Participatory Culture and the New Governance of Communication: The Paradox of Participatory Media

Ganaele Langlois[1]

Abstract

This article develops a critical alternative to the common equation between participatory culture and democratic communication and argues that power on online participatory platforms should be understood as the governance of semiotic open-endedness. This article argues that the concept of cultural expression cannot be understood solely by looking at users' cultural practices, but should be revisited to pay attention to the networked conditions that enable it. This involves tracing the governance of disparate processes such as protocols, software, linguistic processes, and cultural practices that make the production and circulation of meaning possible. Thus, communication on participatory platforms should be understood as the management of flows of meaning, that is, as the processes of codification of the informational, technical, cultural, and semiotic dynamics through which meanings are expressed. This makes it possible to understand the logics through which software platforms transform information into cultural signs and shape users' perceptions and agencies.

The recurring promise of the World Wide Web has been that of accelerated democratization of communication through easy-to-use communication tools fostering greater user participation. From the hypertext to Web 2.0, each evolution of online

---

[1]University of Ontario Institute of Technology, Oshawa, Ontario, Canada

Corresponding Author:
Ganaele Langlois, Assistant Professor, Communication Program, Faculty of Social Science and Humanities, University of Ontario Institute of Technology, 55 Bond Street East, Oshawa, ON 1G0A5, Canada
Email: ganalanglois@gmail.com

communication has seen a resurgence of the trope of active users replacing passive and manipulated masses and making themselves heard worldwide (Berners-Lee 1999; Bush 1945; Nelson 1993). Today, discourses on the rise of an online "Do-It-Yourself" participatory culture making use of the publishing tools offered by popular websites such as YouTube, Wikipedia, Facebook, and Twitter have renewed and revived the equation between increased communicative participation through technology and democratic communication and action (Jenkins 2006: 135-36). From amateur cultural production on YouTube to the organization of grassroots political activism on Facebook or Twitter (e.g., Barack Obama's electoral campaign in 2008, the 2009 Iran protests), user-generated content models have offered new hope and new possibilities for public reinvolvement in affairs of common interest.

Current perceptions of Web 2.0 (O'Reilly 2005) and beyond this online social media, participatory culture, or participatory media to name but a few of the current buzzwords, only exacerbate this equation between greater collaborative participation via new online technologies, and democratic communication bypassing traditional hierarchies and limitations. In this new state of affairs, cultural participation and renewed public involvement seemingly work in symbiosis with for-profit models, especially as the most famous user-generated content websites, with the notable exception of Wikipedia, aim to host as much content as possible and to make online user participation a central everyday life practice in order to generate profits. In so doing, there is an undeniable closing off of the concept of participatory media as it is folded into a corporate online model of participation via a handful of software platforms. Academic research has echoed some these optimistic claims about how the development of tools to facilitate user-generated content is fundamental to the rise of a new participatory culture (Benkler 2007; Jenkins 2006) where there is no separation between producers and audiences anymore (Bruns 2008), but rather the emergence of publics actively engaged in creating and sharing culture. Conversely, such optimistic statements on a technologically driven revolution in minds, cultural practices, political action, and social organization have been tempered by pessimistic analyses both in the mainstream and academic spheres about the demise of any possibility of deep thinking (Carr 2008), constant surveillance and monitoring of users and pernicious advertising, and marketing through new profiling techniques (Albrechtslund 2008; Boyd 2008; Elmer 2009; Langlois and Elmer 2008; Zimmer 2008). From such perspectives, the rise of information and communication technologies creates new forms of control over minds and bodies and cultural, political, and social life.

The debate regarding online participatory media and their democratic potential can be addressed through the following question: what are the processes through which the communicative practices offered online actualize, enact, and thereby reshape specific cultural ideals, such as that of democratic communication? Part of the answer lies in understanding the technocultural aspect of these processes, that is, the critical implications of the constant technical, and in particular software mediation and translation of communicative possibilities at the technical level into cultural values, ideals, and practice in the participatory media environment. As such, we need to move away from

conceptual models that simplify the links between practices of communication and cultural ideals to tracing networks of software, hardware, and users in the participatory media context that cross through discursive, technical, political, economic, and legal fields. Examining participatory media models as assemblages (Deleuze and Guattari 1987), that is, as stabilized systems made of elements, actors, and processes that are shaped and "fixed" to "fit" together (Phillips 2006: 2) in order to produce a culturally stable form of communication, has a critical purpose: such tracing of technocultural dynamics of assemblage makes it possible to identify processes of governance that articulate one element, process or actor (human or technological) to another, and that reshape these elements, processes, and actors in order to create this stable fit. In the case of the communicative practices specific to participatory media assemblages, this allows for a more refined understanding of how human actors are shaped as users with delineated, and oftentimes, compared with the software systems that surround then, limited communicative agencies, and how "free" content feeds diverse technopolitical and technocommercial networks. In that way, it becomes possible to look at the governance of the articulations between participatory systems, cultural ideals, and communicative agencies.

Examining the Networked Conditions of Participatory Media

Critical approaches seeking to understand the distribution of power in the communication process and to point out the resulting unequal distribution of agency among communicative participants have primarily been premised on the question of access to the means of communication and to free, unfettered expression and dialogue. In the previous mass-media universe of unidirectional messages, the main focus of critique was on the unequal relationships between an elite controlling the media (Herman and Chomsky 2002; McChesney 2008) and disempowered masses whose limited agency laid in their capacities to create alternate meanings out of messages imposed on them within the confine of their social and cultural positioning (Hall 1980). With the rise of new forms of user-generated content where anybody can create, publish, and share videos, text, pictures, and sound, concerns with equal access to the means of communication have been reduced to discussions on the cost of equipment, improving user-friendliness and user education, and the new increased capacity to exchange messages is seen as challenging a dominant order and its associated ideologies and cultural values and practices. Yet, this does not mean that questions of control and power, including the question of democratic communication, have disappeared. The specific context of unequal communication in the mass media age might be on the wane, but new powerful actors aiming to capitalize on user-generated content have appeared, raising questions about private control over the flows of information and access to knowledge. We might be able to express ourselves on these commercial user-generated platforms such as Facebook, Amazon, and YouTube, but stringent terms of service and terms of use show that we do not fully or at all control the

circulation of our content both on the Web and through invisible commercial networks. In short, the displacement of the mass media model in favor of a networked model radically changes the configuration of power relations, and therefore how we should understand the notion of democratic communication.

The problem does not only include questions about content but also about users themselves, and in particular the perplexing status of users as free, yet exploited, agents on user-generated content websites. Research into immaterial labor (Terranova 2000, 2004) provides an invaluable insight into how encouragement to express oneself online is also, from a commercial perspective, providing a valuable service for free. From this perspective, the AOL netslaves from the 1990s have been replaced by hordes of Facebook and YouTube users freely providing information and content that can be marketed. Michael Zimmer (2008) explains that as users, the promise of online participatory media is that we can be free to express ourselves both from a cultural, political, and economic perspective, but this freedom comes at a cost in terms of further placing ourselves within networks of surveillance, marketing, and advertising. These paradoxical (yet legitimate in their respective ways) understandings of communicative agency and limitations in the user-generated content environment point out that the very assumptions about users on which current critical analyses of online communication are based also need to be revisited.

The paradox between freedom of communication and control over the networking of information points out that critical approaches to user-generated content are based on two different, and limited, paradigms that are presented here in a rather nonnuanced way in order to highlight their differences and limits. The first paradigm is user-centric, in that it is focused on the link between empowering users and fostering more democratic communication. From this perspective, communication is first and foremost a human affair and online technologies are here to support the creation and sharing of cultural meanings. As such, the Web offers a platform on which human agents can develop new cultural practices of communication—new ways of expressing themselves and exchanging meanings, representations, and information. The term "platform," in the user-centric perspective, has to be understood in its nontechnical meaning: a device that props a speaker up and makes her or him audible and visible to others. From this perspective, instantaneous communication, user-friendly design, and intuitive user interfaces greatly simplify the communication process and therefore enable greater participation and agency. Alternatively, sophisticated search engines and recommendation software enhance the communication process by helping users sort through massive amount of content to get at what is most meaningful.

What I call the network paradigm, on the other hand, does not so much focus on the content of communication but rather on the networked conditions and regulations within which information can circulate online. Analyses focused on the intersection of the technical infrastructure and political and economic dynamics have forcefully demonstrated how the intersection of code and law (Lessig 2006), or protocol and control (Galloway 2004), is a site of power struggle over network control. For instance, Lawrence Lessig's analysis of how the regulation of the code layer—the systems that technically enable the exchange and circulation of information—is increasingly

managed by the market and the state, shows how new forms of control pervert the very democratic ideals of free and unfettered communication on which the Internet is based. Currently, political and legal struggles over deep-packet inspection, traffic shaping and throttling, and the monitoring of flows of information to track illegal downloading, to name but a few issues, demonstrate how the very conditions of networking on the Internet and the Web are being reshaped by political and economic interests, such as private carriers and the entertainment industry. Ultimately, such practices of information control via network regulation limit our agency and privacy as users with regards to what we can actually produce and what content we can access.

The user-centric and network-centric paradigms illustrate two very differing conceptions of content online and in the online participatory media environment as either the product of unfettered participation or as technologically controlled, managed, marketed, and sometimes censored by political, economic, and legal interests. The first step toward bridging these two conceptions and resolving the participatory culture paradox lies in acknowledging that each paradigm has a different focus: the user-centric paradigm focuses more on the question of cultural expression, while the network paradigm deals primarily with processes of transmission. Whether it critically explores protocols (Galloway 2004) or code and its relationship to copyright law (Lessig 2002), the network paradigm has been focused on the technical elements that enable the transmission of information across networks and on the ways in which transmission is governed through a complex of techniques, political and legal decision making, and commercial or noncommercial interests. Whether information can circulate freely and instantaneously, and how it can be controlled, limited, appropriated, and rechannelled on different networks (e.g., networks of surveillance and advertising) are some of the central questions regarding the transmission of information online.

In contrast, focusing on cultural expression implies seeing content not so much as information that travels over computer networks but rather as the culturally recognizable signs that appear on user interfaces. From such perspective, examining the many processes that enable transmission tends to recede in the background insofar as the main concern is with the instantaneous translation of thought into multimedia and hyperlinked content on user interfaces. There are two dynamics at stake with the process of cultural expression online. The first dynamic is to achieve effects of transparency (Bolter and Grusin 1999), that seek to erase the presence of the medium to give an impression of direct translation of human thought into cultural symbols. The use of symbols such as buttons and file folders rather than command lines is a common instance of transparency. The second dynamics is that of hypermediacy (Bolter and Grusin 1999), which, in the participatory media environment, is a process of making software present throughout the communication process by elevating it to a cultural actor on par with human users. On the Amazon website, for instance, the recommendation software is capable of providing culturally relevant book suggestions based on purchase patterns, and Google advertising tailors ads to the past online activity of users. Thus, the premise of the cultural expression perspective is on how online communication can augment the thinking process and the process of cultural exchange. While the object of study—content either as information or as representation—is the

same, these different perspectives focus on altogether different sets of actors, processes, and dynamics. While this description of the two approaches to online content is rather caricatural in that it is difficult to talk about transmission without at least peripherally raising questions about expression and vice versa, it illustrates certain trends and potential blind-sights in current approaches to participatory media.

I propose, in turn, a more systematic integration of the transmission and cultural expression perspectives. The first step toward integrating these two paradigms involves a reassessment of processes of cultural expression in the participatory media environment through a renewed attention to the often invisible networked conditions that enable them. That is, paying attention to networked conditions requires expanding the notion of cultural expression to encompass the networks of technical, institutional, commercial, and political actors that foster the material and cultural conditions of online communication. Focusing on the networked conditions within which the cultural process of communication takes place and within which parameters of participation are defined involves tracking the interplay between networks of technology, policy making, economic interests, legal frameworks, and the cultural production and circulation of meanings. The second step involves reconceptualizing the notion of networked conditions, which in the transmission model refers to a binary framework of open versus closed where the question is about whether information is free to circulate or not. Cultural expression, in turn, cannot be reduced to this binary framework, especially in the participatory media context where the onus is on accommodating as much user participation as possible. In that sense, examining the networked conditions of cultural expression should not be reduced to the question of whether participatory media systems allow users to communicate or more, but more primarily on how online participatory media networks accommodate and manage the open-endedness of cultural expression. With regard to the democratic potential of participatory media, such a new framework requires new critical questions. In the previous mass media era, the critical questions were about censorship—"What can be said?"—and access—"Who can speak?" In the new framework, the first critical question is "How can we say something and to what effects?" meaning, "What is the apparatus through which we express ourselves, and what are the possible cultural impacts and values of specific instances of cultural expression?" The second question is not about who can speak, but rather "What are the assemblages of hardware, software, and users that make possible specific modes of expression, and how are these assemblages governed?" meaning, "How is the field of cultural expression managed by technocultural power formations?"

Participatory Media Platforms and the Production and Circulation of Meaning

The main theoretical challenge in identifying the networked conditions within which participatory communication flows are stabilized as cultural models lies in developing a framework capable of tracing the articulations of technological dynamics, social relations, and cultural processes; from the material level of data transmission through

the translation of information into cultural symbols to the social relationships among communicative actors. The concept of assemblage as a stabilized set of articulations between heterogeneous elements and process is extremely useful here. Such concept finds an echo in cultural studies of technology frameworks focusing on the "interrelated conditions within which technologies exist" (Slack and Wise 2005: 329) and on articulations—the "nonnecessary connections of different elements that, when connected in a particular way, form a specific unity" (Slack 1989: 331)—that allow for the stabilization of practices of communication. Furthermore, the tracing of assemblages can benefit from actor-network theory's invitation to see the rise of technologies as resulting from the multicausal and reciprocal relationships between social, political, and economic agents; human actors; and technical entities and processes (Latour 1993a, 1993b, 1999, 2007).

As assemblages, participatory media platforms enable the production, distribution, and experience of meaning via cultural signs. Meaning here should be understood broadly as making sense of the world, that is, making the world comprehensible and livable by defining its limits and possibilities. Communication, in turn, allows for the formation, exchange, and experience of meaning via the production, circulation, and interpretation of cultural signs: it provides the material and technical setup within which specific practices of meaning-making can take place. As such, one should focus on the networked conditions within which meaning can be expressed, and on the participatory media platform specifically as a site of articulation between information processing, software dynamics, linguistic processes, and cultural practices. From this perspective, the whole process of communication consists of an effort to codify the flows of meaning: to codify the dynamics through which meanings are expressed, actualized, and recognized as adequate reflections of an experience of the world. In the online context, this also includes the stabilization of the cultural roles of users and users' perception of themselves and of the cultural value of specific communicative practices (e.g., whether remixing videos is a valid, serious political practice or not). Such paradigm can be traced back to the work of Foucault (2003) and after him, Felix Guattari (1977, 1989, 1995, 1996) and Maurizio Lazzarato (2004). From this perspective, communication as the codification of flows of meaning production and circulation is not only about transmitting signs but about embodying, producing, existentializing, and sometimes subverting relations of power, and thus about establishing specific roles, agencies, and relationships among the actors involved in the production and circulation of meaning. Communication is therefore inseparable from the question of power, in that communicative practices enact specific assumptions about how things can make sense, and about the roles, hierarchies, and legitimate practices between authors/producers and readers/consumers.

What is the role of technologies of communication in codifying the flow of meaning? Technologies of communication crucially intervene in the production, circulation, and storing of discourse (Kittler 1990), content, and meanings, and thus in the construction of a social world. That is, media technologies rearrange the material, hermeneutic, social, and psychological conditions (Innis 1951; McLuhan 1995) within

which the experience of meaning takes place. Including media technologies as central in the development of practices of communication thus leads to a broader understanding of meaning as not only limited to question of representation and interpretation but also as dependent on material factors, such as material means of expression. The "mediality" of a text—whether appearing "on a printed page, or a computer screen, or in a voice message (Gumbrecht 2003: 11)—is a useful reminder that meaning is not simply an act of interpretation but also an experiential process, and that media technologies play an important role in setting up the parameters of this experience (Gitelman 2008).

With regards to new media, the critical framework that needs to be developed is not only about tracing the emergence of cultural practices of communication and the resulting stabilization of old and/or new power relations but also about considering that practices of communication are inherently technocultural, that is, that what could have been considered as purely human activities in previous communicational environments are now constantly mediated by software as the agent that not only links users to hardware but also to culture. The relatively new field of software studies (Manovich 2002) focuses on the technocultural effects produced when software systems constantly mediate culture and cultural practices. Software studies, as exemplified in the work of Matthew Fuller (2003) and Wendy Huy Kyong Chun (2005), acknowledge both the construction of software—its cultural, political, and technical economies—in order to examine what is culturally enabled or disabled by software, and the ways in which software is in turn articulated and taken up by cultural, economic, and political processes. As such, software studies opens up a space to look at the software processes that translate data into culturally recognizable signs and vice versa. What kinds of cultural assumptions are embedded in software in order to create a dynamic of interpretation and cultural exchange is thus an important question, and one that will enable better understanding of the respective spheres of agency of software and users. That is, if software has become a technocultural actor with a capacity for some form of cultural understanding and therefore an ability to influence users' cultural experiences of and through the Web, what are the technocultural parameters of governance that define its influence over and, by extension, management of users? There cannot be a single answer to this question, given the wide variety of participatory media environments, from commercial online spaces to open-source ones. Subsequently, claims about a single participatory culture should be carefully reassessed given the different types of participatory media environments.

Furthermore, the rise of the platform model to support the production of user-generated content has fundamentally changed the nature of the Web, and therefore the parameters through which the networked conditions of communicative practices can be analyzed. As seen above, the network approach to track the governance of the process of transmission offers a key analytical perspective on participatory media. Such an approach, however, has been developed in relation to a specific structure of the Web as a unified layered, or vertical (Elmer 2006), system comprising the user-interface layer, the code layer, the hardware layer, and political, legal, and economic

layers. The subsequent challenge is to understand what enables the connection between these layers—the protocols of online communication, which are not simply technical conventions, but principles of connections (Galloway 2004) or communicational codifiers. The problem is that the layered approach is not quite adapted to the evolution of the Web toward a platform model. There has been in recent years a multiplication of protocols, new languages, and software, particularly in the participatory media environment. In particular, the development of participatory media sites of customized software programs articulating protocols in different ways in order to tailor the representation of data requires a different conceptualization of network conditions at the technical level. The multiplication of Web services, mashups, and a wide variety of small applications, such as those in Facebook, have transformed the Internet and the Web from a layered entity to a modular one (Langlois et al. 2009). The customized articulation of protocols creates platforms—constructive software spaces (Mackenzie 2006)—that operationalize different communicative and cultural logics. For instance, Wikipedia and Amazon might make use of a similar set of protocols but assemble them differently so as to create different communicative, commercial, and noncommercial models. Therefore, rather than examining the Internet under the assumption that it is made up of a stable set of protocols, it is more productive to look at the modularities of protocols that foster different cultural logics.

Participatory Media Platforms as Conduits for Governance

While software studies ask about software as a site of power formation, the question that I would like to raise in turn is about the principles of governance embedded in software platforms, and in particular in participatory media platforms. The concept of governance is taken from Foucault and Lazzarato and refers to "the ensemble of techniques and procedures put into place to direct the conduct of men and to take account of the probabilities of their action and their relations" (Lazzarato 2004: 114). The concept of governance is central in understanding that while there might be a radical decentralization of communication online, it does not mean that power relations have disappeared. Rather, the locus of power is shifting away from control over content to the management of degrees of meaningfulness and the attribution of cultural value. The concept of governance as applied to the platform environment enables us to get away from the binary of closed versus open communication. Indeed, governance or the work of accounting for any number of possibilities of expression highlights a shift away from meaning itself toward the management of the circulation of content along an axis of more meaningful–less meaningful. That is, with governance, all types of expression have some meaning, and it becomes a question of deciding which expression is more meaningful than another.

The common feature of all participatory media platforms is that they not only allow users to express themselves by enabling content transmission but also establish the

customized networked conditions within which something can become culturally meaningful and shareable. The platform acts as a manager that enables, directs, and channels specific flows of communication as well as specific logics of transformation of data into culturally recognizable and valuable signs and symbols. Thus, it is useful to think about participatory media platforms as conduits for governance, that is, as the conduits that actualize technocultural assemblages, and therefore manage a field of communicational processes, practices, and expectations through specific articulations between hardware, software, and users. Seeing the platform as a conduit for governance makes it possible to recast the question of "free" communication: the governance process in the participatory media environment is not primarily about censorship, that is, deciding who can express themselves and who cannot. Rather, it is about enabling and assigning levels of meaningfulness: what matters more and should therefore be more prominent and visible. This requires not only techniques to assign a cultural value to information but also strategies to foster specific cultural perception of the platform and processes of delineating communicative agencies.

The first aspect of the platform as a conduit of governance is its capacity to act as a manager of information: the goal of the platform is to accommodate as much participation as possible to decide what, in a sea of information, is meaningful, relevant, and should be made more prominently visible on different user-interfaces. This is a radical point of departure from traditional mass media systems, which were based on accommodating only a limited amount of information from set sources. In the platform model, flexibility of sources and ever-expanding information storage are the basis for information management. The platform not only stores information, but through software processing, enacts specific technocultural logics whereby information can become culturally relevant and valuable. A simple illustration of this process is the ranking of search results. The more relevant a search result is, the more prominently it is featured. However, the technocultural logic to decide on what should be made more visible varies from one platform to the next. The Google search engine, for instance, classifies search results according to a technocultural logic that translate a Web protocol—the inlink—into a cultural value of relevancy. Alternatively, the Facebook search engine works by redefining relevancy not only in terms quantitative weight (e.g., number of inlinks) but in terms of customization of content according to one's friendship network. Therefore, the platform as manager of information is in charge of attributing degrees of visibility that correspond to specific attribution of cultural value to information.

The governance processes enabled by a participatory media platform are not only about managing information but also about managing the cultural perceptions, on the user side, of software processes. This process does not only take place through the assignment of cultural value to information by software process but also through the establishment of equivalencies between communicative acts and cultural practices. A fascinating, and much-debated, illustration of this is the relationship between the communicative act of "friending" on social networks and the cultural practice of building friendship (boyd 2006). The complex and at times contradictory relationships between

"friending" and a whole range of cultural practices, from making connections, developing acquaintances, to maintaining friendship, has been a popular topic of debate. Because in this case the relationship between communicative act and cultural practices is not completely stabilized, "friending" illustrate the importance of the platform as enabling dynamics of equivalency so that software-assisted process and communicative acts become culturally meaningful practices for users. Of course, the management of cultural perceptions not only involves software processes, but a whole apparatus of commercial, discursive, and affective dynamics as well. The platform thus manages users' cultural perceptions of the communicative process. In that sense, the platform enacts dynamics of visibility and invisibility: it makes information more or less visible according to its relevance, and it makes some software process (e.g., recommendation systems) more or less salient for users. As such, the platform manages how it is being perceived by users. There are modulations of the processes of visibility and invisibility, of what different categories of users can see or not. For instance, what Web users get to see as relevant and meaningful on their user-interface might be different from that for an advertising or marketing partner. The data and information might be the same, but its value and visibility might be different depending on the user category. Herein also lies the limitation of the claim that participatory culture is more democratic. The perception of democratic communication is managed, in the sense that the platform, through modulations of visibility and invisibility, includes some communicative features and excludes others. With commercial platforms, this usually takes the form of reducing the whole notion of communication to expression at the user-interface level, while evacuating any consideration of the conditions within which such process of expression is possible. That is, while it might be easy to post something on Facebook, user agency is limited to uploading content and interacting with symbolic devices at the interface level, and compared to the web 1.0, HTML environment, only minimally includes question of web design and layout and control over how information circulates. In short, freedom of expression usually means a narrowing down of communicational possibilities on the user side, and relegating whole parts of the communication process to back-end and invisible software processes. The question of control of personal information on social networks is an illustration of this process of managing cultural perceptions of what the communication process stands for through multiple visual, discursive, and technical strategies.

Managing user perceptions by articulating technical processes with cultural values and practices is thus the second aspect of the platform as a conduit for governance. The third aspect of the platform as a conduit for governance logically follows from the second and concerns the shaping of agencies, including both user agency and software agency. The first area of interest here is with regard to the agency of software in relation to users, and especially software's capacity to act as a cultural actor capable of understanding users. Following the software studies perspective, it appears that the platform assigns a specific cultural form and visibility to the software in charge of making sense of users and the information they provide, and this can take the form of, for instance, an avatar, or a recommendation system that actively requires feedback

from users, or a system that is invisible for users yet has a central effect on the customization of information. Users' agency is closely tied with the management of cultural perception, in that platforms have different ways of defining the field of users' communicative agencies. While in context such as open-source programming, communicative agency includes control over code, that is, over the architecture of communication (Kelty 2008), in the more commercial participatory media environment, communicative agency is reduced to cultural expression at the user-interface level, as discussed above. However, the platform does not only aim to restrict the agency of users but to delineate and channel it. Lazzarato's discussion of how contemporary forms of governance intervene in the creation of a common world by defining and making accessible a possible field of experience is useful here (2004: 94-96). In particular, Lazzarato refers to Ranciere's "distribution of the sensible"—to the process through which specific modes of expression and action are defined and assigned, along with specific possibilities, ways of being, of perceiving and sensing the world, and specific regimes of visibility and invisibility. Lazzarato highlights that traditionally, this distribution of the sensible was organized through a dualism and opposition between those who could be seen and represented, and those who did not count and therefore were invisible, between those who could legitimately say something and be heard (i.e., members of the aristocracy or the bourgeoisie) and those who could not (i.e., the proletariat). Such distribution of the sensible, Lazzarato argues, is not the dominant one anymore in the neoliberal context. Rather, contemporary forms of governance operate by moving away from the rejection of specific populations and establishing differentialities along a continuum of agency. That is, in the new distribution of the sensible, anybody can express themselves, but there are modulations and differentials of agency, rather than a binary of attribution/refusal of agency.

With regards to user participation, it can be said that the platform, as a conduit of governance, offers a basis of communicative agency to all. A popular business model is that anybody can sign up for a free account and is therefore given a basis of communicative agency. The provision of ever-expanding storage space, such as on Google Mail, is a form of distribution of communicative agency that encourages users not to erase any of their emails so that the recommendation software can offer more targeted types of advertising based on one's entire history of email exchanges. On the other hand, differential modes of agency enacted by participatory media platforms consist, for instance, of rewarding the more participative users with a greater range of communicative functions. The common warning that, for instance, choosing restricted privacy settings on a given website settings might lessen one's experience highlights how the platform enacts strategies of differentiality. Social networks such as Facebook offer an illustration of the distribution/differentiation dynamic enacted by platforms. On any given social networking platforms (e.g., Facebook, but also MySpace) everybody is given a similar account page and set of communicative tools. The social networking platform, however, operates a series of differentiation among users by offering communicational bonuses depending on what the user chooses to do. For instance, the trade-off for signing up for Facebook applications and giving third-party

access to one's Facebook data is having a greater range of communicative possibilities. A default setting on Facebook to say "hello" to friends is the "poke" button, but by installing the "Super-Poke" application, users can send not only "super-pokes" but also "hugs" and a range of other communicational gestures.

The democratic claim of the participatory media environment is partly true: anybody can express themselves and encounter minimal censorship. However, the locus of power and focus of the governance process is not on content per se, but on the conditions within which meaning can emerge. In short, the process of governance on participatory media platform is about defining degrees of meaningfulness through the attribution of cultural values, the shaping of cultural perceptions of the platform, and the setting up of a horizon of communicative possibilities and agencies. Such process works at the crossroads of different technocultural articulations: translating information into meaningful content, establishing equivalencies between technical processes of communication and cultural practices, and organizing differentials of agency both between users and software, and among different categories of users. As such, undertaking a critical analysis of online participatory media and their associated practices of communication requires understanding how networks of technologies, users, and social processes define and delineate specific modes of experiencing meaning. The question of the governance and conditioning of these networks demands a new framework that does not simply focus on the users, or on transmission technologies, but on the assemblages of culture and technology, users and software that create sites for the experience of meaning (Gitelman 2008: 8).

Declaration of Conflicting Interests

Funding

References

Albrechtslund, A. 2008. Online social networking as participatory surveillance. *First Monday* 13 (13). http://www.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2142/1949.

Berners-Lee, T. 1999. *Weaving the web: The original design and ultimate destiny of the world wide web by its inventor*. San Francisco: Harper San Francisco.

Benkler, Y. 2007. *The wealth of networks: How social production transforms markets and freedom*. Yale: Yale University Press.

Bolter, J., and R. Grusin. 1999. *Remediation: Understanding new media*. London: MIT Press.

boyd, d. 2006. Friends, Friendsters, and MySpace Top 8: Writing community into being on social network sites. *First Monday* 11 (12). http://www.firstmonday.org/issues/issue11_12/boyd/index.html.

boyd, d. 2008. Facebook's privacy trainwreck: Exposure, invasion, and social convergence. *Convergence* 14:13-20.

Bruns, A. 2008. *Blogs, Wikipedia, Second Life, and beyond: From production to produsage*. New York: Peter Lang.

Bush, V. 1945. As we may think. *The Atlantic Monthly*, July. http://www.theatlantic.com/doc/194507/bush.

Carr, N. 2008. Is Google making us stupid? *The Atlantic Monthly*, July/August. http://www.theatlantic.com/doc/200807/google.

Chun, W. 2005. On software, or the persistence of visual knowledge. *Grey Room* 18:26-51.

Deleuze, G., and F. Guattari. 1987. *Thousand plateaus: Capitalism and schizophrenia*, translated by B. Massumi. Minneapolis: University of Minnesota Press.

Elmer, G. 2009. Robots.txt: The politics of search engine exclusion. In *The spam book: On anomalous objects of digital culture*, edited by J. Parikka and T. Sampson. London: Hampton Press, 2009.

Elmer, G. 2006. The vertical (layered) net. In *Critical cyberculture studies: New directions*, edited by D. Silver, 159-67. New York: NYU Press.

Foucault, M. 2003. *The essential Foucault*, edited by P. Rabinow and N. Rose. New York: New Press.

Fuller, M. 2003. Behind the blip: Essays on the culture of software. Brooklyn, NY, USA: Autonomedia.

Galloway, A. 2004. *Protocol: How control exists after decentralization*. Cambridge: MIT Press.

Gitelman, L. 2008. *Always already new: Media, history, and the data of culture*. Cambridge: MIT Press.

Guattari, F. 1977. *La révolution moléculaire*. Paris: Recherches.

Guattari, F. 1989. *Les trois écologies*. Paris: Galilee.

Guattari, F. 1995. *Chaosmosis: An ethico-aesthetic paradigm*, translated by P. Bains and J. Pefanis. Sydney: Power Publications.

Guattari, Felix. 1996. Microphysics of power/Micropolitics of desire. In *The Guattari reader*, edited by G. Genosko, 172-83. London: Blackwell.

Gumbrecht, H. 2003. *The production of presence: What meaning cannot convey*. Stanford: Stanford University Press.

Hall, S. 1980. Encoding/decoding. In *Culture, media, language*, edited by S. Hall, 128-38. New York: Routledge.

Herman, E., and N. Chomsky. 2002. *Manufacturing consent: The political economy of the mass media*. New York: Pantheon.

Innis, H. 1951. The bias of communication. In *The bias of communication*, 117-30. Toronto: University of Toronto Press.

Jenkins, H. 2006. *Convergence culture: Where old and new media collide*. New York: New York University Press.

Kelty, C. 2008. *Two bits: The cultural significance of free software and the internet*. Durham: Duke University Press.

Kittler, F. 1990. *Discourse networks*. Stanford: Stanford University Press.

Kittler, F. 1995. There is no software. Ctheory. Accessed from http://www.ctheory.net/text_file.asp?pick=74

Langlois, G., F. McKelvey, G. Elmer, and K. Werbin. 2009. Mapping commercial Web 2.0 worlds: Towards a new critical ontogenesis. *Fibreculture* 14. http://journal.fibreculture.org/issue14/issue14_langlois_et_al.html.

Langlois, G., and G. Elmer. 2008. The economies of Wikipedia: Open-source as promotional traffic. *New Media and Society* 11 (5): 773-94.

Latour, B. 1993a. On recalling ANT. www.comp.lancs.ac.uk/sociology/papers/Latour-Recalling-ANT.pdf (accessed 14 January 2005).

Latour, B. 1993b. *We have never been modern*. Cambridge: Harvard University Press.

Latour, B. 1999. *Pandora's hope: Essays on the reality of science studies*. Harvard: Harvard University Press.

Latour, B. 2007. *Reassembling the social: An introduction to actor-network-theory*. Oxford: Oxford University Press.

Lazzarato, M. 2004. *Les revolutions du capitalisme*. Paris: Les Empecheurs de Penser en Rond.

Lessig, L. 2002. *The future of ideas: The fate of the commons in a connected world*. New York: Vintage Books.

Lessig, L. 2006. *Code: Version 2.0*. New York: Basic Books.

McChesney, R. 2008. *The political economy of media: Enduring issues, emerging dilemmas*. New York: Monthly Review Press.

Mackenzie, A. 2006. *Cutting code: Software and sociality*. New York: Peter Lang.

Manovich, L. 2002. *The language of new media*. Cambridge: MIT Press.

McLuhan, M. 1995. The Playboy interview. In *Essential McLuhan*, edited by E. McLuhan and F. Zingrone, 233-69. Toronto: House of Anansi.

Nelson, T. 1993. *Literary machines 93.1*. Sausalito: Mindful Press.

O'Reilly, T. 2005. What is Web 2.0. http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html.

Phillips, J. 2006. Agencement/assemblage. *Theory, Culture & Society* 23 (2-3): 108-9.

Slack, J. 1989. Contextualizing technology. In *Rethinking communication, vol. 2: Paradigm exemplars*, edited by L. Grossberg, B. Dervin, B. O'Keefe and E. Wartella, 329-345. Thousand Oaks: Sage.

Slack, J. D., and J. M. Wise. 2005. *Culture + technology: A primer*. New York: Peter Lang.

Terranova, T. 2000. Free labor: Producing culture for the digital economy. *Social Text* 18 (2): 33-58.

Terranova, T. 2004. *Network culture: Politics for the information age*. London: Pluto Press.

Zimmer, M. 2008. The externalities of search 2.0: The emerging privacy threats when the drive for the perfect search engine meets Web 2.0. *First Monday* 13 (13). http://www.uic.edu/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2136/1944.

Bio

Ganaele Langlois is Assistant Professor of Communication at the University of Ontario Institute of Technology and Associate Director of the Infoscape Centre for the Study of Social Media (www. Infoscapelab.ca). Her research focuses on the intersection of language, software, and capitalism in the context of participatory culture.