

Chapter 4 – the Live documentary

This research starts from the observation that digital technologies are changing what a documentary might be. The multiplicity of digital platforms (including web 2.0, smart phones, GPS devices, iPads etc...) and the availability of high speed broadband has transformed video production praxis, but also economic logics of distribution. This is valid for all styles of video production, including documentary making. People interested in documenting reality have experimented with digital platforms as alternative medium to video for documentary making. Since digital platforms afford interactivity they push authors to incorporate some form of user interaction into their documentary content, changing the form of the documentary from linear to non-linear, and from video based to multi-media based. The result of those experimentations is the birth of different typologies of interactive documentaries. As indicated in Chapter 1, interactive documentaries vary in *degrees of interaction*, in *levels of participation*, in *logic of interaction* with the computer and in *degrees of narrative control from the author*.

Although interactive documentaries have existed since the 1980's the explosion of the web in the last ten years, coupled with web 2.0's social and participative nature, has dramatically increased the number and the variety of documentary artefacts. This research started from the observation that no clear terminology is currently available for the variety of interactive documentaries styles that have recently emerged. Terminologies such as new media documentaries (Castells, 2011), webdocs (<http://www.webdocu.fr/>, 2011, France 5 television¹, 2011) docu-games (Whitelaw, 2002; Raessens, 2006) cross-platform documentaries (Bulkley, 2010; Bell, 2010) and interactive documentaries (Goodnow, 2004; Galloway et al, 2007; Choi, 2009) are all mixed up without clear understanding of their differences. The lack of precise terminology is reflected, even more importantly, in a lack of clear conceptualisation able to gather/render the complexity and yet the groundbreaking nature of the new aesthetic tool that I see emerging with/in the interactive documentary.

I think that there is now enough of a critical mass of examples to trace not only the different forms of interactive documentaries that are emerging. I therefore establish in Chapter 1 four modes of interactive documentaries: the hypertext, the conversational, the participative and the experiential mode. This classification is not meant to be the only possible way to differentiate families of interactive documentaries, it is rather my own attempt at placing interactivity at the centre of the analysis of this new digital form.

My hypothesis is that an artefact that is conceived as interactive – and therefore *relational* in its core essence – cannot be studied as a finite form but needs to be addressed through the complex series of relations that form it and that it forms. In what follows I thus gather these complex series of relations under one only concept: the definition of the interactive documentary as a

¹ France 5 television has a part of its website totally dedicated to what they call “le webdocumentaire”, or “webdocs”.

See <http://documentaires.france5.fr/taxonomy/term/0/webdocs>, accessed 16.01.11.

relational entity. This will provide a comprehensive understanding of the interactive documentary in the new aesthetic and ontological dimensions that it offers us.

The interactive documentary as a relational entity

Linear documentaries are time based artefacts. They are composed of 24 images, frames, per second that follow each other in sequential order . Each image can be analysed as a specific form, with its characteristics of framing, composition, salience and information value (Kress, G. and van Leeuwen, 1996:183). A group of those images, when played by a projector, can then be analysed in terms of rhythm, editing and sound. Those bridges allow a series of frames to become linked events. Finally the whole movie can be seen yet again as a unique form with its aesthetic value and its meanings. The interactive documentary is not just the extension of the linear form into a digital media. As media critic Lev Manovich has pointed out in *The Language of New Media* digital objects have their own, and new characteristics. ‘In old media elements are "hardwired" into a unique structure and no longer maintain their separate identity, in hypermedia elements and structure are separate from each other’ (Manovich, 2001:41) which means that an interactive documentary can be composed of visual frames but also by other data and algorithms which can potentially create infinite forms. Depending on the way data and algorithms are matched, the documentary can take shapes that are more or less branching, evolutive or collaborative. The form of the interactive documentary is much more fluid, layered and changeable than the one of the linear documentary. The cut is replaced by the hyperlink which splits immediately one form into multiple possible forms. The cut, that allowed the creation of meaning by creating a chain of events, is now an opening to possibilities where the intentionality of the author is replaced by a dialogue between the user and the possibilities that the interactive documentary system offers. Therefore the interactive documentary cannot be analysed as a single form composed by frames because in interactive media there are new variables: code, interfaces, algorithms² and an active user. The user actualises possibilities created by the algorithm. Sometimes those new forms are finite (in the case of branching structures) and sometimes they are infinite (for example in the case of generative software or when there is user generated content). As a result the form of an interactive documentary is very complex to grasp. It can be fluid, it can be more or less open, it can be repetitive... it can be many “things”. Its digital nature implies modularity - the fact that it is created by independent objects linked to each other where each file is accessible and independent from the others (Manovich, 2001:31) and it also implies variability – the fact that “a new media object is not something fixed once for all, but something that can exist in different, potentially infinite versions" (Manovich, 2001:36). Its variability also means that the interactive

² ‘An algorithm specifies the sequences of steps to be performed on any data, just as a hypermedia structure specify a set of navigation paths (i.e. connections between nodes) that potentially can be applied to any set of media objects’ (Manovich, 2001:41).

documentary can change and evolve, allowing collaborative creations that were not possible with film and video.

I said that the interactive documentary brings with it a need for its own conceptualisation, being the expression of a new aesthetic of contemporaneity. In chapter 1 I argue that interactive documentaries vary in degrees of interaction, in levels of participation, in logic of interaction with the computer and in degrees of narrative control from the author. The specificity of the interactive documentary can thus be understood along these three points: logic and degrees of interaction between author, user and technology; participation of such actors and narrative control from the author. In order to understand the interactive documentary as a relational entity we need to see what these points mean/indicate to us.

Logic and degrees of interaction between author, user and technology

What interests me in this study is how the interactive documentary, as a relational entity, has the capacity to change all the elements which form it and which it forms: author, user, technical means, reception (aesthetic), narrative forms (politics), environment (infinite process). The discourse on what the interactive documentary is in its nature and how it forms in itself all the complex series of relations that are its components, can disclose for us not only its correct understanding but also the importance (from the education to the aesthetical and political point of view) of the interactive documentary for our lives.

In the interactive documentary the interaction between author and user, therefore the line between potential power and subordination, can be constantly crossed since different levels of participation of the user blur such a clear distinction. Power and control become an elastic concept, that depends on ad-hoc and situated circumstances and cannot be generalized. The *logics* of interaction between author, user and technology, once extended to our lives, map an infinite variety of possibilities of being, and allow us to see our becoming as the result of multiple relations, rather than linear and causal trajectories. We are not single and pre-determined, but rather multiple and in movement.

Participation

Participation in interactive documentary differs essentially from the participation that we experience with linear media. When watching a linear film we accept the role of interpreter/observer³. We make sense, and create sense out of what is presented to us. In an interactive documentary our role goes further: not only we have to produce meaning and sense but we also have to participate to the creation of the “thing” itself. Furthermore, our physical being is put in the forefront. An interactive documentary does not exist without some form of physical participation from the user. The act of

³ A certain level of participation of the reader/watcher has been claimed by a variety of authors throughout the 20th and 21st centuries - Roland Barthes (1967), Gene Youngblood (1970), Umberto Eco (1989) just to cite a few – but I argue here that in interactive media we can also physically interfere with the artifact, adding one extra cord to our levels of possible participation.

interpretation is not enough, a physical embodied interaction is required – being it the click of the mouse, the typing of the keyboard or the use of our body in interactive installations. Our participation is therefore embodied. Participation and interactivity here are not seen as an act of interpretation, ‘interactivity means the ability to intervene in a meaningful way within the representation itself, not to read it differently’ (Cameron, 1999). This view of participation underlines our embodied interaction with our environment in our daily lives and our constant mind/body/environment connection.

The narrative control of the author

Much has been said in our century about the authorship of works of art, from Walter Benjamin (*The Work of Art in the Age of Mechanical Reproduction*, 1936) to Roland Barthes (*The Death of the Author*, 1967) and Umberto Eco (*Opera Aperta*, 1989). As seen in Chapter 3 the tendency of opening up the relationship author/viewer has not escaped the moving image (Gene’s Youngblood *Expanded Cinema*, 1970) and has passed through a redefinition of the position of the observer (I argue in Chapter 3 that the author moves from external filmmaker to internal director-enactor). But when passing from analogue to digital media the debate on the role of the author goes one step further. The interaction afforded by digital media has blurred the distinction between author and user/viewer/reader/player. It is as an example of the changes that technology/technique can bring to our notion of creativity and narrative that the interactive documentary is interesting. We can see how the interactive documentary changes the status of the narrative: it is no longer the author which owns the narrative of the event, of the encounter, of its expression and the consequential experience by the user. The ownership of the production of the narration is something communal and imbued in the very relational nature of the interactive documentary: it belongs to all, author, user, environment, infinite possible transformations, all the causations it provokes – in a word: it belongs to the complex series of relation, the open-ended constellation the interactive documentary is formed of.

A relational digital object that visualises our being in the world:

Politics and aesthetics of the interactive documentary

I have argued throughout this research that the linear documentary can be seen as a way to put “order” into the chaotic reality that surrounds us. In Chapter 3 I have traced the slow transition of the role of the documentary filmmaker/author in the last fifty years. I have shown that a certain level of interaction has also been experimented in linear documentary films and I have argued that this interaction was only possible by acknowledging that the observer, the filmmaker, is in active relation with her shooting environment.

I have argued that with the use of digital technology and networked media the documentary maker is losing her role of external observer and has become more an enactor or a facilitator. I have also argued that the role of the user is changing too. The viewer participant engages differently in an interactive documentary than in a linear one. Her agency goes far beyond the act of interpretation or empathy, typical in linear films, and stretches as far as new

modes of interaction can go. What is relevant in digital interactive forms is the degree of agency that the multiple participants have on the final product and how those actions will position them.

To rephrase what I said in the previous paragraph, my hypothesis is that interactive media, but more precisely interactive narrative forms, are pushing forward a constructivist vision of reality, where the user is active in constructing her own reality and knowledge⁴. The existence of levels of interactivity in interactive documentaries is not only influencing the form of the digital object but it also creates a relationship of inter-dependence between the user and the reality that is portrayed. This inter-dependence is what I define here as the political and aesthetical dimensions of the interactive documentary.

The feed-back loop mechanisms (action/reaction) present in any interactive documentary are a simplified visualisation of our constant systemic interaction with the world. The user is actively *affecting* the reality of the interactive documentaries while browsing it, but she *is* also *affected* by it.

If people get used to engage in documentary narrative by sending videos and collaborating in interactive documentaries, they effectively consciously act on the final shape of the documentary and they visualise the effect of their acts (or have to accept that they do not understand the causal link between their decisions and the turn the interactive documentary is taking). In some interactive participative documentaries, that specifically use a mosaic aesthetic, such as *6 billion others*⁵ and *Womanity*⁶, it is clearly the totality of the present points of views that illustrate the commonalities of human beings (for *6 billion others*), or of women (for *Womanity*) as no single interview would be enough to cover such overwhelming topics. This type of approach to interactive documentaries highlights for me the constructivist idea that there are as many realities as there are perceiving individuals and that there is no single “truth”. It is multiple points of views of women defining themselves that creates the concept of *Womanity*, and it is the ensemble of interviews in *6 billion others* that portrays our human condition throughout the globe. None of those interactive documentaries push forward a single definition of the reality they want to portray. On the contrary, they illustrate a world that is formed by variety of points of view and where the user “makes sense” of the website by actively choosing content and then creating her own point of view out of a multitude of stories.

I see in interactive documentaries an opportunity to create a new language and possibly to express complexity and to visualize it, or sometimes experiment it, through the multiple relationships created between the digital object, its user and their environment. I do see an interactive documentary as a relational object that allows us to visualize some of the multiple connections that determine the world as we understand it at a specific moment. This inter-dependence of *affecting* and *being affected* shapes a new field of aesthetic and politic forces which, I believe, the interactive documentary brings about and which we should confront both at a theoretical and at a practical level.

⁴ See chapter 2, page 1 for a definition of Constructivism.

⁵ Available at <http://www.6milliardsdautres.org/>, retrieved 04.07.10.

⁶ Available at <http://www.womanity.co.uk/Default.aspx>, retrieved 06.06.10.

A relational digital object that creates subjectivities

As I said in the previous section, the existence of levels of interactivity in interactive documentaries is not only influencing the form of the digital object but it also creates a relationship of inter-dependence between the user and the reality that is portrayed. The user is actively affecting the reality of the interactive documentaries while browsing it, but she is also affected by it. My hypothesis is that different modes of interactive documentary can influence our way to understand our relation to the perceived world – which is what defines the aesthetical field - but also engenders different models of subjectivity - the political field. Given this double influence, on aesthetic and politics, it is therefore my intent, in what follows, to analyse each interactive documentary mode and to see how their different relational logics might afford different forms of subjectivity. In order to do so I choose to use concepts of *autopoiesis*⁷ and *structural coupling* because they allow me to think of interactive documentaries as systems that are not the linear and causal result of the creativity of an author, but more an entity that is in constant relationships with other systems and that is structured by those relationships. Here the interactive documentary is seen as a system linked to other systems that have a co-determining influence on each other, and therefore create a co-emerging reality.

A new species: the Live documentary

Since the interactive documentary has not one but multiple potential forms I argue in this research that a different approach is needed when analyzing it. The relational dynamics afforded by its interactivity need dynamic lenses to be seen and followed. In order to put emphasis on the interactivity that characterises this form I propose to take interactive documentary out of its context of film theory and put it into a wider context that includes Cybernetics, Philosophy and Human Computer Interaction⁸. I want to look at the relations between systems as they are being coupled in an interactive documentary in order to see what they can create. In other words what is needed is a relational approach that can go beyond the time based form that is experienced by the user and that can zoom in and out of all the possibilities, and links, that emerge from such digital artefact. I am looking for a new idea, a lens rather than a framework, a concept that can allow me to see the

⁷ As explained in Chapter 2, autopoiesis is a concept that comes from biology. Autopoiesis means that although the organism is distinct from its environment it constructs itself via its interaction with it - they are therefore in a relationship of mutual dependency. 'Living beings' claimed Chilean biologists Maturana and Varela 'are characterized by their autopoietic organization' (Maturana and Varela, 1987:47) where autopoiesis is the process of self-making, or of auto-creation, and organization is 'the set of relations that must exist for the components of a system for it to be a member of a specific class' (1987:47). In other words any living organism materially self-constructs itself and by doing so distinguishes itself from its environment and acquires autonomy. Even when the organism is operationally closed (its organization does not change) it can still be an open system (in structural coupling with other entities and with its environment).

⁸ As explained in Chapter 2 a large part of HCI terminology (feed-back loop, enacted perception and user/enactor) comes from first and second wave Cybernetics. Furthermore interactive documentaries use computers and therefore HCI is core to their understanding.

interactive documentary differently – and therefore make it something new. In *What is Philosophy* Deleuze and Guattari explain the “concept” as an act of thought, as a creative force; “having a finite number of components”, they say, “every concept will branch off towards other concepts that are differently composed but that constitute other regions of the same plane, answer to problems that can be connected to each other, and participate in a co-creation” (1994:18). An interactive documentary is not a concept, it is a specific type of documentary, and yet it is by looking at it through some philosophical concepts that I will be able to answer the questions addressed in this chapter. Those questions would be something in the lines of:

Can we see the interactive documentary as a relational object?
If yes, which relational theories could we use to unfold the specificities
of such new form?

In order to answer such questions I will merge some philosophical concepts, extract them from their philosophical context and apply them to the digital artefact that I am investigating. Here is how I will proceed:

1. to see if an interactive documentary is a relational object, I will try to look at it as an assemblage⁹. Assemblages are forged by, and do forge, relations with other assemblages. One would have to see which types of relations are dominant, constitutive and visible in interactive documentaries.
2. the dominant relation that is generally put in the foreground in interactive documentaries is the relation user-interface-digital object. This is a specific type of relation that can be seen from a Human Computer Interaction point of view. In this research I go back to the origins of HCI and demonstrate in Chapter 2 that cybernetic concepts of positive and negative feed-back loop, open and close system and structural coupling are at the roots of HCI. To see if an interactive documentary is open or close, if it can change itself through positive feedback and how those changes happen as a result of the relations with its environment is a way to zoom into the consequences of the different types of interactions that create it. It is also a way to put interaction at the centre of what determines, and maybe terminates, an interactive documentary.
3. To observe the changes of the interactive documentary through its structural coupling with its environment means to establish if it can be seen as an open system (a system that can change itself, and to a certain degree, can create itself). This means using the concept of *autopoiesis* and question if, and how, levels of autopoiesis can be seen in interactive documentaries. Using autopoiesis also means

⁹ I refer here to Deleuze and Guattari’s notion of ‘agencement’ as described in *Kafka: pour une Littérature Mineure* (1975) where a stokehold is seen as both a ‘collectif d’énonciation’ (1975:145) and an ‘agencement machinique de désir’ (ibidem). Deleuze and Guattari describe a stokehold as a man-machine that includes, and defines, the man that puts coal into it. Their relation is forged inside a cultural and affective context that defines them both, and links them. Could the interactive documentary be seen like this?

questioning if an interactive documentary can be seen as a system capable of evolution and of extinction.

The three main philosophical concepts that I have linked and used here are: autopoiesis, interactivity and assemblage. A digital interactive documentary can be seen as a specific type of documentary that differentiates itself by its modalities of interaction, its levels of autopoiesis and the heterogeneity of the elements that assemble it. Instead of calling it an Autopoietic Interactive Assemblage Documentary I will choose the name *Live documentary*. I choose the word “live” because of the variety of its meanings: as an adjective *live* means both “in real-time”, as in a “live broadcast”, and “living”, as in “a live animal”¹⁰. I relate the idea of “being alive” to the concept of autopoiesis, and the fact of “happening in real time” to the instantaneity of interactivity that creates the co-dependence and co-emergence discussed in Chapter 3. But the word *live* also means “connectivity” – in the sense of a “live terminal” or a “live cable”, where the parts are connected via, and by, electricity. I like to see here a possible link to the relations that hold an assemblage together: an invisible flow of connectedness. Finally, as a verb, “to live” means “to reside or dwell” in a place¹¹, putting here the emphasis on situatedness, another concept related to interactivity that has been touched on in Chapter 3 and will be analysed further in the chapters to come.

The Live documentary: merging the concepts of autopoiesis and assemblage in the context of interactive documentary

In their original philosophical and biological realm the concepts of autopoiesis and assemblage might have seemed mutually exclusive – because autopoiesis has internal closure and determinateness, while assemblage is composed of external relations and temporal closure. Before I merge those two concepts when studying the digital interactive documentary I need to explain here why I do not see such potential contradiction between the two terms.

As seen in Chapter 2 Maturana and Varela use autopoiesis¹² to describe a living organism as self-generated (that can produce itself), self-organized¹³ (that has a logic that defines it as different from something else), operationally closed (that keeps its organization during its lifetime) and in structural coupling with its environment (that is in constant interaction with what is around it). The originality of this formulation was to see life as a dynamic process of constant adjustment between the organism and its environment where the organism keeps its identity through the constant re-adjustments

¹⁰ From http://www.oxfordadvancedlearnersdictionary.com/dictionary/live_2. Accessed 11.01.11.

¹¹ From <http://dictionary.reference.com/browse/live>. Accessed 11.01.11.

¹² Maturana and Varela’s original definition is: ‘An autopoietic machine is a machine organized (defined as a unity) as a network of processes of production (transformation and destruction) of components which: (i) through their interactions and transformations continuously regenerate and realize the network of processes (relations) that produced them; and (ii) constitute it (the machine) as a concrete unity in space in which they (the components) exist by specifying the topological domain of its realization as such a network.’ (1980:78).

¹³ Where “organization” is ‘the set of relations that must exist for the components of a system for it to be a member of a specific class’ (Maturana and Varela, 1987:47).

demanded by its internal and external interactions. This approach puts the emphasis on relation and co-emergence between systems; this is why it has been used by process thinkers interested in social sciences (Luhmann), psychology (Guattari, Bruner) and philosophy (Deleuze, Delanda). In order to be used outside of the biological realm theorists had to expand on the original definition of autopoiesis. Guattari and Luhmann have done so by stating that:

Autopoeisis deserves to be rethought in terms of evolutionary, collective entities, which maintains diverse types of relations of alterity, rather than being implacably closed in on themselves.

Felix Guattari in *Machinic Heterogenesis* (1992:39)

If we abstract from life and define autopoiesis as a general form of system-building using self-referential closure, we would have to admit that there are non-living autopoietic systems, different modes of autopoietic reproduction, and general principles of autopoietic organization which materialize as life, but also in other modes of circularity and self-reproduction.

Niklas Luhmann in *The Autopoiesis of Social Systems* (1986:172)

When I speak of autopoietic interactive documentary I am not saying that it is a biologically living organism, a breathing body with reproduction abilities. I am using the term in its larger meaning, as Luhmann does when he sees in social systems autopoietic behaviours even if they are not living systems. But I am also noticing that an interactive documentary is based on the interaction between a human, a context, and a technical (non-human) artefact. It is by opening up autopoiesis and by conceiving the idea of ‘machinic assemblages’ (Guattari, 1992: 40) between human beings and institutional and technical machines that Guattari proposes to see machines not as allopoietic¹⁴, but as autopoietic. In cybernetic terms Guattari stops considering the machine as a stand alone object and sees it as a system in relations with other systems. Guattari, together with Deleuze, wants to see the machine as the ensemble of its connections. Moreover the dualist view of the living machine (autopoietic) being different from the mechanical machine (allopoietic) is bypassed by Deleuze and Guattari’s notion of autopoietic assemblages, where a man using a machine becomes a new assemblage, a constantly shifting entity. Following this view a man using a bicycle becomes a cyclist where the energy of his legs, powered by the mechanism of the wheels, creates a movement that not only changes the nature of such man (from walker to cyclist) and the nature of the bicycle (from object parked on a street to a transport vector) but also the feeling of moving into a space (from feeling the ground with the sole of the feet to feeling the breeze created by the speed of the cycling) and ultimately changing the space itself (from a space of pavement to a space of traffic lights and roads)¹⁵. If we now move the coupling man-bicycle to man-interactive

¹⁴ Guattari goes back to Varela’s definition of a “allopoietic” machine as a machine that produces something other than themselves (for example a printer that produces printed paper) by opposition from an “autopoietic” machine ‘which engender and specify their own organisation and limits’ (1992:39) (for example any living organism that reproduces itself).

¹⁵ With a similar approach in *Reconnecting Culture, Technology and Nature* (2000), Mike Michael analyses how the machinic assemblages man-boots-nature or man-doglead-dog or

documentary, and we see it yet again as a machinic assemblage we can start questioning what this combination is made of, but more importantly how it creates new relations of identity (human's vision and perception of the self), new creative assemblages (the possible materialities and mutating forms of the interactive documentary itself), new relations between the human-interactive documentary and the world (how has this interaction changed the point of view towards the world of both the user and the documentary) and, finally, how is the perception of the world itself changed by such assemblage.

As seen before assemblage¹⁶ is a word coming from Deleuze and Guattari¹⁷ and later used by DeLanda¹⁸. In Deleuze and Guattari's terminology assemblages have two aspects: their content and their expression. By 'expression', Deleuze and Guattari mean that an assemblage is 'a *collective assemblage of enunciation*, of acts and statements, of incorporeal transformations attributed to bodies' (1988:88, emphasis in original) and with 'content' they see the assemblage as 'machinic', as an assemblage of 'bodies, actions and passions, an intermingling of bodies reacting to one other' (1988:88). In *Science, Social Theory and Public Knowledge* (2003), Michael and Irwin simplify such concepts by saying:

'Machinic' refers to the causal relations between objects that make up an assemblage; 'enunciation' refers to the statements and signs that allow the elements of an assemblage to communicate with another. In both cases, these causes and communications serve in the territorialisation of the assemblage – that is, the stabilization of its peculiar configuration of elements. (2003:120)

DeLanda, taking from Deleuze, elaborates onto the machinic and enunciative aspects of the assemblages and puts the emphasis the assemblage's *relations of exteriority*. *Relations of exteriority* imply 'that the properties of the component part can never explain the relations which constitute the whole' (DeLanda, 2006:11) and that 'a component part of an assemblage may be

man-remotecontrol-television are not separate entities, but fluid networks that connect heterogeneous elements.

¹⁶ The word that Deleuze and Guattari used in *A Thousand Plateaus* is 'agencement' which in English would be translated by 'arrangement', 'fitting', 'fixing' or 'organization'. The English term 'assemblage' was used in Paul Fross and Paul Patton's first translation of the *Rhizome* in 1981, and then kept by Brian Massumi's later translation – when *Rhizome* appeared as the introduction of the book *A Thousand Plateaus*. In *Agencement/Assemblage*, John Phillips points out that the translation of 'agencement' by 'assemblage' restricts the understanding of the concept making it synonymous to collating, gathering or blending.

¹⁷ As most terms *assemblage* has an evolution in Deleuze and Guattari's thinking and has been used in several texts with different emphasis. It first appears in the *Anti-Oedipe* (1972) and is then elaborated further in *Kafka: Pour une Litterature Mineure* (1975), in *Mille Plateaux* (1980), *Cinema 1* (1983), *Foucault* (1988) and *Pourparler* (1990). The definition that will be used in this research comes from Deleuze and Guattari's use of the term assemblage in *Mille Plateaux* (1980).

¹⁸ DeLanda refers to Deleuze's definition of assemblage as 'a multiplicity which is made up of many heterogeneous terms and which establishes liaisons, relations between them, across ages, sexes and reigns – different natures. Thus, the assemblage's only unity is that of co-functioning: it is a symbiosis, a 'sympathy'' (as quoted in DeLanda, 2006:121).

detached from it and plugged into a different assemblage in which its interactions are different' (2006:10). By doing so DeLanda tries to determine the type of relations that the assemblage has with other assemblages, and this is the precise points that interests me.

What attracts me in the notion of assemblage is to see entities as possible fields of relations rather than fixed aggregation of their parts. Conceiving entities as linked in two ways (internally to their own structure, and externally to their own environment) is not new. I believe that this same concept is present in the notion of autopoiesis, and this is were I would like to bridge the two concepts of autopoiesis and assemblage. Autopoiesis and assemblage are linked to each other in several ways. They are both based on the notion that it is relations that create a whole. At the base of autopoiesis there is the assemblage, as creation of life is only possible through relationality. But at the base of assemblage there is autopoiesis (as it is the biological word coined by Maturana and Varela that has inspired Guattari to coin the concept of autopoietic 'machinic assemblages' (Guattari, 1995:40).

Autopoiesis as a term was first seen as a definition of life but, as seen in Chapter 2 and here above, it was later used in philosophy (Deleuze and Guattari) and social science (Niklas Luhmann, DeLanda) for its relational meaning, and consequentially lost its strict assimilation with life. I made clear in Chapter 2 that it is this later use of autopoiesis that interests me in this research and that seems to emerge in Live documentaries.

In conclusion, autopoiesis and assemblage are not in my view contradictory, but rather complementary when applied to the Live documentary. If autopoiesis puts the emphasis on logics of self-creation¹⁹, on internal organization (what composes it) and on structural coupling (relations with the environment), assemblage puts the emphasis on eterogeneity of its components and co-relation with other assemblages. Both, combined, could help when looking at the Live documentary.

The Live documentary: Heterogenesis Applying assemblage theory to interactive artefacts

Viewing a documentary as a form of assemblage is not unique to new media artefacts. A linear documentary, a film, or even a typewriter²⁰, can be seen as assemblages. The difference between an interactive and a linear documentary is the extra relational layer of interactivity. In a hypertext documentary a user has levels of interactivity with the content that will vary depending on the project. Those levels of interactivity can be low or high – resulting on more or less complex narrative structures- but they guarantee a dynamic relation

¹⁹ The fact that self-making is present in living entities in flesh and blood does not mean that such mechanism cannot be present in social entities (Luhmann) or agglomerate entities such as the Earth (Gaia theory). An interactive documentary does not breath and reproduce itself biologically, nevertheless its digitality make possible a certain level of self-making (that will depend on the interactivity that is imbedded in it and on the way it structurally organized). A participative documentary, that lives on the web and that depends on people's contributions, has a capacity of self-making, in the sense it's code and logic of interaction allows it to grow by incorporating people's contributions.

²⁰ I refer here to the chapter 'Qu'est-ce qu'un Agencement' in *Kafka : pour une littérature mineure* (1975) where Deleuze and Guattari elucidate how a stokehold, a typewriter or a castle can all be seen as an 'agencement' (assemblage).

between the interactive product and its environment (user, platform, author) that do not exist in linear film. From the moment the user can act on the story order of the documentary (the order of the seen events) she is effectively acting on the plot, on its delivery, on its length, on its form. I am not speaking of the “interpretation” of the story, but of its time based delivered order.

Assemblage theory is a way to see the world as constantly networked, so it could be applied to any relational object. But as Marilyn Strathern has remarked in *Cutting the Network* (1996), networks are difficult to identify and have a ‘fragile temporality’ (1996: 523). First one needs to identify a specific assemblage, out of thousand possible networks, but then, how can one enter, unfold, dissect such complexity in order to say anything meaningful about it?

When DeLanda decided to apply assemblage theory to social entities, he had to build a methodological framework in order to do so. In *A New Philosophy of Society* DeLanda proposes a clear methodology to apply Deleuze and Guattari’s assemblage theory to practical cases analysis. Faced with the question of how can one pass from a general belief that assemblages are formed from a multitude of possible relations to the practical problem of delineating clear lines of thought to investigate when studying a precise assemblage (in his case the family, the city, society etc..) he highlights two dimensions – and by doing so he de facto schematizes and limits the openness of assemblages.

‘In addition to the exteriority of relations the concept of assemblages is defined along two dimensions. One dimension, or axis defines the variable roles which an assemblage’s component might play from a purely *material* role, at one extreme of the axis, to a purely *expressive* role at the other extreme.’²¹ (DeLanda, 2006:12)

‘The other dimension define variable processes in which these components become involved and that either stabilize the identity of the assemblage, by decreasing its degree of internal homogeneity or the degree of sharpness of its boundaries, or destabilize it.’ (ibidem)

In other words DeLanda analyses social assemblages trying to identify the sets of heterogeneous elements that are in relations through it. In an attempt to apply Deleuze’s assemblage theory he somehow simplifies it by saying that any assemblage can be seen as the result of four arguments: their materiality (where do they take place, what are they made of), their expressive role (what do they represent, how do they communicate, what makes them visible), their process of territorialisation (what stabilises their identity) and their process of deterritorialisation (what destabilizes their identity). In this research I will not follow DeLanda’s approach, as I believe it would be a structural imposition to the interactive documentary. I do not see the interactive documentary as

²¹ DeLanda takes this definition from Deleuze’s conclusion to *Mille Plateaux*. When concluding on assemblages (*agencements* in French) Deleuze and Guattari write ‘Il y a une trevalence de l’agencement: 1. contenu et expression; 2. territorialite et deterritorialisation’ (1980:630).

defined by four main arguments, but rather as composed by multiple dimensions. Nevertheless, I need to confront the basic problem of relational approaches to cultural theory: how can one identify what composes the assemblage? Since an assemblage is not static, and it is potentially linked to infinite external assemblages... where does one set the boundaries? In other words: how can we use assemblage theory to analyse a specific multimedia artefact?

De Paoli and Kerr have applied assemblage theory to the interactive field of online games, more precisely to the study of cheating in MMORPGS²². For them the notion of assemblage is 'first and foremost a way of thinking about relations between the whole and the various parts' (2009:3), and such approach is 'multi-level, pays equal attention to technical and non-technical elements, is non-linear [and] focussed on relationships' (2009:10, [and] added by me). De Paoli and Kerr have defined assemblages 'as an open-ended gathering of several different, and sometimes in contrast, elements that can range from material artefacts, to texts, to people or organizations, and that can also include for example cities or biological or linguistic elements (2009:2)²³. Their approach has been to totally embrace Delanda's methodology and to look for the two axis of material/expressive and territorialisation/deterritorialization in some specific MMORPGS case studies. The result of their analysis is interesting but does not go beyond those two axes.

In my quest to use assemblage theory in the study of interactive documentaries I do not want to stop at those two dimensional axis. I want to see the interactive documentary as a complex system that has multiple, if not infinite, dimensions. What interests me is to see how the different levels and modes of interactivity present in interactive documentaries can have a territorialising, and deterritorialising, effect on the creation of subjectivity, but also to see how the circularity of this positive or negative feed-back loop affects the documentary itself - and the space in which the user-documentary assemblage lives. For this I will incorporate the idea of territorialisation and deterritorialisation in my analysis of the interactive documentary but I will also add other dimensions that put more emphasis on the relations of interiority than what we find in DeLanda's methodology. For me, as I already said in the previous sections, the interactive documentary form is highly dependent on its internal logic of interactivity. I will consider the logics of interactivity described in Chapter 1 as the cardinal points that hold together an interactive documentary. For each mode of interactive documentary I am going to select a main case study which I will look at as if it was an assemblage, or as a Deleuze-Guattarian concept, that can be depicted through multiple relations, bridges, all the infinite open elements which form the complex series that the Live documentary is. Though the Live documentary I am not just applying Deleuze's assemblage, nor Maturana and Varela's autopoiesis to the interactive documentary, I am using such concepts as inspiration to create a new approach. I am questioning whether the Live documentary is a dynamic system (that impacts its environment), whether it has levels of autopoiesis (self-regulation and self-making), and to see what

²² MMOPG stands for Massively Multiplayer Online Role-playing Game.

²³ Where in word 'text' I include any narrative media (graphics, video, audio etc...).

relations author/product/user/world it creates. Those relations could be seen as relations of interiority and exteriority, but this would give them the wrong emphasis. In this research I want to concentrate in the organizational/structural coupling relations (inspired by autopoiesis) and on external relations with other assemblages (inspired by assemblage theory). In order to avoid confusion I will call the ensemble of the relations formed by, and that form, a Live documentary its *dimensions*. A *dimension* is a network of relations (which can be of any sort) that links the components that make the Live documentary possible. *Components* can be material (the computer, the platform, the human body etc...), digital (the code, the software etc...), ideas (the idea of the author, the interpretation of the user), legal (the copyright) or cultural (expectations, aesthetics, politics etc...). In other words a Live documentary is composed by heterogeneous components that can be linked within them through infinite dimensions. An interactive documentary can be seen as formed by a series of components such as ideas, authors, users, platforms etc... Effectively those components acquire a different level of granularity when linked to each other to create a dimension that shows a specific aspect of the interactive artefact. The user-author dimension formed by the two components “user” and “author” will be useful to isolate and discuss the substantial difference between a collaborative documentary such as *Mapping Main Street* (2010), which is effectively populated by user-generated content, and a Hypertext documentary such as *Forgotten Flags* (2007) where the author describes his own trip in ex-East Germany. But the dimension code-platform-interface will be useful to see other specificities of the same two interactive documentaries.

Components are therefore elements that acquire sense and function depending on the dimension that contains them, and that are formed by them, but they are also dimensions by themselves. The component “interface” is itself the result of other components such as “technology”, “market”, “user’s needs”, “fashion”, “platform”, “software” etc... A *component*, then, can be zoomed in and zoomed out from. It accepts heterogeneity and it is while relating to others that it acquires a role and a meaning. When linked, and separated by an observer, several components can be seen to form a *dimension of investigation*.

In the rest of this chapter I will thus choose a main case study for each interactive mode described in Chapter 1, I will try to make visible some of the multiple components and dimensions that compose such Live documentary, and I will question the consequences of such relations on an aesthetic, political and ontological level. For this I will use the following questions as entry points of enquiry:

1. what are the main components and dimensions that compose a particular Live documentary?
2. what is its organization and can it change or evolve?
3. do those changes affect the Live documentary’s identity, and/or the identity of the systems that are related to it?
4. what stabilises it or destabilises it, and a Live documentary stop functioning/existing?