Expanded Realities

Interactivity, Immersiveness and Co-creation at the Convergence of Documentary and Media Art

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abstract

What is meant by interactive documentary? What experiences emerge from the combination of documentary and active participatory practices within a certain segment of media art that bears labels such as expanded cinema? What is immersive journalism and how does it fit within these practices? This article outlines some of the historical and influential artistic and academic tendencies underpinning recent practices at the intersection of documentary and media art. These practices invite the direct and active involvement of the spectators, who find themselves, whether individually or collectively, in the position of doers rather than mere observers. Key concepts such as interactivity, immersiveness, representation, and interpretation are examined, highlighting their relevance to this analysis. The objective is to map an inductive area where diverse practices from documentary and media art can come together, engage with one another, and coexist. Central to this exploration is the concept of interactivity, which redefines the viewer's role from passive observer to active participant. Interactive documentaries utilize digital technologies to offer audiences agency, allowing them to navigate through narratives, explore different perspectives, and contribute to the content itself. This challenges traditional documentary paradigms by empowering audiences to shape their own experience. The analysis will examine how this shift towards interactivity affects the representation of reality in documentary and influences the audience's interpretation of events and their construction of meaning. The notion of immersiveness is also crucial, particularly in relation to the use of technologies like Virtual Reality (VR) and Augmented Reality (AR) in documentary contexts. These technologies offer the potential to create a sense of presence and emotional connection, fostering empathy and deeper understanding in the spectator, but many doubts also surround them. Ultimately this article outlines an open space of convergence between open/interactive documentary and media art. Both challenge traditional paradigms of knowledge acquisition and creation. Rather than a one-way transfer from creator to spectator, they both promote knowledge as a shared process in which meanings are cocreated, debated, and continually refined and redefined. This space of convergence encourages a new perspective on how documentary and media art can engage spectators, fostering critical thinking and action while opening documentary to innovative aesthetic and narrative forms.

1. From Interactive to Open Documentary: Some Definitions

his section introduces the concept of interactive documentary, situating it within the historical and theoretical evolution of the documentary genre. From its foundations in linear forms to the experimental work of institutions and practitioners, the interactive documentary is framed as a new and distinct field that reshapes the relationship between reality, interpretation, and participation.

1.1. Reality, Truth and Facts

The relationship between documentary and reality has long been central to debates on how cinema represents, interprets, and constructs truth. This Section begins with that discussion, which provides the basis for understanding why interactive documentary is a variable and continuously evolving genre. Among the many possible perspectives, this analysis focuses on a few authors who, in different ways and with particular depth, have investigated the relationship between reality, truth, and facts: Werner Herzog, with his provocative distinction between fact and truth; Bill Nichols, who translates this tension into theoretical terms related to interaction; John Grierson, who offers a foundational vision of interpretation as the task of documentary; Sandra Gaudenzi, who updates this debate within the digital and interactive context. The choice of these authors is motivated by their capacity to mark turning points and to highlight how documentary cannot be reduced to a mere objective testimony of reality but must instead be understood as a space of interpretation and co-creation.

Werner Herzog exemplifies the questioning of the conception of documentary as an objective recording of reality. In his *Minnesota Declaration*, presented at the Walker Art Center, he argued that «there's something ultimately and deeply wrong about the concept of what constitutes fact and what constitutes truth in documentaries» (Herzog, 1999). For Herzog, reality is not exhausted in a literal representation of events, but emerges from the filmmaker's research process, narrative construction, and the aesthetic power of images or editing. Famous is his statement: «Fact creates norms and truth illumination», distinguishing surface data from what he called *poetic*, *ecstatic truth*, attainable only through imagination, stylization, and fabrication. His critique of *cinéma-vérité* reflects this stance:

Cinéma-vérité confounds fact and truth and thus plows only stones. And yet, facts sometimes have a strange and bizarre power that makes their inherent truth seem unbelievable. (Herzog, 1999)

On a theoretical level, Bill Nichols (2001) takes up Herzog's provocation but reformulates it analytically. Whereas Herzog emphasizes the poetic and imaginative dimensions of truth, Nichols focuses on relational dynamics: truth in documentary is never absolute, but rather the *truth of an encounter*. The camera makes visible the negotiation between filmmaker and subject, producing an interaction that could not exist outside the act of filming:

What we see is what we can see only when a camera, or filmmaker, is there instead of ourselves. (Nichols, 2001, p. 118)

A complementary and earlier approach is offered by John Grierson, widely regarded as a foundational figure of documentary. If Herzog destabilizes the dichotomy between fact and truth and Nichols reframes it in relational terms, Grierson insists on the centrality of interpretation. For him, documentary should not be confined to reproducing reality, but must render it meaningful for human experience. As cited in Dayna Galloway (2013, p. 13), Grierson maintained that a documentary is «only good if its interpretation is a real interpretation, that is to say one which lights up the fact, which brings it alive, which indicates precisely and deeply our human relation to it».

This principle is consistent with his manifesto, where Grierson also emphasized the formal properties of cinema:

The arbitrary rectangle of the screen reveals and enhances movements, giving them maximum effectiveness in space and time. It should be added that the documentary can achieve a deeper understanding of reality. (Grierson, 1946/1960, p. 44)

He further noted:

One photographs "real" life but also gives an interpretation, carefully juxtaposing the details contained within it. (Grierson, 1946/1960, p. 46)

Along these lines, Dayna Galloway shows how even the earliest examples of documentary, such as Robert Flaherty's Nanook of the North (1922), were built on semi-fictional treatments of their subjects (2013, p. 8). This confirms that, from its very origins, documentary has never been a simple record of facts, but rather a field in which reality is constantly mediated.

This never-ending debate, spanning filmmakers and theorists across different eras, gained new relevance with the advent of digital media in cinema. Around 2007, the genre of interactive documentary emerged through the work of a network of researchers and practitioners who sought to distinguish it both from linear documentary and from earlier experiments in interactivity. This network included academics and professionals working within institutions such as the MIT Open Documentary Lab in the United States and the IDFA DocLab in Amsterdam, which became key spaces for theorizing and experimenting with interactive forms. Sandra Gaudenzi, a key figure in this field, has underlined how this shift towards interactivity redefined the genre itself, noting that «the interaction afforded by digital media has blurred the distinction between author and user/viewer/reader/player» (Gaudenzi, 2013b, p. 22). With this redefinition, the debate on truth and reality takes a further step forward, opening the way to practices that radically transform how documentaries can represent, interpret, and co-create reality.

1.2. Towards a Definition of Interactive Documentary

The definition of interactive documentary was discussed at the i-Docs Symposium held on 25 March 2011, organized by the Digital Cultures Research Centre (DCRC) at the

^{1.} Dayna Galloway is Head of Division of Games and Arts within the School of Design and Informatics at Abertay University in Scotland. Dayna's research focuses on the structures, dynamics and aesthetics of video games and, in particular, on the emergence of new interactive forms and experimental game design practices.



University of the West of England². In that context, the genre was re-examined in light of emerging artistic practices and new forms of inquiry.

Sandra Gaudenzi, one of the curators of the Symposium (together with Judith Aston and Mandy Rose)³ and a researcher in the field of interactive documentary, presented the origins of this genre, emphasizing that in 2007 there were very few academic publications on the subject. According to Gaudenzi, this was partly because many new media artists did not consider themselves documentary filmmakers and therefore did not perceive their work as interactive documentaries (Gaudenzi 2013a, p. 26).

The first definitions came mainly from filmmakers and writers in cinema and documentary, who tended to see interactive documentary as a continuation of linear documentary into the digital realm, assuming that it had to be primarily video-based and that «interactivity was just a way to navigate through its visual content» (Gaudenzi, 2013a, p. 27).

This initial understanding, however, differed significantly from Gaudenzi's own perspective. As she declared at the opening of *i-Docs*, interactive documentary is not an evolution of linear documentary, but an independent genre that emerged around 2008. Indeed, the genre also encompasses games, participatory experiences, web-based projects and installations (DCRC 2011). The breadth and openness of the genre were further confirmed by the variety of speakers invited to the *i-Docs* Symposia, coming from diverse fields such as media art, cinema and documentary.

Following the inaugural *i-Docs*, Aston and Gaudenzi published an article (2012) that elaborated on some of the concepts discussed at the Symposium. Their definition highlighted the openness of the genre:

In order to begin the discussion, a definition of i-Docs is needed. The position taken in this article is that any project that starts with an intention to document the "real" and that uses digital interactive technology to realize this intention can be considered an interactive documentary. This is a deliberately broad definition of i-Docs, which is not tied to any specific platform. (Aston & Gaudenzi, 2012, pp. 125-126)

In the same article, the two authors also specify, to avoid misunderstandings, that interactivity in this context is «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*» (Aston & Gaudenzi, 2012, p. 126).

Gaudenzi, in a further clarification of what she means by interactivity, also draws on the theorizing of Humberto R. Maturana and Francisco J. Varela and their particular emphasis on the concept of interaction in their seminal book *Autopoiesis and Cognition*, from which she cites:

It is the circularity of its organization that makes a living system a unit of interactions and it is this circularity that it must maintain in order to remain a living system and to retain its identity through different interactions. (Gaudenzi, 2013a, p. 80)

^{2.} The Symposium was hosted by Bristol's Watershed Media Center (www.watershed.co.uk/) with a follow up stage at Pervasive Media Studio (www.pmstudio.co.uk, i-docs.org/about-interactive-documentary-idocs/i-docs-symposium/).

^{3.} Sandra Gaudenzi teaches at the University of Westminster and at UCL (University College London). She is one of the conveners and creative director of the *i-Docs* Symposium in Bristol (one of the leading centers in Europe for research into evolving documentary practices). She has a background in television production, but now she mostly works in the field of interactive narrative and digital stories in documentary. Judith Aston is Associate Professor and Wallscourt Fellow in Film & Digital Arts at UWE Bristol. She is a Founding Director and curator of *i-Docs*. Mandy Rose is Professor in Documentary & Digital Cultures at UWE Bristol. She is one of the curators of *i-Docs*.

Thus, Gaudenzi situates the concept of interactivity within the broader notion of living systems (and humans as living systems), which, thanks to their self-making, self-organizing and adaptive capacities, are in constant interactive and circular relations with other living systems and with the environment. From this perspective, interactivity is understood as inter-activity, that is «our fundamental way of being, our way of relating and existing through doing». Returning to interactive documentary, she concludes: «If we extend this logic to interactive artefacts, such as interactive documentaries, then our interacting with them is a way to relate and construct our world» (2013b, p. 21).

The interactive documentary is therefore variable, modular (Manovich, 2001), and in constant transformation. Gaudenzi describes it as a "living documentary" in the pure biological sense, where the word living is chosen because «it relates to the idea of "being alive"» (Gaudenzi, 2013b, p. 25) and «put the emphasis on becoming, rather than explaining» (2013b, p. 26).

In addition to these definitions, institutions such as the IDFA DocLab in Amsterdam and the MIT Open Documentary Lab have played a key role in the development of the genre. The ODL was founded in 2012 at the MIT Media Lab, within the context of the New Arts of Documentary Summit, thanks to the initiative of William Uricchio, professor in the Department of Comparative Media Studies/Writing at MIT. The mission of the laboratory was to fully explore issues of authorship and narration and to stimulate participation and co-creation in emerging forms of documentary. Its goal is to bring together narrative designers, technologists and scholars, with a particular focus on collaborative, interactive and immersive narratives.

As the official website states:

The Lab understands documentary as a project rather than as a genre bound to a particular medium: documentary offers ways of exploring, representing and critically engaging the world. It explores the potential of emerging technologies and techniques to enhance the documentary project by including new voices, telling new stories and reaching new publics. (MIT Open Documentary Lab, n.d.)

The word open is not included in the laboratory's title by chance. It is a term that seems particularly appropriate and that bears multiple meanings. Indeed, with respect to the i-Docs group, the ODL favors a different approach. While Aston and Gaudenzi aim to define the interactive documentary as projects documenting reality with a focus on interactivity, the MIT Open Documentary Lab emphasizes concepts such as participation, co-creation, community, network and extended culture, even explicitly embracing the open courseware and open source software movements with which it shares purposes and methods (MIT Open Documentary Lab, n.d.).

The lab's name appears to explicitly reference Umberto Eco's Open Work, a 1962 essay of great significance to the field of art. During an online speech for The Early Visual Media Lab⁴, Uricchio clearly stated that the ODL conducts projects, events and research that revolve around culturally established concepts such as participation, inclusivity and community, through communication systems and social rituals that use contemporary tools and platforms.

Uricchio, in the same context, discusses the concept of co-creation as a key feature of the ODL. Co-creation may be understood in a broad sense as an implicit cultural charac-

4. This is a cross-disciplinary research lab focused on the study of visual media heritage, based in Lisbon, Portugal.



teristic of the human species, but also as a contemporary production method that allows us to "embrace complexity" (Uricchio, 2022) more functionally and effectively, especially in relation to issues such as power and inequality. In an article with the significant title *Not media about, but media with. Co-creation for activism*, citing an interview with filmmaker Kat Cizek, Mandy Rose (already mentioned as curator of *i-Docs*) argues that participation «is only one specific methodology that is appropriate for certain contexts and not others. [...]. Co-creation is about having a broader sense of the co-design and the spirit behind making something» (Rose, 2017, p. 51).

And in the conclusions of her doctoral thesis, Gaudenzi again states:

Opening content to users, allowing the documentary to grow and change as a living organism, seemed to indicate the beginning of a new era of documentary production where co-creation of reality, rather than representation and documentation of it, was the raison d'être of such new form. (Gaudenzi, 2013a, p. 252)

While the ODL aligns with the principles of interactive documentaries and, as Uricchio (2019) emphasizes, interactivity is central to this form, the laboratory's creative approach extends further, incorporating not only interactivity but also a distinctly social and participatory dimension.

It is interesting to note how this approach brings us back to the concept of *living documentary* proposed by Gaudenzi, already introduced earlier. It highlights a transformative process in which interactivity, openness, participation, and co-creation become constitutive forces. From this perspective, both Gaudenzi and the ODL point toward convergent, organic, and open approaches, in which the interactive documentary increasingly takes shape as a space of collective osmosis.

Within this framework, the interactive documentary emerges as an evolving genre, capable of redefining the relationship between reality, interpretation, and participation. At the same time, this theoretical reflection resonates with practices developed in the field of media art, practices that will be further examined in Section 3. of this article, where the dialogue between documentary and artistic experimentation will reveal additional intersections and shared dynamics.

1.3. Immersive Journalism

To conclude this Section, it is useful to introduce the definition of immersive journalism as a form of interactive documentary that, through new media, strengthens the involvement of the viewer, offering a different perspective on facts and a new approach to reality. In this sense, it connects to the discussion raised in Section 1.1., situating it within a broader inquiry into reality, factuality, and representation.

This definition was first introduced by journalist Nonny de la Peña⁵, in a 2010 article, where immersive journalism is not presented as a mere technological variation of documentary but as a specific theoretical proposal within the interactive genre: a way of conceiving the relationship with facts and reality through embodied and engaging experiences, made possible by new media. For de la Peña, immersive journalism is:

^{5.} Nonny de la Peña is a journalist and a pioneer/founder of immersive journalism. She is the director of Arizona State University's Narrative and Emerging Media program, a best-in-class research and graduate program with a focus on new narratives developed using emerging media technologies in the areas of arts, culture and nonfiction. She is the founder and CEO of Emblematic Group and has won many prizes in the field of immersive journalism.

the production of news in a form in which people can gain first-person experiences of the events or situation described in news stories. (de la Peña et al., 2010, p. 291)

This form of journalism employs immersive environments and embodied narratives to engage the user in current socio-political issues, by «combining virtual reality technologies with strong storytelling techniques» (de la Peña, 2017, p. 209) thereby «drawing on the emotional power of presence and direct participation» (de la Peña, 2017, p. 209).

To ensure an effective experience, the immersive environment must not only provide a realistic representation of the simulated worlds, but also meet criteria such as the sense of presence or place illusion, the plausibility illusion, and identification with the virtual body and its behavior (de la Peña et al. 2010, p. 294). Mel Slater⁶, one of the co-authors of the article on immersive journalism with de la Peña and a leading researcher in the field, defines place illusion as «the strong illusion of being in a place despite the sure knowledge that you are not there» (Slater, 2009, p. 3551), while plausibility illusion is «the illusion that what is apparently happening is really happening (even though you know for sure that it is not)» (Slater, 2009, p. 3553). De la Peña et al. further emphasize that «a body representation is necessary for the completion of both PI (Place Illusion) and Psi (Plausibility Illusion)» (de la Peña et al., 2010, p. 295).

According to the theory and practice of immersive journalism, as articulated by de la Peña, the combination of these three principles - place illusion, plausibility illusion, and identification with the virtual body – engages the viewer from a first-person perspective, generating a profound empathetic effect. While this approach undoubtedly reinforces the experiential dimension of interactive documentary, it also reopens the broader and more complex issue of how reality and representation are mediated through immersive forms. In particular, it highlights how interactivity and immersivity, far from being neutral technical features, represent theoretical and aesthetic challenges that directly concern the evolving nature of documentary itself.

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uilding on these considerations, the purpose of this Section is to pause and examine more closely the two key concepts introduced so far: interactivity and immersivity. Rather than approaching them as mere tools, I propose to reconsider them as theoretical categories that, by mutually reinforcing each other, can generate a combination capable of opening fascinating experiential pathways (Murray, 2012, p. 102). Placed in dialogue, these categories can also help to outline a possible space of convergence with practices developed within media art. While this step may seem to reiterate points already made, it functions as a necessary moment of clarification before moving forward.

^{6.} Mel Slater is a Distinguished Investigator at the University of Barcelona and a Professor of Virtual Environments at University College London. He is a highly respected researcher in the field of virtual reality (VR). Slater's work often intersects with psychology, computer science and engineering and includes understanding the impact of virtual reality experiences on attitudes, beliefs and behavior.



2.1. Interactivity

The concept of interactivity deserves closer attention here. As discussed in Section 1.2, Sandra Gaudenzi offered a structural definition, emphasizing how it assigns an active role to the user:

Interactivity gives an agency to the user – the power to physically "do something", whether that be clicking on a link, sending a video or re-mixing content – and therefore creates a series of relations that form an ecosystem in which all parts are interdependent and dynamically linked. (Gaudenzi, 2013a, p. 3)

In her thesis, Gaudenzi expanded this vision by drawing on Second Order Cybernetics⁷: interactivity is a constitutive part of the digital artifact, which should not simply be observed, but should transform those who use it. Interaction is therefore the «ensemble of transformations that occur to the artifact's components as a result of the human-machine inter-action» (Gaudenzi, 2013a, p. 75).

Thus, Gaudenzi conceives interactivity as an open process that produces continuous transformations and not as a simple action/reaction system. To clarify this aspect, Gaudenzi refers to Umberto Eco's seminal book *Open Work*, where it is stated that: «Openness is only possible if the author allows the participator to enter in the creative process. This logic of creation is a participatory logic rather than a representational one» (Gaudenzi, 2013a, p. 77).

For Eco, all works of art are interpretable, therefore "open"; they are never like a road sign that, unless it is transfigured, "can be seen unambiguously in only one way" (Eco, 1962/1997, p. 34). Nevertheless, as Eco claims, some contemporary works of art are more intentionally open: "such awareness is present above all in the artist who, rather than submitting to "openness" as an inevitable fact, chooses it as a work program and even presents the work in a way that fosters the greatest possible openness." (Eco, 1962/1997, p. 36).

This concept, to which Gaudenzi attributes particular importance, was also a point of reference for several media theorists of the 1990s, such as Janet Murray and Lev Manovich. Authors who redefined interactivity in terms of openness and transformation, in parallel with the development of interactive media arts and digital technologies, significantly influencing the field of media art.

Manovich, in particular, with his concept of variability, noted that

a new media object is not something fixed once for all, but something that can exist in different, potentially infinite versions. [...] Other terms [...] that might serve as appropriate synonyms of variable are mutable and liquid. (Manovich, 2001, p. 36)

^{7. «}Cybernetics had from the beginning been interested in the similarities between autonomous, living systems and machines. In this post-war era, the fascination with the new control and computer technologies tended to focus attention on the engineering approach, where it is the system designer who determines what the system will do. However, after the control engineering and computer science disciplines had become fully independent, the remaining cyberneticists felt the need to clearly distinguish themselves from these more mechanistic approaches, by emphasizing autonomy, self-organization, cognition and the role of the observer in modeling a system. In the early 1970s this movement became known as second-order cybernetic» (Heylighen and Joslyn, 2001, p. 3).

^{8.} Original text: «Può essere visto inequivocabilmente in un solo senso».

^{9.} Original text: «Una tale consapevolezza è presente anzitutto nell'artista il quale, anziché subire l'apertura' come dato di fatto inevitabile, la elegge a programma produttivo, ed anzi offre l'opera in modo da promuovere la massima apertura possibile».

Interactivity thus becomes a principle that brings digital media closer to a condition of mutability and permanent transformation.

If understood in this way, interactivity in documentaries and media art does not merely designate a mechanism based on interactive technological supports. Rather, it implies an openness of the work, where cognitive, psychological, and aesthetic processes converge, and where the focus shifts from the centrality of the "object" to the process in continuous transformation, from the "finite" to the "infinite".

Manovich further adds:

A classical and even more so modern, art is "interactive" in a number of ways. Ellipses in literary narration, missing details of objects in visual art and other representational "shortcuts" require the user to fill in missing information. (Manovich, 2001, p. 56)

However, he warns:

When we use the concept of "interactive media" exclusively in relation to computer-based media, there is a danger that we will interpret "interaction" literally, equating it with physical interaction between the user and a media object [...] at the expense of psychological interaction. (Manovich, 2001, p. 57)

Interactivity is therefore not just a tool, but a true interpretative paradigm, capable of redefining the relationship between author, work, and spectator.

2.2. Immersiveness

The concept of immersiveness today appears particularly complex, as it intertwines technological, aesthetic, and perceptual dimensions. For this reason, rather than focusing exclusively on its technical aspect, I intend to reinterpret it from an aesthetic perspective, in order to highlight its implications within interactive documentary and media art practices.

In Section 1.3. on immersive journalism, I discussed the three components that de la Peña and Slater considered necessary for a truly effective Virtual Reality (VR) immersive experience: Place Illusion, Plausibility Illusion, and perception/identification with the virtual body. These considerations, although compelling, also raise uncertainties and questions that directly relate to the debate introduced in Section 1.1. concerning the relationship between reality, truth, and facts.

The questions that arise must be seen as part of an evolving reflection: how close can we get to a faithful reproduction of reality? Is VR simply another form of representation, albeit a more "immediate" one (Bolter and Grusin, 2003)? To what extent can the sensation of feeling as though we were there deceive our senses, reinforcing the credibility of a virtual event? How far can simulation approximate actual reality, truth, and facts?

^{10.} Here "immediate" refers to "immediacy", a term used by Jay David Bolter and Richard Grusin in their influential work Remediation: Understanding New Media. The authors define immediacy as a desire to make the medium disappear in order to create a direct connection between the viewer and the content. According to Bolter and Grusin, the quest for immediacy leads us to continuously update and refine our media technologies. The idea is to create an ever-more immersive experience, where the interface is less noticeable and the user feels more directly connected to the content. Virtual reality is often cited as the epitome of immediacy because it strives to create an environment where the user feels completely immersed in a virtual world, seemingly devoid of any mediation.



What role does the author play in this process? And, is the sense of immersiveness truly proportional to the degree of accuracy with which reality is reproduced?

It is difficult to provide definitive answers to these questions (which remain crucial for contemporary designers in the fields of VR) but they must be posed. For de la Peña, the complexity of this field depends above all on the duality of presence (de la Peña, 2017), since the spectator lives simultaneously in both the real world and the virtual world. Even de la Peña, although aiming to offer the spectator a viscerally authentic verité moment (de la Peña, 2017, p. 210), admits that:

participants know that they remain in the physical location where their body resides but they also feel at the exact same time as if they have been transported to the environment where the scene is unfolding. (de la Peña, 2017, p. 209)

To address this unresolved duality, de la Peña suggests shifting the focus toward what she calls "behavioral realism" (de la Peña, 2017), which does not require a faithful reproduction of reality but instead relies on "strong storytelling techniques" (de la Peña, 2017, p. 209). In her view, this is the most effective way to «support or devolve immersion through its effect on "response-as-if-real"» (de la Peña, 2017, p. 209). This clearly demonstrates how the issue of immersion is connected to the earlier problematization of reality: more than guaranteeing direct access to the real, the immersive experience seems instead to open up new forms of mediation.

But let us take a step back and attempt to offer a definition of the concept of immersiveness from the perspective of some well-known scholars in the field of media art. Oliver Grau, for example, observes that:

in the present as in the past, in most cases immersion is mentally absorbing and a process, a change, a passage from one mental state to another. It is characterized by diminishing critical distance to what is shown and increasing emotional involvement in what is happening. (Grau, 2003, p. 13)

According to Grau, unlike de la Peña, immersion is therefore a mental and emotional process, not necessarily tied to real actions. In his view, immersion is not directly associated with the reproduction of reality; the two remain distinct, and immersion can occur through any medium. In this sense, his approach partially aligns with that of Janet Murray, who states that:

Immersion is experiential and not a function of the size or volume of the stimulus [...] We can also become immersed in old media, in compelling stories that hold our attention to the page or the image, in rhythmic experiences that focus us on music or movement, in puzzles or games that take over our thinking, causing us to lose awareness of the world around us. (Murray, 2012, pp. 101-102)

For Murray, VR represents an alternative modality with new affordances that may develop over time through the collective process of inventing a medium. However, it is not a magical technology and cannot replace reality (Murray, 2020, p. 25).

On this issue, Char Davies, an internationally recognized pioneer for her ground-breaking work in VR in the 1990s, reaches an interesting conclusion while discussing her artworks *Osmose* and *Ephémère*:

I want to emphasize, however, that the medium's perceptually refreshing potential is possible only to the extent that the virtual environment is designed to be unlike those of our everyday experience [...]. It is only when such environments are constructed in ways that circumvent or subvert the medium's conventions, that immersive virtual space can be used to convey alternative sensibilities and worldviews, potentially functioning as a perceptually and conceptually invigorating philosophical tool. (Davies, 2004, p. 103)

From a perspective that seeks to merge documentary and media art, immersiveness remains a complex issue because it involves narrative, aesthetic, cognitive, and perceptual factors. Nevertheless, it is essential to recognize that, in its current state, immersive reality offers only an as if experience, a mode that interrogates rather than resolves the relationship between reality and representation.

3. From Expanded Cinema to the Floating Work of Art in Media Art

his Section highlights and analyzes selected practices within media art that, I argue, intersect with the documentary field as it is framed in this article, thereby opening up new perspectives on the relationship between art, reality, and representation.

3.1. Expanded Cinema

In his seminal work, Expanded Cinema, written in 1970, Gene Youngblood mentions cinéma-vérité, which we examined in Section 1.1., as a starting point for investigating the interplay between art, reality and representation. However, his approach is completely different from that of filmmakers such as Herzog.

Youngblood draws on cinéma-vérité to introduce his own concept of synaesthetic cinema. He posits that the primary aim of cinéma-vérité is to document "unstylized reality" because the filmmaker «is never to intrude by directing the action or in any way alter the events taking place», while in synaesthetic cinema on the contrary, «the artist shoots and manipulates his unstylized reality in such a way that the result has style» (Youngblood, 1970, p. 107).

Youngblood considers the crisis in the artist's relationship with the real to be evident, but he does not attribute it to the type of approach, as suggested in Herzog's critique. Rather, he links it to the advent and large-scale dissemination of television a medium that, in his words, «Renders Cinema Obsolete as Communicator of Objective Reality» (a deliberately aphoristic section heading presented in title case in the original text) (Youngblood, 1970, p. 78).

Within this evolving media landscape, contemporary filmmakers have greater capability to imitate reality, but the resulting realism, which often draws on a bastardized form of cinéma-vérité or newsreel-style photography, is merely a pre-stylized, mirror image of reality. Such realism is perceived as more realistic because it replicates the process-level perception of TV watching, where unstylized reality is filtered and shaped through the process of that given medium (Youngblood, 1970, p. 80). Youngblood discerns patterns suggesting that virtually all forms of cinema have been profoundly influenced by television and by a false realism, so we are inexorably being drawn towards a synaesthetic



dimension. This progression is not abrupt but rather consists of transitional phases: «first toward greater "realism", then cinéma-vérité, before the final and total abandon of the notion of reality itself» (Youngblood, 1970, p. 79).

Youngblood outlines a progression towards an extra-objective domain that culminates in synaesthetic cinema, a form that amalgamates subjective, objective and nonobjective elements within a space-time continuum. For Youngblood, synaesthesis is «the harmony of different or opposing impulses produced by a work of art. It means the simultaneous perception of harmonic opposites» (Youngblood, 1970, p. 80).

These harmonic opposites are perceived via a syncretic perspective based on «the combination of many different forms into one whole form» (Youngblood, 1970, p. 84) which enables the totality to be understood. Such combining of forms operates on the principle of synergy, whereby the behavior of the overall system is unpredictable, being the outcome of the behavior of its individual parts.

This introduces us into a metaphysical sphere that transcends all traditional forms of representation and narrative. It concerns forces and energies, the fundamental subject of synaesthetic cinema, which cannot be photographed. It is centered on the process and effect of seeing, the phenomenon of experience itself, existing only in the viewer:

Synaesthetic cinema abandons traditional narrative because events in reality do not move in linear fashion [...]. It is concerned less with facts than with metaphysics and there is no fact that is not also metaphysical. One cannot photograph metaphysical forces. One cannot even "represent" them. (Youngblood, 1970, p. 97)

3.2. Reality vs. the Representation of Reality

Some of Youngblood's examples and considerations must be understood in relation to the historical context in which they were developed, since they do not take into account subsequent developments in media and cinema.

Nevertheless, the concept of expanded cinema, which originated in the 1960s from the broader idea of expanded arts, is recognized by a whole movement of audiovisual media artists and filmmakers who, since those years, have undertaken different lines of innovative experimentation along a path that extends to the present day.

These figures include Valie Export¹¹, who in a 2003 lecture for *The Essential Frame* - Austrian Independent Film 1955-2003 event - identified, among the prerequisites for expanded cinema «the destruction and abstraction of the material, as well as the film projection and participation of the audience» (Export, 2003).

Export, in relation to her work in the field of expanded cinema with the well-known artist and curator Peter Weibel¹², recounts:

In 1967, Peter Weibel and I developed our "Expanded Cinema" in Vienna. We examined the relationship between reality and the apparatus that registered it. The media of expression and representation were themselves brought into this discourse. (Export, 2003)

^{11.} Valie Export is an influential Austrian artist known for her groundbreaking feminist performance art, experimental films and conceptual artworks that challenge societal norms and perceptions of the female body. Active since the 1960s, her provocative works have made her a pivotal figure in contemporary art.

^{12.} Peter Weibel was a renowned Austrian artist, curator and theorist, particularly known for his work in the field of new media art. He was artistic director of Ars Electronica festival and Chairman and CEO of the ZKM in Karlsruhe, Germany.

This vision obviously arises in a context where there is no boundary between social struggle and art, to the point that Export herself states that expanded cinema also means expanded reality (Export, 2003).

At this point, it is clear that expanded cinema - which was born, I would again underline, in a period (particularly the 1960s) characterized by political and artistic events with strong social impact - brings film and the audiovisual into a new relationship with reality. It is not solely based on representation or identification; rather, it explores diverse forms, some anchored to traditional concepts of screen and film and others pushing boundaries to the extent of contemplating a "film without film". For example, in the artwork Tapp und TastKino (Tap and Touch Cinema – 1968), Valie Export proposed a version of expanded cinema without celluloid, a mobile outdoor action announced over a loudspeaker by Peter Weibel, which narrowed the boundary between art and life.

Since the 1960s, expanded cinema has been developing and evolving in a very open way, taking on the multiple forms well summarized by Peter Weibel in the section on Expanded Cinema, Video and Virtual Environments in his essay Future Cinema: The Cinematic Imaginary after Film (2003), which he edited with Jeffrey Shaw¹³, another well-known pioneer in the field of media art.

In this work, Weibel outlined the leading experiments in the field of expanded cinema from the 1960s to the 1990s (including works produced using celluloid as a material, or closed-circuit or multi-screen techniques, or an interactive or immersive approach). He concluded by, at last, exploring new types of narratives that behaved "algorithmically" and "rhizomatically", whereby linearity and chronology were set aside in favor of multiple perspectives, wherever possible to be projected on multiple screens. «These new narrative techniques», according to Weibel, served to «render the complexity of social systems lucid» (Weibel, 2003, p. 124), thus allowing audiovisual-based media art to overcome the crisis of representation seen in painting in the 1980s.

In a 1997 essay/catalog on the work of Jeffrey Shaw, Weibel was highly explicit in his treatment of the question of representation:

Celluloid could be replaced by a length of thread, the projector by a mirror [...]. These permutations of the prevailing film forms also altered the character of filmic representation. A film is usually expected to supply a picture of the world, to reproduce the world. Expanded cinema aimed no longer to reproduce reality but to construct its own reality in the filmic play. The expansion of the technological medium brought with it an expansion of the reality able to be grasped by senses. (Weibel, 1997, p. 2)

Youngblood too delved into the concept of the image within the domain of expanded cinema in a later work, advancing the following compelling claim: «Today cinema represents reality, tomorrow it will be reality» (Youngblood, 1989, p. 30). From the perspective of contemporary discussions on future screens, this statement can be read as anticipating a shift in which cinema no longer functions as a medium of representation but as a medium that actively constructs experiential realities.

Artists navigating this realm prioritize relation, interaction and variability. They strive to create a dynamic space that «models rather than represents» as Bourriaud (1998/2010, p. 19) would say, using narratives born from the encounter between reality and virtuality.

^{13.} Jeffrey Shaw is a visual artist and well known as a leading figure and pioneer in media art, especially in the areas of interactive art, virtual, augmented and mixed reality, immersive visualization environments, navigable cinematic systems and interactive narrative.



3.3. The Floating Work of Art

In her article, *The Art of Narrative Toward the Floating Work of Art* (2002), professor, curator and art historian, Söke Dinkla, introduces the term *floating work of art* to characterize artistic strategies in media art that are informed by expanded cinema.

According to Dinkla, the floating work of art emerged in the late 1980s from the technological euphoria of the 1970s, during a historical period marked by significant political and social events – most notably the fall of the Berlin Wall – which reshaped the landscape of Europe and led to a new socio-political framework that was no longer based on antagonism and division. The concept of floating work of art could apply to interactive media artworks, which change and evolve based on spectator interaction or algorithmic patterns.

Artists who have experimented with the floating work of art (including pioneers such as Jeffrey Shaw, David Rokeby, Lynn Hershman and others) identify most radically with the digital medium as an aesthetic space that facilitates the logical deconstruction of predetermined systems (Dinkla, 2002, p. 35).

These artists propose new ways to navigate an abstract "floating" reality via different media, styles, genres or conceptual frameworks, seeking to avoid dualism, division and conventional modes of visual representation because this could generate the risk that "behavior also follows established rules, instead of opening up new spaces of experiences" (Dinkla, 2002, p. 36). Indeed, the aim of the floating work of art is to construct experiences in which the spectator, within the cybernetic loop created by the artwork, "realizes that it is he who generates reality with his gaze" (Dinkla, 2002, p. 38).

I believe that the notion of floating work, directly connected with the expanded cinema experiences, is highly salient to this article, as it powerfully aligns with the specific perspective articulated by Gaudenzi/Uricchio in the field of documentary. For Dinkla, the floating work of art «is not an entity but a state transformed by changing influences [...]. The floating work of art is no longer the expression of a collective, but it is the state of a "connective" – a web of influences that are continually reorganized by all participants» (2002, pp. 38-39). This perspective resonates with the thinking of Gaudenzi and Uricchio, particularly in their emphasis on openness, participation and co-creation as defining traits of the interactive documentary. It is here that I locate a key commonality with my own argument: both Dinkla's floating work of art and Gaudenzi/Uricchio's notion of the interactive documentary shift the focus from the artwork as a fixed entity to the processes of transformation and negotiation through which meaning is continually reshaped by the interplay of participants, media, and context.

4. Final Remarks

n this article I outlined an open space of convergence between open/interactive documentary, a genre that arises from reflection on the documentary form itself, and media art. I believe that even though these genres have different roots, both challenge traditional paradigms of knowledge acquisition and creation. Rather than a one-way transfer from creator to consumer, they both promote knowledge as a shared, interactive and immersive process in which meanings are co-created, debated and continually refined and redefined.

Throughout the article, I have attempted to inductively illuminate this space by comparing some of the theories and practices of media art with those of open/inter-

active documentaries and describing their potential areas of strength, contact and overlap. The aim of these investigations and this comparison stems from my deeply held personal conviction that the convergence between interactive documentary and media art generates a relational dynamic that can act as a powerful catalyst for critical thinking and action. As we continue to navigate our interconnected digital future, these practices will be key to cultivating and growing individual and collective engagement and intelligence, thereby empowering individuals and communities to shape their own realities.

Among the many artists who are moving in this direction, I mention here in particular: Blast Theory, Teri Rueb, the artists produced by the National Film Board of Canada, and more recent artists like Lauren Lee McCarthy or Forensic Architecture, who move between the forms of open documentary and those of media art. I myself, as an artist and practitioner, am pursuing this trajectory with projects such as Apnea and Photosynthetic Me.

Finally, although the theme of narrative has not been explicitly developed in this article, my underlying intent has been to suggest how this convergence calls for a fresh perspective on its role. Narrative, here, is not conceived as mere storytelling, but as a structural principle capable of weaving together interactivity and immersivity, opening new pathways between reality and virtuality, and fostering deeper forms of participation. The search for such narrative forms represents the next step of this research: a fertile ground where aesthetic innovation and critical reflection converge, from which future practices of documentary and media art may draw renewed strength.

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