

LOCATIVE ART, IDENTITY AND MEMORY: PRODUCTION OF PARTICIPATIVE HYPERMEDIA DOCUMENTARIES IN THE SETTLEMENTS OF LANDLESS RURAL WORKERS MOVEMENT IN BRAZIL

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ABSTRACT

Our paper examines how the production of participative hypermedia documentaries with mobile devices can foment subjectivities and generate social movement within the interstitial settlements of the Landless Rural Workers Movement (MST) in the state of Rio Grande Do Sul, Brazil. The research project was initially underwritten by a CNPq/SEC/MINc 2013 grant, with on-going research underwritten by funding from the Proext 2013 and Proext 2014 Competitions “Contributions of Interactive Art in ICT education for teacher training.” We draw upon the appropriation of media art and technology to establish links between the creation of subjectivity as emergent identity, the detection of memory as integrative process within social movement and the organization of parallel creative economies as alternative valuation. The theoretical thrust of our work couples Simondon’s philosophy of technics with Guattari’s activist ecosophy. To activate our theoretical framework in praxis, we situate mobile devices at the intersection of environmental, social and mental ecologies within locative art. We examine the micro-politics of the quotidian and memory as integrative of experience to bring forth singularizing experiences where both sender and receptor become generators of content mediated through a generalized web of connectivity which provides singular local value within global connections.

Our paper examines two projects that deal with mobile digital devices towards the creation of new subjectivities and the generation of social movement within the settlements of the Landless Rural Workers Movement in the state of Rio Grande do Sul, Brazil. The research projects were initially underwritten by a CNPq/SEC/MINc 2013 grant, with on-going research underwritten by funding from the Proext 2013 and Proext 2014 Competitions “Contributions of Interactive Art in ICT education for teacher training.” We draw upon the appropriation of mobile digital devices to establish links between the creation of subjectivity as emergent identity, the detection of memory as integrative process within social movement and the organization of parallel creative economies as alternative valuation. The theoretical thrust of our work couples Simondon’s communications theory and philosophy of technics with Guattari’s activist ecosophy. To activate our theoretical framework in praxis, we situate mobile devices at the intersection of environmental, social and mental ecologies within locative art under the aegis of Guattari’s ethico-aesthetic paradigm.

As such, we seek to generate an enabling ecology of practices which reposition the functionalities of digital technologies and the potentials of web-based social media. We examine the micro-politics of the quotidian and memory as integrative of experience

to bring forth singularizing experiences through the production of videos where both sender and receptor become generators of content mediated through a network of connectivity which provides singular local value within global connections. This entails a shift from considering technologies and media as technological entities towards the activation and realization of difference towards the invention of a subjective society which Guattari saw as being “created within the perspective of a new aesthetic-political paradigm.” For both, Guattari and Simondon technology defines an active and vital realm of potential not as a means but as constitutive of an enabling ecology which interlinks aesthetic and ethical concerns. [1 - 3]

From a technical standpoint, digital technologies provide popular access to the means of production of professional quality content whereas web-based social media provide unprecedented possibilities for dissemination and distribution of cultural production. In turn, locative media simultaneously bring into play the couple of mobility and fixity by prompting offerings from local services to re-texture the give-and-take of the informational landscape as well as color the experience of occupation. Location can thus no longer be considered a stable center: location becomes a nomadic quality – an ambulating attractor of unsettled intensifications – as it becomes activated by the displacement of the user and by the topological dimensionality of connected movements. As a territorializing technology, the new communication devices and the indefiniteness of location lead us to reconsider the conception of cognitive subjects and their spaces of occupation. The way we currently use wireless devices and their apps has transformed them from mere passive recipients into active agents of production, reception and distribution of information. Locative media activate or provide access to additional channels of sited information on the most diverse aspects of an environment while generating new hybrid bodies which simultaneously inhabit actual and virtual locations. This enhanced informational landscape composed with mobile devices – commonly referred to as a mobile augmented reality – creates communicated territories, both in the sense of being linked as well as being involved in the exchange of information, as hybrid spaces of digital-informational control and mobility but which are not necessarily physically connected.

EDUCATION AND LOCATIVE MEDIA

The conjunction of ICT, *Locative Art and Education* proposed by our project comes at a historically propitious moment for schools in southern Brazil in which the pace of technological progress outstrips those of educational and social spheres. To bridge this

developmental gap, we proposed the project *Contributions of Interactive Art in ICT education for teacher training* selected for funding in the PROEXT 2014 Competition.

Our research and extension education project is based on continuous training and qualification of teachers in the use of ICT in elementary education. Participating teachers and educational technicians were provided with basic ICT training in order to enable them to apply this newly-acquired skill set in their professional practices. Our entire Interactivity, Art and Technology research group (Inter.Artec/CNPq) was of one mind in the belief that technological innovation is not simply a matter of equipping schools with computers: teachers must also be provided with ongoing training so they can work with a variety of digital media and information and communication technologies while focusing on hypertext and hypermedia languages using an interdisciplinary approach.

ICTs are changing the pedagogic methods of social and educational interaction while encouraging change that goes beyond the simple use of technology. Yet, we sought answers to two pressing questions: at what level do methodological changes affect cognitive processes? What mutations are being produced within schools as a result of new digital interfaces? Reflection on these questions raised others. It was also felt that educators faced various challenges as a result of using ICT: How does the use of digital technologies enhance a critical and innovative outlook on teaching and learning while taking into consideration the aesthetics of digital culture? How do these technologies instigate novel cognitive processes of perception and image creation? How can educators go beyond habitual practices with digital interfaces and in particular with mobile devices, seeing that art transgresses the technology of each era? How can teachers stimulate the production of new knowledge by their students through associative interpretations between the various modalities: visual and/or verbal/auditory?

To attain our objectives, we proposed a two-phase methodological structure. We began with weekly study group meetings at the Federal University of Santa Maria (UFSM) with project leaders of the research-creation project to design the teacher training programs and devise questionnaires addressing the relation between Art, Education and Technology. The Interactivity, Art and Technology research-creation group/CNPq started out with a survey of the state-of-the-art in the fields of Digital Arts and Education and ICT. Based on the findings, the research group produced questionnaires which were then made available online through a Moodle environment to assess the scope and relevance of the topics and themes developed by the program for their implementation in public schools. The compiled results served as basis for the second phase: eight workshops on the use of tablets in education were created for teachers and a SIGATEC symposium on Art, Education and Technology was held at the Federal University of Santa Maria (<http://w3.ufsm.br/sigatec/>).

Out of all the mobile devices available, the research group felt that tablets were the way to go. Their versatility and utility of these devices expand the horizons of the classroom through network connectivity and makes the learning experience more real-world; they evoke greater interest by students; they improve aesthetic, perceptual and cognitive development; and they foster closer student/teacher learning interaction. Thus, with tablets provided by the state government to public school teachers, the research group sought to use these devices for educational development within the public school environment and incorporated the aforementioned theoretical considerations into eight workshops: Tablets and Augmented Reality, Tablets and Audio Narratives, Tablets and Visual Narratives, Tablets and Video Production, Tablets and Hypertext, Tablets and Digital Narratives in Video Gaming Environments, Tablets and Support Materials, Tablets and Learning Tools.



Fig. 1. Locative Media Workshop, UFSM. 2014, Photo courtesy of Andreia Machado Oliveira.

LOCATION AS A NOMADIC QUALITY

The proliferation of ubiquitous computing and mobile media have transformed the landscape of public space. The use of mobile devices allows one to speak on the phone in the metro, to send text messages while walking down the street or perform other activities representing “experiences of private life in the midst of the accelerated movement of the everyday in contemporary public spaces.” [4] Individuals in motion can thus communicate and interact through digital media technologies in cyberspace while being minimally aware of the place they occupy in space. Cyberspace does not eliminate the idea of physical space; the two become hybridized the moment that information pertaining to the physical space is made available within virtual contexts and that the virtual space is mapped onto the physical space which is inhabited by material bodies, thus “the public sphere arises from the complex interaction of material and immaterial spaces in hybrid spatialities characterized by dynamic flows.” [5]

Locative media simultaneously bring into play a double function of mobility and fixity whereby the ambulatory user prompts offerings from local services to re-texture the give and take of the informational landscape. “The location becomes the subject of action: the information “emanating” reacts to and from it.” [6] Yet, location can no longer be considered a stable center: location as a nomadic quality becomes an attractor of variable intensifications as it becomes activated by the displacement of the user. The world becomes mediated by information as a territorializing technology which is subsidiary to mass communication and the whims and preferences of the user. Informational flow generated by control and distribution systems as the center ceases to be the model and is replaced by post-mass media formats “which allow the free and extensive production, consumption and circulation of information.” [7] However, all mediation, whether mass media or post-mass media, leads us back to material culture – we inevitably relate to the world through artificial mediators, namely language, institutions or technological devices.

These new forms of communication and the indefiniteness of location lead us to consider the conception of cognitive subjects. The way users currently “consume” wireless devices and their apps has transformed them from mere passive recipients into active agents of information production, reception and distribution. Locative media allow information to be expanded by providing additional channels of sited information on the most diverse aspects of an environment while generating new hybrid bodies which simultaneously inhabit actual and virtual locations. This enhanced informational landscape composed with mobile devices – commonly referred to as a mobile augmented reality – creates communicated territories, both in the sense of being linked as well as being involved in the exchange of information, as hybrid spaces of digital-informational control and physical mobility. Lemos [8] asserts that the hybridization of physical space and cyberspace is what characterizes the era of ubiquitous communication. Post-mass locative media facilitate the appropriation and distribution of information across networks thus allowing for expressive relations to emerge between cyberspace and urban space. In this way, post-mass locative media produce informational territories where the movement of incoming and outgoing information as an open system is constitutive of new corporalities which together produce associated milieus as cognitive subjective entities.

IDENTITY AND MEMORY

The power of mass media to define and sway public opinion constitutes one of the most powerful forces in defining and modulating how the citizenry thinks, perceives and acts socially, politically and culturally in the world. Media are also leading determinants as to how the citizenry will accept the legitimacy of government and submit to governability: in the battle over the hearts and minds of people, the effects of media and mass communication are of paramount importance and require a new understanding which reflects the new social, political and cultural dimensions as well as the new limitations to governability.

Our project with the Landless Rural Workers Movement in the state of Rio Grande Do Sul, Brazil, underwritten by a CNPq/SEC/MINc 2013 grant, seeks to answer the following question: Does the production of an ontological shift to the conceptual underpinnings of the methods of mediatic practice bring about deep and lasting subjective social change? In order to answer this question, our research starts out from the belief that communication is a process that generates change and that communication media are agents of social change. But the way that they do so depends on how they are posited theoretically and empirically. In terms of our project, this entails a shift from the consideration of media as mere technological entities to a re-orientation of their understanding and use towards the determined activation and realization of a subjective *socius* under a new paradigm of micro-political desiring-production. This in itself brings out a number of problems of an ethico-aesthetic nature which we seek to resolve through the creation of social, mental and material ecologies of practices within a series of hypermedia documentary production workshops.

Participative hypermedia documentary has explored alternative pedagogies towards the acquisition of documentary production skills as subjective development but not through the application of research-creation methods as a pedagogical strategy. This innovative methodology pioneered at Hexagram-Concordia Centre for Research-Creation in Media Arts and Technologies (<http://hexagram.concordia.ca>) in Montreal by Lynn Hughes and developed by the SenseLab is at the forefront of participative methodological innovation. The Canadian Federal Government’s Social Sciences and Humanities Research Council strategically recognized this research methodology in 2003 as one of its research funding categories towards the development of knowledge and innovation through artistic expression, scholarly investigation and experimentation.

The goals of this project are two-fold. First, the theoretical repositioning of concepts central to communication studies such as media, agency, change, social movement, identity, memory, subjective agency and the subject/object relation along the lines established by process philosophy. Second, to devise and apply a syllabus based on this conceptual realignment and a research-creation methodology to teach hypermedia documentary methods in a series of workshops offered to the residents of the assentamentos of the MST in RS.

From a theoretical standpoint, if we take Lasswell’s linear model of communication as constitutive of one half of Osgood and Schramm’s model, the assumption is that the circularity of the process exists on the same plane or field: that there is a corresponsive relevance between the outgoing message and the response in terms of terms, scale and duration. [9], [10] If one considers cinema, the linear model of transmission and reception postulates that we have an exhibitor, a film and a spectator all working together as a coherent communicational whole. Yet, it is obvious that the three are working on different levels of

understanding: the character of the message conveyed depends upon the field of coherence under consideration. If we look at Lasswell's linear, mechanical model of communication, the well known 5 W's – *Who? Says What? In Which Channel? To Whom? With What Effect?* – we see that the point is to get the Message from the Communicator to the Audience to create an Effect – so that, often, in the analysis of media there is a disconnect in answering the five Q's as corresponding concordances and determining exactly what message is in play. For example, the response of the spectator to the exhibitor of a film as message is not an analysis of the film but \$12. This would imply that the understanding of what is at stake is different for the two parties in the visual equation of the model: one could say that there is a lack of symmetry or disparity between the terms constituting the relation. On one level we are discussing the spectators' experience of the film in terms of receptivity as a field of understanding and on the other we are discussing the exhibitor's income in terms of finance as a field in itself. Both fields are consistent and coherent within their own expanses of meaning/methods, but they exist and function on totally different levels even though they both "share" the film as message. There are scholars that still say that these two spheres of interest are not to be confounded, but the whole field of film marketing as a practice and as field of knowledge lies precisely in the expression of the progressive understanding of the interactive functional dynamic of the relation between these two fields of activity. The French philosopher Gilbert Simondon (1924-1989) would say that in this case the film exists as a concretized entity, as a shared or associated element in a "milieu" or medium, in which the film performs various functions simultaneously.

The implications of these concepts on communication theory are not lost on Simondon: his theories of information and transmission through the process of transduction are very exciting indeed and are presented in his *Mode of Existence of Technical Objects* (1958) whereas his theory of individual and collective individuation is developed in *L'individuation psychique et collective*. [11] They are beginning to gain traction and acceptance yet there is resistance not only because of the implicit miscegenation of discourses and the concretization of knowledge and methods between disciplines but also because of the implications at an ontological level: according to Simondon's thought, a thing A can be a something else according to the light shed upon it. This is of major significance epistemologically because it contradicts the three Principles or Laws of Thought, namely, the Law of Identity (A is A); the Law of Contradiction (A thing A cannot be both A and not A simultaneously); and the Law of Excluded Middle (A thing A is either A or it is not A).

The work of French philosophers Gilles Deleuze and Félix Guattari develops the conceptual apparatus that expands Simondon's proposal where the subject is considered as an effect of individuation, rather than as a cause. They develop a means of thought that allows one to work with shifty constituent elements that have no fixed essence and manifest multiple identities always

in flux as well as postulate the concretized workings of the interactive functional dynamic of the relation between fields of activity. For Deleuze and Guattari, the relations which constitute the linkages between fields are not static or permanent: they are dynamic beings (not as nouns but as verbs) which create expanses of operational fields they call territories. [12] "The spatial, material and psychological components that constitute or deconstitute a society, group or individual" seen as territories are of key importance to our project because they are the "apparatuses that comprise history as a lived, experiential assemblage of events and circumstances." [13], [14]

Obviously, the direction which informs these questions reflects a deviation from traditional epistemology. Where traditional epistemology seeks to delimit and constrict problems to determine definite answers to questions, our approach complexifies the process of enquiry by shifting the emphasis from the answering to the posing of questions. This inversion of the traditional metaphysical relationship between identity and difference represents an important epistemic turn for our project. The epistemology of difference emphasizes the generation of questions which propels the advance of creativity and the process of discovery. It delves in the realm of change, difference and open-endedness rather than seek satisfaction in static, definitive and unchanging transcendental formulations. Instead of looking for understanding through questions of essentialism and identity, our methodology aims at a functional or practical understanding based on experience. This is a method anchored in radical empiricism – one which does not vie for a total explanation: rather, it seeks its truth value in terms of relative coherence in experience as local operational functionality. But this is not to say that we are comfortable with vagueness, imprecision or ambiguity; we are simply more comfortable with indeterminacy and open-endedness. This shifts the attention of creation from the end product to the process itself, where what is important is not so much the creation of "images" but the process of alteration to the "image of thought:" it seeks to locate movement of thought as change within the pedagogic process as the conditions, the conditioning, of actual experience. And it is within this always-differentiating field that according to Deleuze and Guattari the image of thought "posits itself and its object at the same time as it is created" and which for us represents the creative domain of our project both for the author and the participants of the documentary workshops as "laboratories of thought and experimentation for future forms of subjectivation." [15], [16]

It is within this immanent plane of invention that research/creation plies its methods looking to discover and create novel qualitative combinations of sensation and feeling as "percepts" and "affects" as realizations of subjectivity. Where traditional mass media systematically "place the receptor outside the frame of experience" in order to exploit the process and widen the binary divides between producer/consumer, active/passive, subject/object, our project seeks to use digital media to integrate and involve people

in participative models of media production in order to dissolve these dualities and heighten political subjectivity as a memorial social dynamic. [17], [18] Thus, we seek to generate an enabling ecology of practices which reposition the functionalities of digital technologies and the potentials of web-based social media. This entails a shift from considering technologies and media as mere technological entities towards the activation and realization of difference towards the invention of a society which Guattari saw as being “created within the perspective of a new aesthetic-political paradigm.” [19]

For both, Guattari and Simondon technology defines an active and vital realm of potential not as a means but as enabling ecology which interlinks aesthetic and ethical concerns. [20] From a technical standpoint, digital technologies provide popular access to the means of production of professional quality content whereas web-based social media provide unprecedented possibilities for dissemination and distribution of cultural production. And to harness their full potential, we need to see them as the intersection of social, mental and environmental ecologies expressive of praxis which “will lead to a reframing and a re-composition of the goals of the emancipatory struggles.” [21] If we look at this from a traditional communication model of generator-medium-receiver, for the MST the most important implication of this model is the generation of content which can be used to give heft and flexibility to their mediatic presence, positioning and agenda-setting at a local, regional and global scale. From a new media standpoint, for the people of the assentamentos, the settlements, this enhanced mediatic existence allows for the establishment of dialog and relational networking in virtual communities as well as flesh-and-blood in-the-world communities.

Content will be produced at a grass-roots level and be user-generated through digital technologies which include digital video, blogging, podcasting, forums, review-sites, social networking, social media, mobile phone photography and wikis. Free distribution and dissemination of this User Generated Content (UGC) can be maintained through low-cost social media and “content-based” sharing sites which place no censoring restrictions. However, the ability of assentamentados and the MST to generate documentary production and disseminate it on their own terms means that these digital technologies and communication techniques can be used for a variety of purposes: for historical and archival documentary, as source material for news and current-event documentary, for the maintenance of their ecology of technical practices and the presentation of everyday life, for fostering solidarity and the expansion of social networks, for educational purposes, for personal self-affirmation and for creative/artistic expression. Within the dissemination and distribution process, access to these materials can be modulated according to individual user security needs or protocols set-up by the MST itself without external influence by using conventional peer-to-peer (P2P) or anonymous friend-to-friend (F2F) file-sharing networks or other file transfer systems. Also, depending

on end-user needs, the UGC can be provided in a variety of resolutions and formats and independently accessed.

But what is key here is that the UGC is, as Touraine points out, an expression of the individualism of the Subject – “it represents the individual in his attempt to be a responsible actor” where the result of subjectivation “is the self-representation of an individual or a group as an actor, trying to impose their own ends to their environment.” [22], [23] The Subject “cannot oppose this invasion with universal principles but with the resistance of [their] singular experiences.” [24] The important aspect here is for individual documentarians to create works according to a different pattern; not one based on objectivity with aspirations towards artistic or professional outcome but on their own decidedly subjective singular experience and their interpretation of everyday events. And it is exactly this expression of the singular experience which is to be brought out in the work of documentary production. It is not a question of dictating what is to be produced and how but of examining structures of *habitus* and the dispositions of creative process by establishing a research/creation methodology within the documentary production workshop process.

The theoretical aspect of the research will make free use of a trans-disciplinary approach to produce the conceptual foundations upon which the ethico-aesthetic ecology of practices will be mounted. As such, the theoretical praxis will consist of a direct formulation of the concepts based on the reasoned survey and consideration of the existing literature according to the thematic delimitations of the project and defined in the bibliography. While we develop the theoretical side of the project, we will be simultaneously creating the syllabus for the practical workshops in light of the directions informed by the theoretical research. The syllabus development process entails a three-phased approach: the first will emphasize the attainment of basic technical capabilities by the workshop participants with simple video cameras (e.g consumer grade or cell phone) or computer tablets; the second will focus on the acquisition of documentary production techniques and the development of expressive capabilities; the third will involve the distribution and dissemination of the documentary productions via web-based social media and dedicated web-sites.

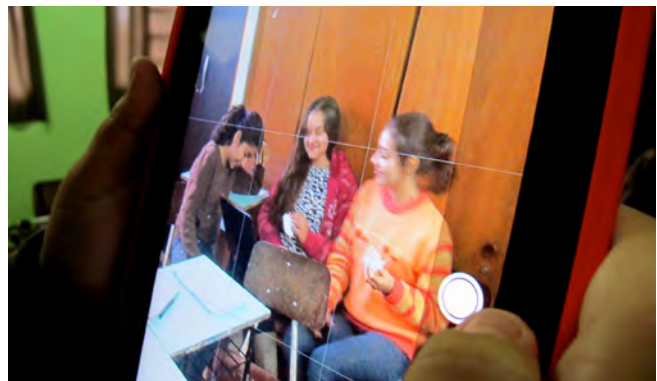


Fig. 2. Experimenting with tablets, 2014. Image courtesy Felix Rebolledo Palazuelos.

The second phase will be the most problematic as the acquisition of documentary production techniques and the development of expressive capabilities will be the crux of our project – it is here that we will be able to see if we can instill an appropriate method of ethico-aesthetic discovery and creation that will convey the singular expression of self and community through the appropriation of media and its direct subjective use. This will entail the acquisition of documentary production techniques and the development of expressive capabilities as ethico-aesthetic discovery and creation that will convey the singular expression of self and of personal histories as narrative constructs through the appropriation of digital media and their direct subjective use. The work carried out by the students in acquiring the technical skills and crafting their narratives will follow the practices of research creation where the systematic, grounded appraisal of the experiential results will be modulated by a rigorous processual and experiential mapping practice as prescribed by a cartographic methodology.

As such, the project is predicated on three phases which come into being and simultaneously co-exist with one another. The first phase is the acquisition of technical skills and the creation of participative videos as experimentation; the second phase will involve the record keeping aspect of the experiences as data gathering; the third phase will consist of the cartographic mapping of experience as interpretation. We emphasize the simultaneity of the various aspects of the research process because in contrast to traditional methodologies which sequentially separate the research protocol into the discrete steps of design, experimentation, data gathering and analysis of results, our cartographic methodology seeks to investigate the movement of thought that occurs in the intervals between these steps. Rather than break down the research process into these discrete protocolary steps towards the eventual discovery of results, the cartographic methodology sees the incremental advancement of the eventual process-as-discovery the result of the research. The principal thrust is not a question of arriving at a Big Conclusion but about the observing and monitoring of the coming to being and deployment of the project's processual unfolding in order to generate propositions. Therefore, the three phases of the project co-exist as mutually dependent participants in an ecology of practices. [25] The narratives of recounted practices seek expression to the witnessed changes but also to the subjective changes which instigate the witnessing of these changes as the creation of novelty as invention as well as the recognition of the advance of novelty as a calling-forth from the future.

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