibid. 32) He goes on to explain: "dams and websites, highways and protocols are equally infrastructural. There can be lightweight and portable as well as heavy and fixed infrastructures." (Ibid.) Adopting this view, this dissertation not only looks at visible and hard infrastructures, like those created by humanitarian aid, but also micro-infrastructures such as format, and the material structures of interactive practices. I also want to look at invisibly connected infrastructures, which can also be described as a "discursive formation[s]." (Foucault 1972) Indeed, studying interactive practices about migration also means analyzing the "infrastructures of humanitarianism." That is, I am interested in the way interactive practices supports and frames humanitarianism as a discursive formation.

Here, an archaeological analogy can help articulate the structure of this project. It will look at a dynamic system—the media ecology of interactive practices about migration—through an in-depth analysis of its elements (the cultural artifacts) and the ways in which they interact. I will first adopt a "morphological" approach, and study the artifacts' individual appearance, form and technology. However, before proceeding to a deeper excavation, I must "core" into the material site. That is to say: I interview makers, creators, developers and archivists, in order to receive insider insight that might help me to excavate further, and to prepare appropriate methodological approaches. This interdis-

ciplinary methodology is a response to the sheer formal variety of interactive practices.

I will not construct a linear history of what has emerged, then, but a snapshot of what is constantly emerging. Aside from the different forms these practices take—whether that is a graphical interface, viewing mode or software—all of them can be understood as elements within a system, that cross institutional bridges and unify diverse producers and creators such as legacy media, TV broadcasters, independent artists or media companies, universities, and international governmental, or non-profit organizations. Media, as Peters suggests, shape us as we shape them:

> The crossroads of humans and things defines the domain of media studies. We are conditioned by conditions we condition. We, the created creators, shape tools that shape us. We live by our crafts and conditions. It is hard to look them in the face. In the grandest view, media studies is a general meditation on conditions. (Peters 2015a, 51)

When we view interactive practices about migration as cultural artifacts, we might first ask what is at stake when the humanitarian impulse intersects with interactivity? What does it tell us about the way humanitarian discourse marks social and cultural processes? How is a cultural artifact like an interactive practice about migration framed by institutional and technological infrastructures, and how does it frame other discourses?

1.3 Urgent (Inter)action. Contributing to the Study of Interactive Practices about Migration

In my research, I argue that these practices produce a media ecology which shares a "humanitarian goal." This goal is inherited from certain documentary filmmaking traditions; more specifically, Grierson's belief in the educational power of documentary, (over and above any aesthetic and creative potential). As Pooja Rangan highlights:

> "Grierson's prescription of these priorities as ideals for the emerging genre of documentary can be read as an impulse toward humanitarian media intervention at a moment of disillusionment regarding the integrity of global democratic structures: as Brian Winston notes, the 'suffering humanity' of 'social victims' is the most powerful legacy of the Griersonian school." (2017, 3)

Rangan explores what she calls the "humanitarian impulse" (ibid.) in documentary practices, specifically in participatory films, which claim to give voice to the most vulnerable among us. She argues that saving the lives of suffering individuals is the "raison d'être" for this form of documentary production. She goes on to explore how the question of vulnerability is made "urgent" or "immediate" in such media practices. Indeed, they produce an imaginary of emergency: "*Emergency thinking* institutes a humanitarian order of priorities in which saving endangered human lives takes precedence over all other considerations, including the aesthetics and politics of representation." (Ibid)[7]

The media objects that I will analyze have been released by UN agencies; non-profit organizations; public, private or independent broadcasters; artists, and independent companies. Some invite you to play the role of a journalist or a migrant, while others allow you to virtually "visit" a refugee camp. Some are structured by an unconventional viewing logic that requires an "active" user, while others use non-linear storytelling techniques and interactive visualizations of data sets. Creativity is medium-specific, but it is only a means to a larger end. The novelty of the interactive features represents a technological promise that bridges a gap in distance—or visibility. The projects share a humanitarian purpose, and an understanding of interactivity as "action-oriented."[8]

Interactive practices about migration demonstrate an ambivalent attitude towards their subjects. On the one hand, these media objects

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7 She refers here to both Calhoun and Scarry's ethical imaginaries of "emergency thinking." See Scarry (2011), and Calhoun (2008).

8 Rangan discusses Grierson's "humanitarian mission." (Ibid. 3)

offer a positive view of migrants and refugees, and emphasize their subjects' vulnerability, and the urgent need to do something about their situation. They address viewers as potential decision makers—that is, people that might make a difference or at least offer solidarity. However, at the same time, they reproduce a humanitarian discourse which sharply distinguishes between those who govern and those that can be governed. In other words: humanitarianism is another iteration of governmental rationality.

In order to effectively analyze interactive practices about migration, I aim to answer the question that Pooja Rangan poses about participatory documentary. Namely, I must interrogate: "what aesthetic, formal and narrative tropes are invented to generate sensations of temporal urgency and direct spatial presence?" (ibid. 4)

By analyzing interactives through the topic of migration from an epistemological perspective, I seek to provide an answer to Rangan's question. The interactive practices analyzed not only demonstrate a constant tension or bias in their communication of solidarity, but they also underline other trends in contemporary discourses concerning migration.

1.4 Scholarship on Interactive Documentaries and New Documentary Ecologies

Scholarship on so-called interactive documentaries and, more recently, on new documentary ecologies, originated in debates on "participatory culture" in the late 2000s (Jenkins 2008). In the early 2000s, faced with the popularity of YouTube and other Web 2.0 platforms, legacy media began to realize how important it was to reach customers that had stopped watching television or buying newspapers and instead sat in front of their PCs.[9] The Web 2.0 or "participatory Web" marked a historical shift, offering users the opportunity for direct participation via the World Wide Web. It provided two basic things:

9 For more information on Web 2.0, see Blank and Reisdorf (2012).

> There is the structure, provided by the platform, and there is the network effect, which emerges if large numbers of people find the platform valuable. Combined they create new content and much more, including new forms of user engagement, communication, and information gathering. (Blank and Reisdorf 2012, 5)

Witnessing the "network effect" in action, legacy media turned to the Web in search of audiences. For example, in 2007, German broadcaster ARTE released its first on-demand video service, and in 2008 produced the first example of a "webdoc"—a French term that mixes the words "web" and "doc" to describe a short web-based "documentary." (ARTE 2018, 43) This webdoc, released in weekly episodes, was called *Gaza/Sderot* (2008). The film made use of a split screen aesthetic to portray two sides of a story concerning Palestine and Israel. On the left side of the screen, we see interviews from people living in Gaza, and on the right side those from Sderot. The interviews provided a human insight into border stories. On the upper part of the ARTE webpage the user could switch to three other views: one featured a satellite image which pinpointed every interview location on a map; a second featured pictures of all the people interviewed; and a third used tags to direct the audience to specific themes brought up the interviews. This film represented one of the first popular iterations of the webdoc or interactive documentary.[10]

At the same time, a community of practitioners and scholars emerged in some documentary festivals such as IDFA (the International Documentary Festival in Amsterdam). These figures organized the first conference dedicated to the webdoc, which they included in the umbrella term "i-doc," or interactive documentary. As Judith Aston

10 There is no consensus about what was the first webdoc. Prior to this example, other Adobe Flash games were very popular. Further, some define interactive documentary not exclusively as a web-based media object. This means that we can find other examples even prior to or coterminous with the advent of the Internet. Herrero and Gifreu-Castells see the MIT project "Aspen Movie Map"—funded by ARPA in 1978—as one of the first examples of interactive documentaries (2019).

and Sandra Gaudenzi explained in an article that appeared in the 2012 issue of *Documentary Film*, the organizers of the first i-docs conference at the University of Bristol (Gaudenzi and Aston were among them) had already been working and meeting to discuss some emergent forms of digital documentary that emphasized user participation and interaction (Aston and Gaudenzi 2012, 128).[11]

Several i-docs conference participants contributed to the same 2012 *Documentary Film* publication, like Siobhan O'Flynn. She defined i-docs as media objects that are "often designed as databases of content fragments, often on the web, though not always, wherein unique interfaces structure the modes of interaction that allow audiences to play with documentary content" (O'Flynn, 142). She further argues that what distinguishes online documentaries is their "openness," compared to traditional documentaries which she defines as "presented in the final edit as a static closed artefact" (ibid. 149). I-docs, she argues, "can be open in form and practice, extending across multiple platforms, as expanding, interactive, porous and participatory databases." (Ibid.)

Aston and Gaudenzi pushed for a clear definition, and considered interactive documentaries to be "any project that starts with an intention to document the 'real' and that uses digital interactive technology to realize this intention" (2012, 125). Interactivity is, from their perspective, central to these media, and is defined as "a means through which the viewer is positioned within the artefact itself, demanding him, or her, to play an active role in the negotiation of the 'reality' being conveyed through the i-doc" (ibid. 126). As the authors clarify, they first met in 2009 in London at the Documentary Now! Conference. There, they found common ground because they had both worked in the field of interactive documentaries and noted that "over the previous two years there had been a real explosion of productions in the field (…) These were big projects produced for mainstream audiences leading to our conclusion that i-docs were no longer a niche form." (Ibid. 128)[12]

11 For instance, through the social network "meet up."

12 They mention projects by ARTE and the NFB: *Prison Valley* (2010) and Caterine Cizek's *Highrise* (2008-2015).

Scholars and practitioners involved in the i-docs community[13] borrowed some terms from hypertext studies, and "ergodic literature" or "cybertext" studies (Aarseth 1994) to point out that interactive documentaries were a form of non-linear narrative. The concept of non-linearity in i-docs (Aston and Gaudenzi 2012; O´Flynn 2012; Gifreu-Castells 2014) means that the story is not simply experienced as a linear plot progression from a start point to an end point, but it requires the viewer to interact with the digital environment in order to experience the story—literally to "click." Non-linearity, explains Aarseth (a literary theorist interested in Hypertext), belongs to the kind of literary texts that evolve not through a linear path but instead present "forking paths" or "a text which has no fixed sequence" (2003, 767). This means that the text is made of different blocks (which Aarseth calls "textons") and the reader chooses how to build his/her own narrative.

Gaudenzi, who had previously worked as a British TV broadcaster, was completing a PhD Thesis about i-docs at the time. Together with Aston, she published a taxonomy of interactive documentaries by looking back at Espen Aarseth's user functions in "cybertexts" (Aarseth 1994; 2003) and combining them with Bill Nichols' modes of representation (2001). According to the two authors, the four categories, or "modes of interaction," are the *conversational*, the *hypertext*, the *participative*, and the *experiential* (Aston and Gaudenzi 2012; Gaudenzi 2013). These categories are based on the user's agency. In other words, on what the user is able to do in the digital environment. This taxonomy follows others proposed by scholars from Spain (Gifreu-Castells 2011) and France (Broudoux 2011). Nevertheless, as Aston and Gaudenzi explain, one of the reasons they attempted to develop a taxonomy was to try to define i-docs or webdocs as a *genre* (2012, 133). Moreover, they hoped it would give it the status and authority necessary to build a business model (O'Flynn 2012, 151).

The scholars and practitioners who took part in the first i-docs symposia met not only to define a genre but also with the intention of re-

13 A website was created in order to connect every scholar involved, and publish articles on the topic. See http://i-docs.org/.

thinking nonfiction storytelling through interactivity. (Interactive) storytelling is a keyword often used for understanding i-docs from a narrative perspective. Storytelling alone defines not the story itself or the plot, but the process of its telling (Brownwen 2016). Interactive storytelling suggests that the reader's—or viewer's—active engagement defines the way we tell a story. As aforementioned, in "non-linear" texts, the construction of the sequences of the narration is not fixed, but is controlled to a certain extent by the user. William Uricchio, researcher and principal investigator at the Open Doc Lab at MIT in Boston,[14] argues that: "rather than thinking of narrative as an overarching structure of the entire experience (whether Aristotle's or Freytag's 'beginning, middle, and end'), it can instead be understood as the building blocks of an experience, each with its own cycle of 'exposition, transformation, and resolution'." (2019, 81)

Uricchio's belief is that technological changes and developments can offer more insightful ways of understanding and re-telling reality. He takes as one of these first visual laboratories and examples the so-called *actualités*. After that, he continues, Cinema Verité and Direct Cinema made use of new technologies—such as lightweight cameras—to experiment with new perspectives, in the process developing cinematic language that both fiction and non-fiction filmmakers have borrowed. A change, highlights Uricchio, is taking place (again):

> The documentary, long underappreciated for its transformational impact on film form, is again offering new ways of representing and intervening in the world. Only this time, rather than simply using new techniques to represent social change, the documentary form is itself the subject of social and technological change." (Ibid. 73)

14 This lab is specifically devoted to the experimentation and study of documentary forms through the use of new and innovative technologies. They state: "Drawing on MIT's legacy of media innovation and its deep commitment to open and accessible information, the MIT Open Documentary Lab brings storytellers, technologists, and scholars together to explore new documentary forms with a particular focus on collaborative, interactive, and immersive storytelling." (MIT Open Documentary Lab n.d.)

New techniques of composition offered by i-docs aka interactive documentaries thus challenge the traditional narrative form. Janet Murray has argued that narrating a story on a computer device means designing it using a procedural method (Murray 1997; 2011). That is how narrative becomes not only an "overarching structure" that should be followed, but, following Uricchio, an amalgam of "building blocks of an experience" (2019, 81). Murray proposed a vision for the future of narration in her seminal work *Hamlet on the Holodeck* (1997). In it, she compares what she calls the "computer medium" to film, and attempts to rethink, from the perspective of a storyteller, what features this might entail: "it is important first to identify the essential properties of digital environments, that is, the qualities comparable to the variability of the lens, the movability of the camera, and the editability of the film, that will determine the distinctive power and form of a mature electronic narrative art." (Murray 1997, 70)

One of the features Murray discusses is "procedurality," or the ability to express meaning through rules. Rules are, in this case, related to the way interactive media are being coded. Coding entails a set of procedures. The other essential properties of digital environments are the participatory, the spatial and the encyclopaedic (ibid. 72).[15] Narrative in computational objects offers users not only to follow a singular arc, but opens the possibility to negotiating its progress. By offering users a certain level of agency in the development of the story—or paraphrasing Uricchio, in choosing which building blocks to use to construct the narrative—interactive documentaries challenge (like other nonlinear texts) another notion of documentary filmmaking: that of the author. Authorship is not fixed, but can be negotiated. Siobhan O'Flynn reconsiders the documentary form in the light of i-docs and other interactive nonfiction, and argues that they borrow from web 2.0 the potential to empower audiences: "as networked communities who can intervene, cri-

15 If procedurality (meaning making through rules) and participatory features (the ability to interact with content) can make an environment interactive, the encyclopaedic (the possibility of unending information) and spatial (the ability to navigate a space) can create immersive stories. (Murray 1997, 91-94)

tique and occasionally mobilize in response to the calls of action embedded in documentary´s re-representation of real-world crises." (2012, 148)

Sandra Gaudenzi, in contrast, argues that for i-docs there might simply be a different expression of authorship. In other words, the director or creator becomes a "facilitator." (Gaudenzi 2014, 141) It is not clear if Gaudenzi ignores the debate on the death of the author[16] on purpose, but there is nonetheless validity to her argument. Leaving aside the implication that the viewer is a passive subject, what Gaudenzi aimed to do was providing useful categories for working filmmakers. The scholarship behind i-docs is, in fact, often practice-based, and the need to provide categories and to talk about modes or forms of negotiating authorship is directly addressed to filmmakers and creators—especially those that wish to engage the audience with interactive elements in their work.

But if we take into account the fact that meaning is constructed by readers, viewers, users or spectators, does this mean that i-docs simply materialize this process of negotiation? What if the films' non-linear storytelling is merely evidence that linear narration is not the norm, but is instead just an option? This is one reason why i-docs and interactive practices represent interesting objects of study. But this is not the only reason. Indeed, a problem that Aston and Gaudenzi address was also what to expect from the documentaries in the future. They also foreground other long-held assumptions, "blurring prior divisions between fiction and non-fiction, text and paratext, director and audience," as O'Flynn explains (143).

These assumptions though might as well be discarded by looking at the past. Other scholars, in their research into earlier media cultures, have also highlighted similarly complicated discourses on narrative. William Uricchio, in a project collaboration between MIT and

16 Roland Barthes first brought this to light in his essay, (Barthes 1967) but others have discussed the meaning of the author, for instance Foucault has written about authoriality in terms of discursive practices, arguing that the author might be seen as a function (See Foucault 1969).

IDFA Doclab, developed "Moments of Innovations," a participatory website that connects new interactive projects with their "ancestors," looking as far back as the prehistoric Age.[17] Early cinema, or the "cinema of attractions" (Gunning 1990) represents a similar visual laboratory in which experimentation with narrative, format and aesthetics, was the real standard. Uricchio, for instance, investigates VR stereoscopic vision and spectacle in early cinematic experiments with panoramas (2011). Contemporary technologies such as (digital) virtual reality applications and visors designed specifically for VR experiences are therefore not part of a new impulse, but of a historically situated practice. These past media cultures shows how contemporary interactive practices might be part of a specific moment of media-technological redefinition.

Constant technological change challenges scholars' definition of i-docs as a new genre of interactive nonfiction storytelling. If in 2012 i-docs still sought a PC-desktop distribution, the progressive shift to new and mobile formats encouraged some scholars to adopt software scholar Matthew Fuller's contention that we should look at these practices as "a dynamic system," (Fuller 2006), in "which the parts are multiply connected and interdependent" (Nash, Hight & Summerhayes 2014, 2). In other words, despite the efforts of several scholars to categorize interactive documentaries, Nash, Hight and Summerhayes argue—and I agree—that a totalizing vision is simply not possible due to "the sheer diversity and rapid rate of change" (2014, 3). Nevertheless, this effort was useful in creating not only new scholarship about this "undefinable" genre, but also in rethinking previous traditions in documentary film and more broadly in the "creative treatment of actuality" (Grierson 1946, 147). I-docs and other interactive practices once again challenged certain assumptions around media knowledge, especially those concerning linearity in storytelling and authorship. Patricia Zimmermann, a scholar who has worked on documentary film, home movies and amateur films, has also recently explored the "openness" of the documentary form on the web. She calls for a media ecological perspective in order to understand how the "creative treatment of actuality" (1946,

17 For more details: https://momentsofinnovation.mit.edu/.

147) is being negotiated. She argues that: "documentary cannot be reduced to one form or a set of practices. Rather, it may be more productively thought of as a continually evolving constellation of practices across many different technologies that investigate, engage, and interrogate the historical world." (Zimmermann 2019, 1)

In other publications, Zimmermann suggests looking at documentary today not as a "monoculture," but rather as a "heterogeneous documentary ecology" (2019, Introduction). She attempts to situate documentary within this ecology of different practices such as algorithms, media, archives, video art, gaming, user-generated projects, etc. She also sees it as an evolving and dynamic ecology which is entangled with different contexts of production, circulation and social relationships (ibid). In order to study this ecology effectively, she suggests reverse engineering each media object with the purpose of "identifying the components and interrelationships of [its] system" (ibid). What is notable about the practices she analyzes is the potential they have to invert established historiographies, to dismantle and refuse them, and to mobilize in their place new imaginaries (ibid).

This political potential is most visible in the democratic openness of interactive documentaries framed as "participatory" practices. Aston and Gaudenzi also refer to this potential when they write: "i-docs that follow a hypertext, a participative, an experiential or a conversational logic will vary in terms of their look and feel, but also in terms of their political impact." (2012, 135)[18]

18 That being said, two years after the first i-doc conference, in 2014, Kate Nash—also part of the Bristol research group—writes again about interactivity and argues that "there is no necessary connection between interactivity and audience empowerment" (2014, 53), although producers and makers often celebrate interactives, especially Virtual Reality and 360° videos, as a potential vehicles for change.

In another recent publication Zimmermann, together with the i-docs community, argues for the i-doc's potential "polyphony," (2018) using Mikhail Bakhtin as a theoretical crux.[19] She writes:[20]

> Polyphony derives from Baroque music: it designates the layering of melodies to produce new sounds and new relationships. New media documentary moves from the monophonic of one voice and one argument toward the polyphonic of many voices, many strategies, many technologies, many interfaces, and many iterations. Like Baroque musical forms, polyphonic new media strategies are generative. (Zimmermann 2018, 9)

Zimmermann, Aston and Odorico embrace this notion of polyphony and propose a model for i-docs that emphasizes a plurality of voices and media strategies, which might, in turn, "dismantle monumental national master narratives and instead configure an open multivocal mosaic generated from the dialogic." (2018, 14) In a similar vein, Amir Husak considers i-docs as tool for activism. Discussing certain examples, Husak argues that "these new technologies, dominated by immediacy and accessibility, are particularly suitable for projects that aspire to mobilize for action, engage with communities and challenge central power structures" (Aston and Odorico 2018, 3). But he acknowledges that in order to mobilize for action there is still a need for "utopian thinking' " and an "awareness of the paradoxes of new technologies." (Husak 2018, 28-29)

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19 In the editorial, they explain that 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." (Bakhtin quoted in Aston and Odorico 2018, 1)

20 In another contribution Zimmermann talks about polyphony "as elaborated in postmodern and postcolonial historiography as a model structured in heterogeneity" (2017, 57), and "as a strategy to turn historical explanations away from causality, linearity, and unity, elements often linked to hegemonic power which minimizes differences." (2017, 59)

Although these utopian ideals are important for practitioners and makers, they have long been critiqued by those that do not believe in a purely democratic and open use of technologies (such as, for instance, software studies scholars). Further, I would argue—and Zimmermann has discussed the same problem—that this is not a valid approach for every participatory and interactive project.[21] It also depends on who is responsible for the production, how these "polyphonic" voices are implemented, where it circulates and in what way. As aforementioned, scholars such as Pooja Rangan criticize the "immediacy" or urgency of documentary practices. In contrast to this utopian or perhaps even positivistic belief in the use of technology, giving a voice to the vulnerable with the intention of empowering them might also reinforce the power structures that polyphonic strategies wish to dismantle. The question is to first identify and distinguish the structures of power (and also the infrastructures) which might be challenged, inverted, demolished—even if in a utopian way. Scholars that believe in the political potential of interactive practices emphasize therefore not the question of interactivity per se, but how we make use of interactivity in order to construct a counter-narrative.

1.5 The Corpus of Interactive Practices about Migration: Viewing from *Within* and Viewing from *Above*

This work analyzes and studies ten to fifteen media objects, which I call "Interactive Practices about Migration." Although I refer to and approach them as a media ecology, I would like to stress that they were not selected because of their artistic value, nor can they be integrated into a "documentary" framework, as is the case with Patricia Zimmermann's conception of the term. Nevertheless, they share with i-docs and

21 She is also aware that the realm of what she calls participatory new media and collaborative documentary is "built on collaboration, collectivity, engagement, politics, and process. And yes – she argues – it is idealized, romanticized, fantasized. " (Zimmermann 2019, Chapter 17)

open new media documentaries a common ground, which is the "creative treatment of actuality." (Grierson 1946, 147) We might also say that they belong to the realm of nonfiction, which means everything that is *not* fiction. Fiction comes from the latin "fictio" and means something that is made up, or constructed (*Lexico*, s.v. "Fiction"). The boundary, however, between fiction and nonfiction is not always clear, so I suggest framing my corpus of case studies as belonging only to a specific topic—that of migration. In this sense, it might be paraphrased as the "creative (and interactive) treatment of migration."

Looking at migration through an epistemic lens, I have chosen several case studies that claim to have a "useful" humanitarian purpose. They share with documentary practices a political urgency and an explicit social aim, but at the same time they are produced by a constellation of actors: public broadcasters, legacy media, independent companies, and UNHCR agencies. Interactive practices about migration are therefore entangled with different media and humanitarian institutions. Channelling Acland and Wasson's definition of useful cinema, these practices also "identify a disposition, an outlook, and an approach toward a medium on the part of institutions and institutional agents." (2011, 4) They can be seen, therefore, as "tool[s] that are useful, tool[s] that make, persuade, instruct, demonstrate, and…[do]…something." (Ibid. 6) It will soon become clear how this constellation of actors contributes to the production of a "scopic regime"—that is, a specific way of viewing migration, from *above* and *within* (Jay 1988). The practices wish to persuade or educate, while promising that they will make an impact. And the promise they carry is a technological and infrastructural one, which has a humanitarian bias. The two chapters titled "Views" are therefore dedicated to a close analysis of case studies, which either put the viewer in the shoes of migrants or refugees, or instead view migration as a historical, global and collective movement.

The first of this two views is what I call "A View from Within." This view addresses our moral sentiments by asking us to step into the shoes of "vulnerable" migrants, or to travel and witness a refugee camp. In chapter 3 I analyze this "View from Within" and study newsgames, serious games, interactive text-adventures. When discussing serious

games, newsgames and interactive practices that make use of certain game structures, I refer to studies about serious games, or persuasive games,[22] docu-games, documentary games or newsgames.[23]

Some game scholars explored the potential of games beyond entertainment. Ian Bogost first used the concept of "persuasive games," to analyze how computer games which deploy what he calls a "procedural rhetoric" might be able to persuade (2007, 28). The term "serious game" dates back to 1970s, when Clark Abt wrote a book about the use of games for training and education. He claims that such games have been produced since the 1950s "to illustrate… scientific research, to train professionals and to broadcast a message." (Abt 1971, 9) Jost Raessens, instead focuses on "documentary computer games or docu-games" using a semio-pragmatical approach borrowed from Roger Odin, and argues that games have both an educative and entertaining purpose (Raessens 2006). He has also written about what he calls "refugee games" (Raessens 2010). Using Lakoff´s idea of "framing." (Lakoff 1980, 2004) he argues that in such games the player activity could be seen as a political metaphor. Further, these simulations present complex issues in a way that may have an "impact on what players know, feel, and do about the issues addressed." (Raessens 2015, 258) Game scholars can be divided between those who approach games from a narrative point of view—with proponents often coming from literary faculties—known as the narratologists, and the ludologists, who study games for the specific structures that belong only to games (*ludus*), and who thus understand games as "simulations" (Frasca 2003). Yet, both believe in a game's potential beyond mere entertainment—that is, it can be a tool with which to discuss cultural and social issues. This potential is at the core of a certain independent production of games. Since 2004 the Games for Change Festival in New York is a venue that brings together game creators, producers and scholars in the name of change. In the "About Us" section of The *Games for Change* festival website, the organizers state: "[we] empower game creators and social innovators to

22 See Bogost (2007).

23 See Bogost, Ferrari and Schweizer (2012).

drive real-world change using games and technology that help people to learn, improve their communities, and contribute to make the world a better place." (Games for Change 2020)

In the name of this perhaps utopian sentiment, games are presented that deal precisely with the topic of migration, some of which will be analyzed more deeply in subsequent chapters. Here, the claims and promises of technology aim to create social impact. Indeed, the festival in recent years has become a place where game scholars discuss the political potential of these specific interactive media.

However, if we regard interactive practices about migration in general as "media for change,"[24] then we have to think precisely about what change they seek to achieve, and question the power structures that make this change possible. Games, like the utopian i-docs envisioned by Zimmermann et al., might possess the same potential to subvert established narratives by encouraging community participation and "inviting strategies of intervention in…power structures" (Zimmermann 2019, Introduction). But if i-docs undermine the author's position by foregrounding participation and enabling production outside conventional media outlets, a different strategy might be needed to implement the same activist agenda when it comes to games. In the case of computer games, for instance, Gonzalo Frasca argues that we should think about them as simulations—that is, not only as media objects of representation, but as media for simulating complex social systems and dynamic experiences (2003). Games, he suggests, can help us to rethink new futures: "simulation is the form of future. It does not deal with what happened or is happening, but with what may happen. Unlike narrative and drama, its essence lays on a basic assumption: change is possible." (Frasca 2003, 233)

We shall see in chapter 3 that serious games, newsgames and other examples of interactive practices I investigate do not always recognize or realize this potential. Frasca views games as works of art, but what

24 See, for instance, the institutions that connect journalists and creators under the banner of "media for change:" For instance: https://mediaforchange.org/, or http://www.media4change.co/.

happens when a humanitarian vision drives the creation of interactive media? Chapter 3 responds to this question.

Chapter 4, in turn, will interrogate those interactive practices that depict migrant trajectories and data about refugees on a global map over time, using interactive maps and data visualizations. Although only a few scholars have explored interactive maps (Adams 2018), the study of maps is part of a long tradition in critical cartography and other disciplines such as STS (Science and technology studies). Bruno Latour has argued that maps, like other inscriptions such as graphs and diagrams, can provide evidence in a "rhetorical or polemical situation" ([1990] 2011, 3) and enable those who own them to gain power over those that do not (ibid). Critical cartography in the 1980s made one important claim: maps are social constructions, and not objective representations of the world (Harley 1988, 1989; Wood 1992; Pickels 1992). In other words, they construct a specific vision over the world. Matthew Edney contends this vision of maps as mere representations by arguing that maps are processes as well. Following Edney, cartographic practice cannot be understood only as a transhistorical empiricist project; instead, different "modes"[25] have contributed to this discipline at different historical moments (2005). He claims that institutions and social organizations influence cartographic practice with their own "world view[s]." (Edney 1993, 2005) Edney, then, analyzes maps as part of a larger network of power relationships, and does so with recourse to Foucauldian terminology. In short, maps are "cultural artifacts." (Cosgrove 2007)

Media theorist Bernhard Siegert views maps as "media that are themselves agents of subject constitution." (2011, 13) From this perspective, maps are "sources of a history of representation and [can]not [be seen]…as representations in a history of intentions and their cultural conditions." (2011, 14) For Siegert, the point is to understand "what techniques of representation were part of power relations, and how the

25 Edney intends modes as a "set of specific relations which determine a particular cartographic practice." These relations are "cultural, social and technological." These relations govern a certain "production of space" in a historical moment (2005, 54-68).

very concept of the territory is related to those techniques and those power relations." (2011, 15) Map making is therefore a cultural practice that produces a territory as a political reality (ibid).

In the Chapter "A View from Above" I will explore how maps as interactive practices, combined with data visualizations, are produced through the use of satellites, software, etc. I wish to understand how interactive maps and data visualizations are entangled with the topic of migration, and how the kind of knowledge they produce depends on infrastructure and institutions. But also, in the name of the urgency of the "humanitarian impulse," I analyze how maps and data about migrants and refugees on a global scale become a humanitarian storytelling device (Rangan 2017). What happens when interactive maps pretend to show the "flow of migration?" What does it mean to see through a map? What does it mean to animate and collect data to produce maps of migration? Relying on literature from critical cartography, data visualization theory and design, chapter 4 investigates how migration intersects with this apparently empowered form of viewing.

1.6 Software Studies and the Challenge of Preserving Interactives

Studying interactive practices about migration means studying web-based software. Consequently, it also means examining how software is produced, circulated, and accessed on the web. Some idealize The World Wide Web as an open, de-territorialized space where communication is free. Nevertheless, despite its democratic-utopian origins, the Internet has undergone a process of privatization. The field of software studies has helped to uncover and problematize this process. We only need to think of the most popular Internet browsers—which belong to Google, Mozilla (which is not only a foundation but a corporation), Microsoft, and Apple. They dominate access to the World Wide Web (al-

though there are alternatives, such as the Tor browser).[26] As Wendy Hui Kyong Chun notes in her analysis of new media, Peter Steiner's famous comic strip, in which a dog surfs the Internet while claiming that "on the Internet, nobody knows you are a dog" is no longer true (2016). What has stayed constant is the Internet's open architecture, or material infrastructure, which was developed by Robert Elliot Kahn with a view to creating a packet radio system network called "Internetting." (Leiner et al. [1997] 2017, 5) This system used certain protocols to maintain more effective communication. Indeed, the TCP/IP architecture remains foundational to the Internet infrastructure that we know today: "a key concept of the Internet is that it was not designed for just one application, but as a general infrastructure on which new applications could be conceived, as illustrated later by the emergence of the World Wide Web. It is the general purpose nature of the service provided by TCP and IP that makes this possible." (Leiner et al. [1997] 2017, 7)

Critical software studies narrate the brief history of Internet infrastructure in a less promising and utopian way. On the one hand, visionaries, who hoped to share and democratize knowledge, were responsible for early projects. On the other, the protocols they created—as Alexander Galloway has stressed—may come to define new structures of political control (2003). Galloway redraws Deleuze's theory of the "societies of control." (Deleuze 1992) which, following Foucault, claimed that 17-20th century disciplinary societies are being replaced by control societies, where the performance of power is enacted not in enclosed spaces but in constantly mutating ones. According to Deleuze, the corporation has supplanted the factory as the prototypical enclosed space. For Galloway,[27] this movement towards a control society is defined by

26 The Tor browser is a portal to the so-called deep web, or dark web—the last communication tool where you can still be anonymous.

27 This "protocological control" (Galloway 2003, 8) is a combination of two different machines: the TCP/IP protocol, which allows a peer-to-peer non-hierarchical communication, and DNS, which is a decentralized hierarchical technology. DNS, for instance, translates a domain into an IP address using a top down process.

the invention of computer-mediated communication, which, since the 1980s, was not only sold to corporations, companies and research centers but also to regular consumers (2003).

The advent of the personal computer and the Internet is a moment where power becomes decentralized, but control still exists. Since Galloway (2003) wrote his critique of protocols, we have entered a new era of mobile communication. But the protocol system is still at work. New kinds of machines are being developed, such as API, or application programming interfaces.[28] Many interactive practices about migration use API, from Google, Facebook, etc. But even open web APIs, which allow anyone to forego code writing and embed an additional feature such as a map in a web page for "free," facilitate an exchange of data between a webpage visitor and the owner of the API (Galloway 2013). [29]

Complicated power relations like the above demonstrate that the Internet is more than simply a democratic equalizer. Correspondingly, despite the polyphonic promise of i-docs and web-based interactive practices, these media are embedded in infrastructures of power and control. This is why scholars such as Patricia Zimmerman are aware that what they are calling for is utopian, and perhaps, ultimately, out of reach. I think that any scholarship about interactive practices needs to look at media infrastructures critically. Media objects such as interactive documentaries or webdocs, docugames, and newsgames form an "ecology of emerging practices," that cannot be framed or enclosed in a single definite digital format (Nash, Hight, & Summerhayes 2014). Because interactive practices are software, access can only be granted via a certain standard/format. The question of format, which I will explore

28 I will discuss API in chapter 2.

29 Galloway is very critical of "open-source" code: "when Google or Facebook 'open-sources' resource x, it provides an API or 'Application Programming Interface' granting managed access to x. Let us not be fooled: open source does not mean the unvarnished truth, but rather a specific communicative artifice like any other. And in this sense one should never celebrate a piece of source code, open or closed, as a bona fide original text." (Galloway 2013, 9)

in chapter 2, is therefore fundamental. Formats, claim Jancovic, Volmar, Schneider: "can hence be regarded as specific sets of designed and negotiated features and functions that determine the aesthetic configurations of a medium, produce and reflect diverse relations of cooperation, and refer to different domains of application and models of monetization." (2019, 7)

Pioneering new formats often means breaking with established standards, while others become digital outcast in the chapter "(Digital) Outcast" I will study the use of Adobe Flash by interactive practices and its progressive deprecation. The change in formats and circulation is also the symptom of a redefinition of institutions involved in this specific media production. Stauff and Keilbach have described how television today rearticulates certain dynamics that were already at work in the era of network broadcasting (2011). They argue that "change" and "transformation" are specific features of how TV broadcasts operate. Broadcast and other producers of interactive practices, while opting for innovation become victims of technological media warfare. To keep interactive media circulating means to keep them accessible. Interactive practices highlight the tension between the new and the old, and the necessity to update and "to remain the same." (Chun 2016)

This exemplifies an important challenge against digital obsolescence. Interactive practices represent therefore a conundrum when it comes to archiving and preservation. Some institutions are starting to work towards a resolution, in order to preserve a part of web production which is otherwise destined to vanish or to be stored as mere "source code." In 2016, the IDFA Doclab invited a group of experts from different international institutions to discuss the problem[30] (Verbruggen 2017). In 2017 they co-organized a conference at the Phi

30 Following Verbruggen, he explains: "We asked these archivists, curators, publishers, developers, professors and producers to look at three specific cases. The goal being to lay out the options that exist for keeping this creation alive for the future and come up with a clear-cut project plan." (2017)

Centre in Montreal called "Update or Die."[31] In chapter 2, I will more thoroughly explore how certain institutions such as the Sound and Vision Institute in Hilversum and the National Film Board of Canada are trying to preserve web-based interactives for future generations. This chapter looks at the materiality of these media objects and their "vulnerability." By looking at their economic and software infrastructures, I seek to understand the effects of this complex network of discursive and material infrastructures on practices of archiving today. How can we look towards the future of interactive practices? What can they tell us about reshaping the way we preserve and constitute media as memory?

1.7 Why do Interactive Practices about Migration Matter?

As I have already outlined, this work is structured like an excavation. That is, I understand interactive practices to be "cultural artifacts." This selection of nonfiction media objects contributes to broadening the scholarship of documentary film studies. It does not aim to continue the tradition of documentary film as art, but instead goes beyond the canon by looking at examples which are "useful" productions. It thus inherits different scholarly traditions, such as those accounts of industrial non-fiction film history labelled "Gebrauchsfilme", such as Yvonne Zimmermann's work on Swiss industrial film production (2011). This chapter has thus offered a methodology for the analysis of what I call "interactive practices about migration." I prefer to use this term precisely, in order to broaden my approach and create a heuristic vantage point: to look at these practices as media objects that form part of a broader media ecology, and to understand their systems of production and circulation. I do all this before categorization, and before discarding the finding, and thus pay attention to what is under,

31 This dissertation also faces this issue, and suggests that there needs to be a crucial bond between media practices, their formats, economic models of production, the preservation process and memory itself.

in front, and behind it. We have to understand how they are affected by migration and humanitarian infrastructures that often determine their existence. If media studies is, as Durham Peters argues, "the crossroads of humans and things" (2015a, 51) and "a general meditation on conditions," (ibid., 51) then this work reflects on the conditions of interactive practices about migration.

The title of this work points to the "migratory" dynamics at stake: on the one hand the nonfiction media production's shift to web-based circulation, and on the other, the topic of human migration. This strategy of choosing migration as the subject with which to frame my corpus allows me to define the site and thus the limits of my excavation. As its title suggests—this dissertation is interested in mobility. this accelerated—and yet for some, decelerated—movement is part of what we might call globalization. This is a world where a new condition of mobility affects not only goods, but also, and especially, people. It is also a world where speed affects humans and things unevenly. In this world of "liquid modernity" some people "move and act faster, those who come nearest to the momentariness, are now the people who rule" (Bauman 2013, 119). Whereas others are "forced" to take a long, risky journey to reach a space where they might be given a decent life, or they are doomed not to move at all. Zygmunt Bauman compares refugees, displaced people and other "homines sacri," (Agamben 1997) to the "waste of globalization." (Bauman 2004, 58) And if refugees may remain forever in this unfortunate position, media and other goods that fail to circulate can become waste or return to source code, or might be discarded if there are no preservation practices in place.

This work will thus focus on the context in which interactive practices about migration were made, in order to understand how they define and are defined by certain infrastructures and discursive formations. This "excavation" represents my own method of preservation. The "morphological" analysis of the case studies adds detailed descriptions, as they represent a form of documentation. And indeed, some of the examples cited are already inaccessible. Let's dig in!