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On the Complexity of Digital Video Cameras in / as Research: Perspectives and agencements
La complexité des caméras vidéo numériques dans la / en tant que recherche : perspectives et agencements

Francis Bangou

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ON THE COMPLEXITY OF DIGITAL VIDEO CAMERAS IN / AS RESEARCH: PERSPECTIVES AND AGENCEMENTS

FRANCIS BANGOU *University of Ottawa*

ABSTRACT. The goal of this article is to consider the potential for digital video cameras to produce as part of a research agencement. Our reflection will be guided by the current literature on the use of video recordings in research, as well as by the rhizoanalysis of two vignettes. The first of these vignettes is associated with a short video clip shot by a newcomer student as part of a three-year research project that focused on the interrelationships between citizenship, technology, and pop culture. The second vignette relates to the entry of a piece of art into the research agencement. As an agencement in and of itself, the goal of this article is not to provide definitive responses, but rather to disrupt habitual ways of thinking about videos in / as research and potentially contribute to change.

LA COMPLEXITÉ DES CAMERAS VIDEO NUMERIQUES DANS LA / EN TANT QUE RECHERCHE : PERSPECTIVES ET AGENCEMENTS

RÉSUMÉ. Le but de cet article est d'examiner ce que des caméras vidéo pourraient produire au sein d'un agencement de recherche. Notre réflexion prendra appui d'une part sur ce que nous révèlent les écrits consacrés à l'utilisation de films vidéos dans la recherche, et d'autre part sur la rhizoanalyse de deux vignettes. La première vignette est associée à un court clip vidéo filmé par un élève nouvel arrivant dans le cadre d'un projet de recherche de trois ans consacré aux liens qui unissent la citoyenneté, la technologie et la culture pop. La deuxième vignette touche à l'entrée d'une œuvre d'art dans l'agencement de recherche. Étant lui-même un agencement, cet article ne prétend pas fournir de réponses définitives, mais tend plutôt à perturber la façon dont nous envisageons les vidéos dans la / en tant que recherche et ce faisant à potentiellement contribuer au changement.

Video cameras have become a ubiquitous part of our everyday lives, and as such have contributed to the radical transformations of some of our social practices. Research in education has also been affected by such change, as an increasing number of scholars are now using video cameras as resources to study the processes of teaching and learning (Jewitt, 2012; Shrum, Duque & Brown, 2005). The ever-increasing affordability, performance, and handling

qualities of video cameras may have contributed to their popularity among researchers (Jewitt, 2012). It is also true that in the 1990s, a growing number of researchers became increasingly interested in the study of teaching and learning in socio-cultural contexts (Arievitch & Haenen, 2005; DuFon, 2002; Johnson, 2006; Kozulin, Gindis & Ageyev, 2003). By allowing researchers to capture learning and teaching in a natural setting and with great detail, video cameras have thus become a preferred data collection tool for a number of academics (Jewitt, 2012).

Using the concept of agencement (Deleuze & Guattari, 1987; see also DeLanda, 2006), this article will illustrate how digital video cameras have the potential to contribute to increased engagement with the "opaque complexities of lives and things" (MacLure, 2010, p. 4). More precisely, the goal of this article is to think *in* the research (instead of just thinking *about* it), and to reconsider the interrelationship between the video camera and other components of research agencements as a way of breaking free of our long-held paradigms (Lather, 1997; MacLure, 2010). We can then ask the question, within research agencements, how do digital video cameras function, and what do they produce?

This article will start with a brief presentation of Deleuze and Guattari's (1987) ontology and the concept of agencement, followed by an explanation of what conducting research as agencement entails. The reflections will be guided by the current literature on the use of video recordings in research, as well as by the rhizoanalysis of two vignettes. The first of these vignettes is associated with a short video clip shot by a newcomer student as part of a three-year research project on the interrelationships between citizenship, technology, and pop culture. The second vignette relates to the entry of a piece of art into research agencement. As an agencement in and of itself, the goal of this article is not to provide definitive responses, but rather to disrupt habitual ways of thinking about videos in / as research and potentially contribute to change.

A BRIEF INTRODUCTION TO DELEUZE AND GUATTARI'S ONTOLOGY AND THE CONCEPT OF AGENCEMENT

Contrary to classical philosophers like Aristotle and Plato, Deleuze did not advocate for a transcendent ideal; rather, he argued on behalf of the immanent nature of existence (Weinbaum, 2011). Indeed, the philosophy of immanence that Deleuze advanced is one that addresses both the origins of existence on a fundamental level as well as the emergence of beings as constituted individuals (Srnicek, 2007). In Deleuze's view, existence is primarily productive, and as such it "cannot be considered apart or separate from its myriad expressions," which themselves are entangled and immersed in the constant process of becoming (Weinbaum, 2011, p. 8). In this context, becoming refers to the merging of the world's various elements that form "multiplicities," which can be understood as expressions of existence (Weinbaum, 2011). Such a viewpoint negates the

importance of the identification and representation of the world's individual elements, and instead highlights the significance of interrelationships and how these interconnections help to form complex expressions of existence (Deleuze & Guattari, 1987; Sandvik, 2010; Weinbaum, 2011).

A Deleuzian philosophy of immanence, sees no hierarchical relationship between human and non-human elements of the physical world Rather, all expressions of existence are considered to be on the same level, as

> immanent philosophy acknowledges matters biological (as in respiration), emotional (as in the potential of a beautiful sunset to pass into the human body as sentimental mood), ethical (as in the demands passing into the owner when a kitten's eyes beg for food), and physical (as in the pain that makes the body move when sitting in an uncomfortable chair) as interventions between human and non-human elements. (Sandvik, 2010, p. 30)

For Deleuze and Guattari (1987), there are three dimensions to existence, namely: the actual, the virtual, and the intensive. The actual dimension deals with reality as it is observed, and is made up of individuations (i.e., fully constituted expressions of substance, or actualizations). The virtual dimension refers to the space of becoming, which appears not unlike the actual but encompasses patterns of becoming (Weinbaum, 2011). The intensive dimension, which intermediates between the actual and virtual dimensions, encompasses the production of actualizations as guided by virtual patterns (Weinbaum, 2011). All three dimensions are in constant interaction. For example, a black suit jacket in the virtual dimension could interact with elements such as a graduation ceremony, a funeral service, pride, or sorrow in the intensive dimension, and then materialize as a smile or a sob in the actual dimension.

According to this understanding, agencement is a concept that denotes "the inherent capacity of multiplicities to affect and be affected by each other" (Weinbaum, 2011, p. 22). Although the concept of agencement is often translated as "assemblage" in English, this article will retain the original French because the notion of "assembly" fails to capture the changeable nature and constant reinvention of an agencement. After all, the assembly of something like a children's swing set involves following unchangeable and linear instructions, since each component has been fabricated in accordance with a predetermined final product. If the assembly does not proceed as instructed, the final product will not be the swing set as intended. On the contrary, an agencement refers to an unregulated combination of various elements that, although not necessarily intended to be joined, nevertheless constitute a whole once combined (Bangou, 2013).

By nature, an agencement is changeable and non-linear, with a certain degree of inherent temporality (Bangou, 2013). Indeed, agencements are "functional conglomerations of not unified elements or self-identical entities or objects" (Sandvik, 2010, p. 31). Agencements are also affected by their own components,

including the flows, forces, and intensities that relate to their constitutive elements. Deleuze and Guattari (1987) further conceptualized an agencement as comprising two axes. The first of these axes has two parts: content and expression. As such, it is simultaneously a tangle of entities whose circumstances, passions, and motivations (i.e., content) react to each other, while actions, statements, and transformations (i.e., expression) are simultaneously and collectively enunciated. The second axis "has both territorial sides, or reterritorialized sides, which stabilize it, and cutting edges of deterritorialization, which carry it away" (Deleuze & Guattari, 1987, p. 88).

In order to illustrate the interconnectivity that occurs within and between agencements, Deleuze and Guattari (1987) have referred to the naturally occurring rhizome, which in botany is a subterranean plant stem that sends out independent roots and shoots in all directions. They further noted that the idea holds true for some animals in instinctive pack formation, for "any point of a rhizome can be connected to anything other, and must be" (Deleuze & Guattari, 1987, p. 7). Indeed, like rhizomes, agencements freely and constantly establish connections and interconnections between themselves that are neither fixed nor inflexible (Deleuze & Guattari, 1987). Also like rhizomes, agencements may be broken or shattered at a particular connection, but they will re-establish themselves on either an old or a new line — like a map as opposed to a tracing (Deleuze & Guattari, 1987). Indeed, "what distinguishes the map from the tracing is that it is entirely oriented toward an experimentation in contact with the real. The map does not reproduce an unconscious closed in upon itself; it constructs the unconscious" (Deleuze & Guattari, 1987, p. 12). Like a map, this article attempts to construct the unconscious by exploring the role that video cameras can sometimes play in a research agencement.

The analogous concept of assemblage has more recently been re-examined by a number of scholars, including DeLanda (2006). In order to "elucidate the proper ontological status of the entities that are evoked by sociologists and other social scientists" (p. 8), DeLanda has added a third axis. This additional axis defines how expression consolidates an agencement and enables "a certain latitude for more flexible operation while benefiting from genetic or linguistic resources (processes of coding and decoding)" (DeLanda, 2006, p. 19). Thus, in the actual dimension, although a fixed number of properties may characterize the elements of an agencement, an infinite number of capacities to affect — and be affected by — interactions with other elements may be present, with this set of potential interactions varying from element to element (DeLanda, 2006).

Massumi (1996, 2002, 2010), also seeking to better understand the changeable and non-linear nature of existence, focused on how multiplicities affect each other — especially in terms of the connection between one's mind, body, and affect. In a seminal article, he pointed to a study demonstrating that sad images are not always related to unpleasantness in order to show that the relationship

between an element's qualities (i.e., content) and intensity (i.e., strength and duration of effect) is neither straightforward nor logical, but in fact multi-leveled in terms of intensity and qualification (Massumi, 1996). For him, levels of intensity and qualification are not connected through a relationship "of conformity or correspondence, but [rather] of resonation or interference, amplification or dampening" (Massumi, 1996, p.219). Indeed, in his view, elements that generally tend to be semantically or semiotically indexed as being separate (e.g., pleasure and sorrow) can potentially be connected through their intensity (Massumi, 1996). Massumi (1996) has also equated intensity with affect, and has conceptualized intensity as a state of emotional suspense where disruption could potentially occur (e.g., through pleasure or sorrow).

Notably, Massumi (1996) cautioned against viewing affect as being synonymous with emotion, as affect pertains to intensity and abides by its own logic, while emotion relates to "the conventional, consensual point of insertion of intensity into semantically and semiotically formed progressions, into narrativizable action-reaction circuits, into function and meaning" (p. 221). Moreover, for Massumi, both intensity and qualification are instantaneously embodied within one's existence. Specifically, intensity is embodied "at the surface of the body, at its interface with things," whereas qualification is embodied at a deeper level, mostly because it is "associated with expectation, which depends on consciously positioning [it]" (Massumi, 1996, p. 219). However, both intensity and qualification still involve independent reactions (e.g., goose bumps, which are simultaneously embodied both on a surface level and on a deeper level). As he explained,

> modulations of heartbeat and breathing mark a reflux consciousness into the autonomic depths, coterminous with a rise of the autonomic into consciousness. They are a conscious-autonomic mix, a measure of their participation in one another. Intensity is beside that loop, a nonconscious, never-to-be-conscious autonomic remainder. It is outside expectation and adaptation, as disconnected from meaningful sequencing, from narration, as it is from vital function. (p. 219)

Following Deleuze and Guattari (1987), scholars have built upon the philosophy of becoming and have determined that agencement are constantly affecting — and being affected by — other agencement via rhizomic connections. Thus, an agencement has multiple entry points, all of which are located within the veritable tangle of interconnections.

CONDUCTING RESEARCH AS AGENCEMENT

Recently, MacLure (2010) argued that in order to conduct research within a theory such as the one described above, and to "work the ruins" (i.e., escape the gazes of more traditional, familiar, and comfortable paradigms) while doing so, one needs to engage "with the opaque complexity of lives and things" (p. 4).

This engagement, she argued, can only be accomplished through Deleuze's transcendental empiricism — that is, through an empiricism that provides the space to be aware of, and engrossed with

> the sensations, forces, and movements beneath the skin in matter, in cells and in the guts as well as between individuals and groups. This kind of empiricism traces intensities of affects that move and connect bodies subatomatically, biologically, physically and culturally. It doesn't privilege human interpretation or conscious perception and the bodies that are animated by affects are by no means restricted to human bodies. (MacLure, 2010, p. 5)

MacLure (2010) further argued that it is primordial to "find a language that interferes with its own tendency toward homogeneity, categorization, and equilibrium, so that it begins to vibrate, releasing variation and singularity" (p. 6), and then make the language stutter by interrupting its usual workings.

In the same vein, Haver (1997) has advocated for the advancement of queer research, as it would interrupt the world rather than provide a normalizing explanation of it. From this perspective, queer research could potentially "precipitate an onto-epistemological panic" in individuals and society by inducing "stammering," or the "essential inability to conceptualize what is being thought when thought tries to think its thinking" (Haver, 1997, p. 290).

In line with MacLure's (2010) notion of making language stutter, Sandvik (2010) has shared her experience as an educational researcher by using a method of agencement that includes both art and philosophy. For her, researchers play an integral role in research agencement, and hence they should relate *in* the material they gather in the field as opposed to just relating *to* it (Sandvik, 2010). Moreover, she advocated that "we have to move towards a decentring of the researcher as a subject and start engaging in the flows, intensities, and speed that emerge from different parts in the machineries in action (human and non-human)" (Sandvik, 2010, p. 32). Once this is achieved, any number of unanticipated elements might surface to enrich and guide the analysis.

This article is an attempt to think *in* the research project and to relate with the material collected via digital video cameras. In fact, this article in and of itself could be considered an agencement of multiple forces, flows, and intensities. One of them was the call for articles for this special issue on multimedia in / as research, which triggered my reflection. In order to explore what video cameras contribute to the agencement of the research, the ways they potentially affect and are affected by their connections with other elements of the agencement, as well as the agencements that were created through these relationships will need to be mapped out. This can be done by considering the actual characteristics of the video cameras used in the research project and the ways they affected and were affected by the research participants and the researcher — all while keeping in mind that physical, biological, emotional, political, and ethical matters could potentially intervene in these mechanisms.

Inspired by Lenz Taguchi (2009), Sandvik (2010) explored the speeds, intensities, and flows of research agencement by slowing down and speeding up the analysis in circular and horizontal movements. Circular movements focus on the re-examination (e.g., criticizing, deconstructing, rethinking) of the field material (Sandvik, 2010). Moreover they offer opportunities to challenge what is taken for granted, making the researcher active and conscious of his or her habitual ways of thinking. Such movements slow down the process of research analysis and leave open a space to think / live the events once more (Sandvik, 2010). On the contrary, horizontal movements accelerate the flow of events, and enable transformation and change in the emergence of a new event, which makes it easier to let go of habitual ways of doing (Sandvik, 2010).

Along these same lines, Masny (2013) introduced the concept of rhizoanalysis as a means to expose "potentialities for thinking differently about qualitative research" (p. 339). Rhizoanalysis is an approach that enables a researcher to analyze transgressive data (i.e., sensual data, emotional data, response data, and dream data), which is by definition "out-of-category and not usually accounted for in qualitative research methodology" (St. Pierre, as cited in Masny, 2013, p. 341). For Masny, rhizoanalysis is an agencement that first and foremost creates change; it is intended not for finding meaning (interpretation), but rather for creating wonder about what could potentially become. It follows that we, as researchers, must shift our focus from data to vignettes. Indeed, vignettes — which are integral to research agencement — allow research to "rupture, deterritorialize, and take off in unpredictable rhizomatic ways and create concepts" (p. 343). For this to happen, however, it is necessary to first "understand the process involved in the selection of vignettes and how they are written up, [and] how vignettes-becoming-map actualize" (p. 343).

For Masny (2013) and her multiple literacies theory, reading, reading the world, and self are all mechanisms that have the potential to transform both human and non-human life. To her, reading is both intense and immanent: "To read intensively is to read critically" so as to disrupt established patterns of thought, keeping in mind that "cognitive, social, cultural, and political forces are at work" (p. 15). Disruptive reading is a kind of immanent reading (i.e., thinking of, and investing in, reading) in that it is actualized in unpredictable ways based on the interconnections of a particular agencement.

Reading, reading the world, and self are all integral to rhizoanalysis. Indeed, the selected vignettes — essential components of any rhizoanalysis — can be intensely affective, as their passages often "disrupt as connections happen in the mind of the researcher and thought is produced" (Masny, 2013, p. 343). This reflexive characteristic is what makes rhizoanalysis unique, as it is "not a matter of going through the whole data set to identify excerpts according to themes or codings" (p. 343), but instead is a vehicle that creates opportunities for the researcher to pose new questions. This happens when "the analysis

'is reported' in indirect discourse," and as a result "the subject is decentered and so interpretation by the subject is abandoned. Concepts are created and introduced through questions and indirect questions for there is no one way to look at vignettes" (Masny, 2013, p. 343). This article is likewise intended to generate more questions than answers as new understandings are created.

USING VIDEO CAMERAS IN / AS RESEARCH

There is a plethora of studies on the use of video cameras in / as research (e.g., Penn-Edwards, 2012; Shrum et al., 2005), particularly in social sciences such as ethnography, anthropology, and education (DuFon, 2002; Jewitt, 2012). The use of the video camera as a research instrument has a long history in these fields, as it has enabled researchers to capture and examine complex social events (Jewitt, 2012). Interest in video recording has steadily increased as the technology has evolved, and researchers have found innovative ways to integrate it into their research (Jewitt, 2012). In the same vein, Shrum et al. (2005) note that today people are more willing to be filmed (or to film themselves), for video cameras are a ubiquitous part of our lives. The accumulated effect is that video cameras are now a research instrument of choice for social scientists.

Digital video cameras have the advantage of being more accessible, more mobile, and easier to manipulate than the video cameras of the analogue era. Therefore, in recent years they have been increasingly used to support different aspects of research projects, including the organization of the project, the collection and analysis of the data, and the dissemination of the results (Garcez, Duarte & Eisenberg, 2011; Shrum et al., 2005; Walker, 2002). Because of the pervasiveness of video cameras in today's research, many guides have been created for the use of video in research (Garcez et al., 2011). One of the most recent of these (i.e., Jewitt, 2012) provides guidelines on the many ways to integrate videos into research projects, and highlights some of the strengths and limitations of such uses; issues associated with the validity of such data are also addressed.

Many researchers have examined how the use of video cameras affects the research project, focusing for instance on the relationship between the researcher and the participants (Shrum et al., 2005); the gaze of the video camera (Jewitt, 2012); the manipulation and transformation of the data (Garcez et al., 2011); the perception of the researcher (Penn-Edwards, 2012); and the motivation of the research participants and confidentiality protocols (Schuck, & Keaney, 2006). In most of these studies, warnings and advice were formulated mainly to minimize "corruption" of the data and to preserve their accuracy (Schuck, & Keaney, 2006). Such stances are in part based on a transcendent view of existence; in other words, as researchers we observe "the world from a perspective outside its existence" (Weinbaum, 2011, p. 3), and only by extracting its essence can we acquire real knowledge about the world.

While it is important to engage in a reflection on the ways that video cameras can affect a research project, this article will attempt to do so from a different standpoint. It recognizes that existence is always partial and provisional (MacLure, 2010), and that transformation is constitutive to any research agencement. A video, therefore, is just a potential actualization of multiple virtual and intensive connections. What matters is not necessarily to extract the essence of (i.e., to define) a specific actualization, but rather to map the interrelated processes that lead to its emergence — which is what this article will attempt to do in regards to the ways that digital video functions and produces as part of the research agencement.

THE RESEARCH PROJECT

This article is based in part on field material that was collected as part of a three-year research project that was funded by Canada's Social Sciences and Humanities Research Council.[1] Numerous English and French high schools in Ontario, Canada participated in the original study, which aimed to understand how information and communication technologies (ICT) and pop culture intersected with immigration during the process of young people's "becoming-citizen." Specifically, the initial project used Masny's (2009) multiple literacies theory to look at how the dominant discourses of a normed society (e.g., school programs, policies, curriculums, etc.) were articulated, both at home and at school, in terms of their interconnectedness with the counter-discourses of citizenship. The original research team was made up of three University of Ottawa professors (including myself), each with varying degrees of experience with Deleuze's philosophy, Masny's multiple literacies theory, and rhizoanalysis; I myself had only just been initiated to Deleuze's work and was new to rhizoanalysis.[2]

The first vignette featured in this article is based on material taken from a French public high school in Ontario, Canada. At this school, seventeen students ranging from grade seven to grade ten participated in the original research project. All participants at this school spoke at least two languages. Some were born in Canada, and others were newcomers to the country within the past five years. All had parents from diverse countries of origin in Africa, Asia, the Middle East, and / or Latin America.

COLLECTION OF THE MATERIAL

The original research project collected research material in three phases, all of which focused on the responses of students (and sometimes teachers, parents, and administrators) to issues, discussions, and assignments related to citizenship. Most relevant to the present article is the third phase, which had student participants using video cameras to create their own video "texts" to serve as agencements of citizenship, pop culture, and technology. For this third phase,

participants were given easy-to-use digital video cameras (Flip cameras) about the size of a mobile phone. Participants took these Flip cameras home on two occasions, for a period of about three days each time, with instructions to take simple videos that would communicate what being a citizen meant to them. For guidance, we suggested making films about how they liked to spend their time, both online and in the real world. After they had returned the Flip cameras, each participant took part in a short individual interview to review some of their clips and discuss what they had filmed. The interviews were intended to map the various elements that contributed to the emergence of these films as agencements. At the end of the research project, all participants had created at least one film, with thirteen participants creating a second film as well. One of these films forms the basis of the first vignette featured in this article.

In order to think *in* the research agencement (instead of simply thinking *about* it), I kept a digital voice recorder (on a cell phone) by my side as I was working on this article as a way to capture whatever emotions and reflections might be triggered by this research agencement. This was particularly helpful when I was reviewing the student video texts, as some of the feelings I had experienced during the initial research project returned to me and I was able to make note of them with the recorder. I was also able to record some thoughts on the interconnection between the virtual, the actual, and film as they were triggered while I was visiting a modern art museum; those reflections comprise the second vignette featured in this article.

ANALYSIS OF THE MATERIAL

This article is based on a rhizoanalysis of the field material collected during the initial project (e.g., Vignette 1), and the material that emerged when writing this article (e.g., Vignette 2). The first vignette, which is based on a clip from one of the student videos, enables the analysis to be slowed down through circular movement, as it provides an opportunity for me to both re-think and re-live the moment as it is captured on film — making me conscious (and critical) of my habitual ways of thinking. The second vignette focuses on my experience in writing this article as a way to disrupt the flow of my research agencement through the emergence of an unexpected element: an art installation. The analysis is able to speed up through horizontal movement in order to enable me to once again let go of my habitual ways of thinking. In this way, it is my ultimate hope that the rhizoanalysis of these two vignettes will open new lines and enable our reflections on video cameras and research agencement to take flight.

In Vignette 1 (see below), a student named Abdu (pseudonym) and I talk about the Arabic music that can be heard in the background of one of his films (see Video 1). Abdu was a student in a grade eight citizenship course. He was born in Canada, and his parents were originally from Algeria. At the time of the research he spoke Arabic, French, and English. The interview which comprises Vignette 1 was conducted in French.

VIDEO 1. *Abdu's video clip* (click to activate)

Video 1 is part of a series of short video clips recorded with the Flip camera filming out the window while Abdu was travelling in a car. This particular clip lasted for about a minute, and the entire time the voice of his mother can be heard speaking in Arabic and French over the Arabic music that is playing on the radio. At one point, we can also hear the voice of his baby brother. At the end of the clip, Abdu says something to his mother in Arabic with some French words here and there. While Abdu submitted several video clips, the level of intensity (Massumi, 1996) that this one evoked in me was stronger than for the other video clips. In the following vignette, intense affective passages are underlined to show when connections happened in my mind and when thought was produced (Masny, 2013) as a way to map how this vignette was selected.

Abdu chose to film a passing neighbourhood through a car window as a way of capturing on film what being a citizen meant to him. In order to slow down the rhizoanalysis, this vignette can be reconsidered in terms of how the Flip camera functioned and produced within the research agencement. Specifically, a focus can be placed on how the Flip camera's characteristics affected and were affected by other elements in this research agencement. Slowing down the analysis in this way enables me to see how Abdu was not only able to use the Flip camera to actualize a unique citizenship-related experience as it occurred, but also able to share that experience with me. This is in line with DeLanda (2006), who asserts that an agencement has elements that "stabilize its identity as well as components forcing it to change or even transforming it into a different assemblage" (p. 12). In what other ways might various elements of the research agencement affect and be affected by the characteristics of a video camera?

Researcher: *Tu écoutes quoi le plus souvent ?*
Abdu: *Le raï.*
R: *Le raï plus souvent. Parce que tu aimes, ou... ?*
A: *Je l'aime.*
R: *Tu écoutes aussi de la musique dans d'autres langues à part l'arabe et le français? Surtout ça ?*
A: *Oui.*
R: *Et c'est ta mère qui te parlait là ?*
A: *Oui.*
R: *L'arabe est de quel pays ?*
A: *Algérie.*
R: *L'Algérie. J'ai aussi l'impression d'entendre un peu de français lorsqu'elle parle ta mère. C'est ta mère qui parle.*
A: *Elle mélange les deux.*
R: *Elle mélange les deux, d'accord. Alors pour toi c'est important de montrer cette langue et la musique ?*
A: *Oui.*
R: *Qu'est-ce que ça évoque pour toi ?*
A: *Ça me rend content.*
R: *Hmmm mmm.*
A: *La musique, des fois ça m'aide quand je suis stressé.*
R: *D'écouter de la musique en arabe ça te calme ?*
A: *Ça me soulage.*
R: *Ça te soulage. Qu'est-ce que tu veux dire ça te soulage ?*
A: *Comme je ne vais pas penser au problème.*
R: *Hmmm mmmm.*
A: *Je suis dans un autre monde.*
R: *Ah, ça te met dans un autre monde ?*
A: *Oui.*
R: *Et le monde que tu imagines, est un monde... ?*
A: *C'est un monde calme.*

Researcher: What do you listen to most often?
Abdu: Raï.
R: Raï most often. Because you like it, or...?
A: I like it.
R: Do you also listen to music in other languages besides Arabic and French? Mostly that?
A: Yes.
R: And it's your mother that was talking to you here?
A: Yes.
R: Arabic is from what country?
A: Algeria.
R: Algeria. I seem to be hearing a little bit of French when your mother speaks. Is it your mother who is speaking?
A: She mixes both.
R: She mixes both. Okay. So, it's important for you to show this language and the music?
A: Yes.
R: What does that evoke for you?
A: It makes me happy.
R: Hmmm mmm.
A: Music helps me sometimes when I'm stressed.
R: Listening to Arabic music calms you?
A: It's a relief to me.
R: It's a relief to you. What do you mean it's a relief to you?
A: Like I'm not going to think about the problem.
R: Hmmm mmmm.
A: I'm in another world.
R: Oh, it puts you in another world?
A: Yes.
R: And the world that you imagine is a world...?
A: It's a calm world.

VIGNETTE 1. *It's a calm world*

In slowing down the analysis, I may also ask how certain aspects of video camera technology can transform the notion of citizenship into another agencement. Dominant discourses often discuss citizenship in terms of space as state, borders, and territory, while Abdu's film (which inadvertently captured the sound of the radio) explored how citizenship becomes a calm world through music — an idea that was quite a departure from how citizenship was viewed even in his class. Indeed, in the curriculum that guided this course, citizen was mainly defined as the status of a person in relation to a state (Bangou & Fleming, 2014). Clearly, video technology enables the creation of multimodal "texts" that combine both visual and audio elements of the world, potentially disrupting more conventional (i.e., paper and ink) narratives by incorporating sights, sounds, and emotions (e.g., passing neighbourhoods, Raï, calmness)

that would otherwise be semantically indexed as separate. Through this simple and unplanned video, however, such connections are possible because an affective space is created. The small size and easy-to-use nature of the Flip camera enabled this space to be created. The connections that another device (i.e., an audio recorder) could have been produced in that exact moment can never be known, and we are left to wonder if the video's visual elements in particular affected the level of intensity within the research agencement. After all, the Flip camera served as more than just a "gaze" into Abdu's experience. Rather, it became a force in the production of citizenship-related connections, actualization, and agencement. This made me wonder how the agencement of Flip cameras, participants, and citizenship could all potentially be transformed by such connections.

Importantly, Abdu's vignette brings to the forefront of my mind how I, as researcher, also became a force in this agencement, as affective connections were made in my mind during the rhizoanalysis (see the underlined text in the above transcript). As previously mentioned, I had only recently become familiar with Deleuze's work, and the original research project marked my first time attempting rhizoanalysis. Letting go of my formal training as "interpreter" of data was not easy for me (and, to some extent, it is still not easy). For instance, the first time I conducted interviews with the sole purpose of mapping the emergence of ideas (as opposed to interpreting the material), I had little confidence that I was asking the right questions in the right way.

As I reviewed material for this present article, recollections of the frustration I felt while first watching the participants' video clips began to emerge — frustration that stemmed from my inability to identify logical and linear relationships between citizenship and the videos. As I re-watched Abdu's video, however, I remembered the relief I had felt when I first viewed it; at last I had a clear entry point (in this case, music) into a student's agencement of citizenship. Interestingly, I also remembered that what had first attracted me to this clip was the music, as it reminded me of music I had listened to in France many years before. Perhaps if the music hadn't been so intensely affective for me, I would not have been drawn to this clip — which leaves us to wonder what alternate understandings may have surfaced if other participants' videos had made similar affective connections for me in the intensive dimension. Indeed, the intensity of the video clips for me as researcher may have transformed not only the research agencement, but also the resulting notion of citizenship and how it is connected to pop culture and technology.

This vignette was an attempt to look back at research material while slowing down the speed of the analysis and thinking *in* the research agencement in regards to how the video camera functions and produces. Through this process, thoughts were generated through the disruptions that occurred in my head and the video cameras eventually became a force that led the research agencement

into a path. In the next vignette, smoother spaces for transformation will be created by speeding up the flow of analysis.

The following vignette is about an experience I had when I was writing this article. The thoughts transcribed below were recorded on August 24, 2013, on a cellular phone at a modern art museum. Although, in this case, a device other than a video camera was used to record the material, video cameras were intrinsic parts of this agencement as they were the object of the thoughts that were generated. Intense affective passages are underlined to show when connections happened in my mind.

VIGNETTE 2. *An afternoon at the museum*

> I just saw an exhibit of modern art that kind of activated some thoughts regarding the article I am writing right now about the use of video in research and some artists such as Manders, who created this piece that [is] <u>just supposed to trigger some thoughts [in] us</u>. So, it made me think about the video cameras and when we gave [them] to the students and how it kind of triggered some thoughts also for them. <u>They really had to stage, putting in a visual or audio form, what they wanted to say about citizenship</u>. So these are the kind of thoughts that [arose] when I was looking at this exhibit. So maybe I need to think about it some more while I'm writing.

The piece of art I am referring to was created by Mark Manders and Jarla Partilager and is called "Room with Reduced Chair and Camouflage Factory" (Figure 1). The main elements of this piece are a chair in a reduced format and an imagined camouflage factory, complete with three flattened shapes that resemble animals. When reading the short text about the piece, I understood that the misplaced and misshapen elements were put together not so much as representations of reality, but rather as activators of thought.

What happened when this piece entered the research agencement? As mentioned in the above vignette, it made me think about the agencement of the video cameras and the research, as well as the ways that both elements were affected by one another. As the analysis sped up through broad horizontal movement, thoughts emerged in regards to the ways that the student participants had to create "texts" about citizenship using video — a mode of expression not traditionally promoted in high school. Just like Manders and Partilager's piece, the students' films were not necessarily representations of reality, but rather, possible expressions of it. They were the agencements of misplaced and misshapen elements that are sometimes associated with citizenship, pop culture, and technology, and these agencements could potentially produce change through the thoughts they activated.

What could potentially happen when unconventional modes of expression are promoted in a classroom, particularly with regards to citizenship? According to MacLure (2010), we need to locate language that stutters in order to break out of old paradigms and "work the ruins," so to speak. Therefore, perhaps

it would be best for educators to provide learners with the space and opportunity (e.g., via video cameras) to create their own maps of citizenship, rather than ask them to simply reproduce and perform citizenship as it is defined in dominant discourses. By doing so, we might enable them to create real change.

FIGURE 1. *Room with Reduced Chair and Camouflage Factory (Manders and Partilager, 2010)*

In this research agencement, conversations between the student participants and the researchers were created through the video cameras. These conversations started when we entered the classroom and presented the project to the students. How might the "language" of our conversations have been affected by the video cameras? For instance, I remember the enthusiasm that some of them exhibited when we showed them the pocket-sized video cameras and told them that they could take them home. How may these emotions have contributed to the transformation of the video cameras within the research agencement?

This vignette illustrates what could potentially happen when an unexpected element such as a piece of art enters a research agencement. The video cameras and the research agencement became "other" through the thoughts that were generated as a result. However, it is also important to acknowledge that this piece of art could have generated any number of thoughts when it entered the research agencement.

OPENING

Conducting research is certainly a creative process that transforms and produces existence in complex ways. Deleuze and Guattari has provided us with the tools to conceptualize such complex mechanisms not so much to control or manage existence but rather to participate in its proliferation, through disruptions. This article was an attempt to do so, by thinking *in* a research agencement. More precisely, the question that guided our reflection was within research agencements, how do digital video cameras function, and what do they produce?

As parts of the research agencement the video cameras affected and were affected by other elements of the agencement and it is through these intensive / affective moments that disruption potentially occurred, and the research became other. Indeed, when researchers, participants, and their emotions and senses are all on the same level along with video cameras, each of these elements can potentially create change. For instance, Abdu was able to capture easily with a video camera a spontaneous and unpredictable experience and by doing so, transformed citizenship into an emotional world. The text created with the video camera generated feelings of relief into the researcher which directed the research into a path. The call for articles for this special issue on multimedia in / as research was another element of the agencement that contributed to the emergence of this article and to the transformation of video cameras into productive forces.

The goal was not so much to provide definitive responses, but rather to illustrate what could happen when, as researchers, we creatively engage with other elements of a research agencement and open ourselves up to the realm of possibilities. However, doing so was not an easy process, as it "has been hard to escape interpretive mastery and narrative coherence" (MacLure, 2010, p. 3) and detach from hierarchies and linear thinking. Using videos as a way to make the language of research stutter may be an interesting avenue to explore keeping in mind that they could also potentially shut down change through the frames and blind spots they produce. As Deleuze and Guattari (1987) and DeLanda (2006) argue, within an agencement there are elements that work to stabilise it and maintain the status quo and others that force its transformation. It may be why it is still so difficult to use multimedia in / as research even when we want to push boundaries. Now that I come to think of it, this creative process could have contributed to the emergence of a video as opposed to an article, but somehow it did not happen.

It is important to become aware of the connections that affect a complex system such as a research project. Yes, doing so could be "messy," as one is carried in multiple and unpredictable directions. In that regard, rhizoanalysis, as well as circular and horizontal movements of analysis, are helpful in mapping the processes of becoming. For the present research agencement, these processes of becoming have affected the video cameras, the researcher, the participants, the research agencement, and even this article, for they are all connected. As a reader, you are now part of this agencement, and anything can now happen.

NOTES

1. I would like to thank the Social Sciences and Humanities Research Council for their contribution to this research.

2. Please note that the data reported in the first vignette belongs to the SSHRC project / research team as a whole (including myself) whereas the data reported in the second vignette belongs to me as it emerged when I was writing this article.

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FRANCIS BANGOU is an Associate Professor at the University of Ottawa, specializing in second language education. His research is inspired in part by the work of Gilles Deleuze and Félix Guattari. His work has been presented at numerous international conferences and published nationally and internationally.

FRANCIS BANGOU est professeur agrégé à la Faculté d'éducation de l'Université d'Ottawa, spécialisé dans le domaine de la didactique des langues secondes. Sa recherche s'inspire, entre autres, des travaux de Gilles Deleuze et de Félix Guattari. Ses travaux ont été publiés et présentés à l'échelle nationale et internationale.