Networked Publics: The Double Articulation of Code and Politics on Facebook

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Abstract: Through three case studies of online political activism on Facebook, this article conceptualizes the deployment of issue publics (Lippmann, 1993; Marres, 2005) on Facebook. We argue that issue publics on Facebook come into being through a specific set of double articulations of code and politics that link and reshape informational processes, communicational constraints and possibilities, and political practices in different and sometimes contradictory ways. Using Maurizio Lazzarato's exploration of immaterial labour (2004), we demonstrate the need to further understand the networking of publics and their issues by considering how online platforms provide the material, communicational, and social means for a public to exist and therefore define the parameters for assembling issues and publics and circumscribe a horizon of political agency.

Keywords: Political communication; New media; Immaterial labour; Online political activism; Web 2.0

Résumé: Au travers de trois analyses d'exemples d'activisme politique en ligne sur Facebook, cet article offre une conceptualisation du développement de problèmes d'intérêt général et de leurs publics sur Facebook (Lippmann, 1922; Marres, 2005). Nous démontrons que les problèmes d'intérêt général et leurs publics sur Facebook sont créés au travers d'une série de double articulations du code et du politique qui lient et refaçonnent les processus informationnels, les

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possibilités et contraintes communicationnelles et les pratiques politiques de manières différentes et parfois contradictoires. En se référant aux travaux de Maurizio Lazzarato sur le travail immatériel (2004), nous démontrons le besoin d'analyser le processus de réseautage des problèmes d'intérêt général et de leurs publics. Ceci inclut une nouvelle approche envers les plates-formes en ligne comme fournissant les moyens matériels, communicationnels et sociaux pour qu'un public puisse exister, et comme définissant par la même un horizon d'activité politique et les paramètres selon lesquels des problèmes d'intérêt général et leurs publics peuvent être assemblés.

Mots clés: Communication politique; Nouveaux medias; Travail immaterial; Activisme politique en ligne; Web 2.0

The rise of online social networks that enable users to create content, maintain and build social ties, and engage in discussions on public issues has generated much hope, both in the mainstream media and academic circles, for reviving citizen participation in public affairs ("Person of the Year," 2006). Facebook in particular has emerged as an important political site in North America and worldwide. Facebook's social networking platform served as a global meeting point to organize support for monks' protests in Burma in the fall of 2007. During the recent U.S. presidential elections, the Barack Obama Facebook group had more than 1.2 million supporters. The potential of Facebook as a site of political communication and action led to a partnership between Facebook and ABC News for the 2008 U.S. elections, with an "aim to mobilize active political engagement" ("Announcement: Facebook/ABC," 2008). In Canada, an estimated 23% of Canadians are on Facebook ("Facebook in Canada," 2007), and Canada's largest city, Toronto, has the second most Facebook user accounts of any city in the world ("London trumps Toronto," 2009). The Canadian political scene is gradually integrating Facebook as a political campaigning tool, as well as a tool for public expression. Major Canadian politicians have Facebook pages, and provincial and federal governments take into account Facebook participation, as in the case of protests by young drivers of Ontario against new driving regulations in the fall of 2008 ("McGuinty will reach out," 2008).

These instances of political activism point to the growing importance of Facebook as a space where a public can be reached and informed and can enter into a dialogue to discuss issues of common interest and influence political decision-making. This type of Habermasian (Habermas, 1962) description of Facebook's democratic potential, along with the more general optimistic discourse on Web 2.0, user-generated content, and online social media, however, remains challenging to investigate from a research perspective. Technically, there are tremendous difficulties in tracking information on private online spaces that have developed a complex and black-boxed architecture. Theoretically, the challenges primarily lie in understanding the uniqueness of social networking sites as assemblages where software processes, patterns of information circulation, communicative practices, social practices, and political contexts are articulated with and redefined by each other in complex ways. In particular, there is a need to examine how diverse elements and actors (human and non-human, informational, commu-

nicational, and political) are mobilized and articulated in specific ways in order to shape specific online forms of publicity and public discourse. The challenge is that elements that have traditionally been ignored by the field of political communication, such as Web 2.0 companies, software processes, and informational architectures, now play a central role in providing the very material means of existence of online publics and in framing the scope of online political practices. That is, these elements do not simply help transpose a public will online—they also transform public discussion and regulate the coming into being of a public by imposing specific conditions, possibilities, and limitations of online use. Thus, the challenge is not simply to identify new communicational practices and their effects on the content of public discussion, but to understand how the encounter between technologies of communication and political processes creates new conditions for the formation of issues of common interest and their publics.

Inspired by Deleuze and Guattari (1987), this article starts by exploring publics on Facebook as resulting from several processes of double articulation of code and politics that define new conditions and possibilities of political action and communication. From a double-articulation perspective, online publics and issues result from linking, assembling, connecting, and thus hybridizing diverse code (platform, software, networks, informational dynamics, et cetera) and politics (political discourses, political movements, political cultures, politicians, citizens, et cetera) elements and actors. As such, there is a need to pay attention to how politics mobilize code at the same time as code formalizes politics according to specific informational logics. The article relies specifically on three case studies of political activity on Facebook that trace processes of double articulation at different levels: the user interface level, the level of informational-representational processes, and the level of the black box.

The first case study follows the evolution of Facebook groups related to the 2007 Ontario provincial election. The second case study examines the controversy surrounding the "Great Canadian Wish List," a Facebook event launched by Canada's national broadcaster (the Canadian Broadcasting Corporation, or CBC) in the summer of 2007. The third case study focuses again on the 2007 Ontario provincial election, but it examines the constitution of publics through Facebook's back-end architecture and database. The intention, through these case studies, is not to offer a definitive account of the role played by Facebook groups in shaping political campaigning and public discourse, but to open avenues of reflection on the new conditions through which publics come into being online. Examining the double articulation of code and politics in the shaping of Facebook publics demonstrates the need to transition away from focusing on the content of online public discussion to investigating the modalities of existence of a public. Furthermore, while the heterogeneous constitution of publics and issues of common interest has been examined through the issue-public approach (Marres, 2005; 2007), this article shows that there is a need to examine not only the assembling of publics, but also the networking of publics via online software platforms. The exploration of networked publics draws from Maurizio Lazzarato's (2004) post-Marxist reflection on the ways in which immaterial labour, including communicative processes, serves to organize power relations by suggesting, framing, and

setting the conditions for the emergence of specific social relations and horizons of subjectivation within control societies.

Facebook, me-centricity, and publicity

Much hype has surrounded the democratic potential of Web 2.0 platforms as social production tools (Benkler, 2006) to harness collective intelligence, allow users to express themselves bypassing traditional media (Jenkins, 2006), and enable access to a wealth of information about public issues.² The rise of blogs, wikis, and other user-generated content and collaborative platforms has been seen as fundamentally changing the relationships between citizens, politics, and the media (Bruns, 2005, 2008). The term "Web 2.0," however, is very general, and there is a need to identify the specificities of each of the platforms and websites that fall under this category. Social networking sites (SNSs) such as MySpace and Facebook share some similarities with other Web 2.0 platforms, but differ significantly in terms of patterns of information circulation.

SNSs allow people to be in touch with their social circle, and they typically start with a request to create a personal account. From their personal account pages, users can invite other users to become "friends" and can send messages and content (text, video, pictures, sound) to their network of friends. On Facebook, the modalities of exchange among friends are extremely varied, from news stories that automatically let users know about the Facebook activities of their friends to private (e.g., e-mail features) and public (e.g., "wall"-to-"wall" posts) content exchange. Furthermore, one's network can be extended not only through invitations to "friends," but also through becoming, for instance, a fan of a public figure, political cause, or TV series and through creating and/or signing up for events and groups. Thus, as opposed to other Web 2.0 spaces, social networks can be considered me-centric. In particular, while Facebook aims to act as a large repository of information by offering numerous ways of posting information, accessing information, and communicating with others, any kind of activity takes place through a highly individualized and personalized perspective. The entry point on the Facebook interface is one's user account, and the Facebook recommendation and search features rank their results by measuring closeness to one's network, including school affiliation, geographic location, and number of friends already participating in an event or group.

Modes of political activity on Facebook thus differ significantly from other Web 2.0 formats, especially with regard to how information and content circulate through the Facebook platform. By default, Facebook provides three ways to express political support: members can become "fans" or supporters of a politician's profile, they can create or join a group, or they can change their political views on their profile. Of these three modes of expression, only groups and politicians' profiles extend a person's political views beyond their me-centric network to publicly list the person as a member or supporter on the Facebook interface. Becoming a fan or a group member allows for the aggregation and publicization of users around particular political figures and causes. Thus, networks of common interests are created, and the Facebook platform greatly simplifies communicating within and to a network via e-mails, invitations, and reminders. In turn, users can invite their own friends to join a group, page, or event, either in an

active fashion (e.g., sending an e-mail) or in more passive ways (e.g., through automated status updates visible to friends). Facebook groups offer a far more dynamic window of study—one that reflects the participatory aspects of social media—than a politician's profile page, which only comes from top-down decision-making by parties and campaigns. That is, only politicians can create political profiles, whereas anyone can create or join a group.

Thus, exploring the formation of participatory publics on Facebook is best done through a study of groups, as they represent the moment at which me-centric profiles are put together and publicized. As will be demonstrated in the first case study below in particular, the two poles of me-centricity and publicity on Facebook are made to co-exist, in the case of the constitution of issues and publics, through multiple articulations of code and politics, which can have different effects. In that sense, Facebook should not be considered a stable format, but rather a platform that allows for different forms of modulation of me-centricity and publicity. These modulations are best examined through a double articulation framework.

Facebook and the double articulation of code and politics

While at first social networking sites seem to emerge as another platform to enhance public participation and communication about public issues, they nevertheless require a critical approach to the informational dynamics of user-generated content, especially as they have been surrounded by controversies. As opposed to open news sources and blogs, private and commercial social networks, Facebook in particular, have been decried as invading privacy through constant surveillance and monitoring of users for commercial purposes (Albrechtslund, 2008; Boyd, 2008; Petersen, 2008; Scholz, 2008).

Concerns about privacy, surveillance, and control over informational and communicational dynamics have come to temper more optimistic declarations about the renewal of public dialogue and exchange on social networking sites. These concerns highlight the ways in which the software and informational architecture of Web 2.0 sites allow new forms of control to emerge. These new dynamics of control should not be limited to questions of surveillance and privacy, but should also include questions concerning the cultural experience of being a user of social networking sites. That is, the informational processes that shape the very experience of using Facebook—the constant personalization, the automated updates and recommendations—are not only restrictive, as they enable new forms of surveillance and control; they are also productive, in that they set the conditions for social bonding and cultural exchange. The me-centric perspective on Facebook, for instance, is a constraint, but it also offers a specific context of cultural and social experience and enables new forms of sociality and new ways of accessing information. In the same way, the informational processes aggregating users into groups define specific modalities of publicization.

From a methodological perspective, online social networks should be seen as platforms, that is, as the convergence of different technical systems, protocols, and networks that enable specific user practices and connect users in different and particular ways (McKelvey, 2008). Thus, there is a need to explore the role of Facebook in the political process by following a vertical approach (Elmer, 2006)

to study the conditions of connectivity of different cultural, communicational, and informational components present in specific online spaces and platforms. The code, languages, and architectures, as well as the other elements that produce a human-understandable visual interface, impose specific constraints on the communication process while also allowing for new possibilities of expression, and in that way, they redefine what it means to communicate online. In the case of Facebook, a vertical approach that takes into account the "informational politics" (Rogers, 2004) regulating communication processes leads to an examination of the paradox of free and open communication that exists between the use of tools to facilitate the production and circulation of content and the opacity and complexity of an architecture regulated by the economies of data mining. The vertical approach invites us to examine the double articulation of code and politics and to identify how informational processes intervene in the plane of politics and public discussion and vice versa.

A political Facebook application, such as the one that enabled users to share the famous "Yes We Can" song in support of U.S. presidential candidate Barack Obama, enacts a series of double articulations. On the one hand, the specific informational dynamics for sharing information on Facebook are mobilized for a political cause: spreading a political anthem to large audiences. On the other hand, the code is not simply mobilized by political forces; it also enables new forms of more hidden political practices that make use of the surveillance potential of Facebook to gather information about users subscribing to this application—their demographic profiles, their likes and dislikes, their network of friends, et cetera. In this way, the assemblage resulting from the deployment of this specific Facebook application should not be considered as a homogeneous whole, but rather as allowing for multiple power relations, some visible, some hidden. Furthermore, because online social networks such as Facebook are layered entities (Langlois, 2005) that involve not only visual interfaces, but also informational processes and communicational practices, these double articulations take place on different planes with various effects. Thus, there is a need to develop analytical approaches and methodologies that move away from the user interface as a central source of data and integrate the informational dynamics that, while invisible to users, play a central role in defining the modalities of existence of publics on Facebook.

The aggregation of publics: The 2007 Ontario provincial election

The first set of double articulations to consider is at the level of the user interface. Here, the main actors involved in the constitution of issues and their publics are the politicians, citizens, NGOs, et cetera, that make use of the communicative possibilities offered by Facebook in order to support, represent, and create new modes of political communication and participation. The process is not simply one of human actors mobilizing communication technologies, but also of communication technologies enabling new patterns of political organization. The concept of participatory medium perhaps best encapsulates these relationships in that it refers primarily to the new communicational practices that link online dynamics with a broader political context, such as electoral campaigning. From this perspective, processes of double articulation include the new communicative

affordances offered to users and the ways in which these new affordances allow for new discourses, content, and discussion to exist within a participatory media space. In short, the question becomes one of knowing which new forms of publics and issues arise through tools for participatory communication offered on Facebook. This type of approach is particularly helpful for examining how political communication on Facebook, through new participatory affordances, differs from the types of political communication taking place in other media.

The 2007 Ontario provincial election provided a useful case study for looking at different modes of participation and aggregation of publics on Facebook. Our first intention when undertaking this research project was to see whether it would be feasible to track the rise of issues of common interest and the constitution of their publics by taking into account the specific communicational dynamics of Facebook, and in particular to see whether Facebook was mobilized by traditional political practices such as partisanship and whether it allowed new formations, new issues, and new publics to emerge. Our method was to do weekly manual searches for groups on Facebook using the names of the major party leaders—"Howard Hampton" (New Democratic Party), "John Tory" (Progressive Conservative Party), and "Dalton McGuinty" (Liberal Party)—as well as the more general "Ontario election 2007." We included the last category as a catchall for the range of issues related to the electoral campaign. In total, 281 Facebook groups were tracked from August 31, 2007, to October 5, 2007. The groups ranged from official party groups to local groups and grass-roots groups.

Overall, we found a co-existence of partisan and issue-based politics among the Facebook groups related to for the Ontario election. While the majority of Facebook groups (54%) were used for partisan purposes, in that they either supported or attacked a candidate of party, there also were a significant number of groups focused on issues of common interest (38% of all groups). In that sense, there was a rearticulation on Facebook of an offline campaign as a way to pressure politicians into acting on specific issues, such as lowering or freezing university tuition fees or raising the minimum wage. It is also noticeable that the most popular groups in terms of number of members were almost all issue-based rather than party-based (see Figure 1). For instance, the Green Party of Ontario was the only group in support of a political party to rank in the top 10 Facebook groups by membership in the last week of the campaign. The rest of the groups were focused on issues, from electoral reform ("Vote for MMP") to tuition fees ("Freeze Ontario Tuition") to renaming a highway ("Ontario Highway of Heroes Petition—Support Our Troops").

A common conception of participatory media is that they enable marginalized voices to express themselves. And indeed, in the case of the Ontario election, Facebook allowed for the emergence of marginalized issues and publics. Some of the most popular Facebook groups during the election in terms of number of members focused on issues that were not prominent in the traditional mass media. The Green Party of Ontario, for instance, had a strong grass-roots and official presence on Facebook (the "Green Party of Ontario" group had 1736 members). Another prominent Facebook group throughout the campaign was related to a referendum on electoral reform that took place at the same time as the provincial

election. The issue of electoral reform was mostly ignored by the mass media, which focused more on politicians, while it was widely debated on Facebook (Nelson, 2007).

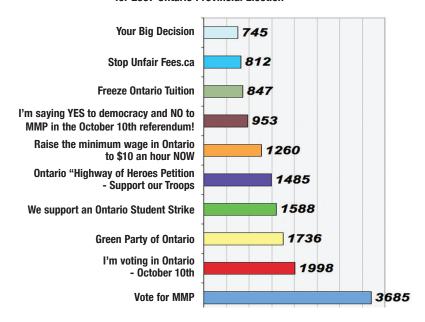


Figure 1: Top Ten Facebook Groups by Membership for 2007 Ontario Provincial Election

The Ontario election also revealed how the articulation between the participatory affordances of Facebook and its me-centric architecture reshape a horizon of political agency within private and localized networks. During the Ontario election, there were numerous local groups focusing on similar issues, thus showing that Facebook can be used not only to publicize issues, but also to foster a process of satellization of issues within smaller personal networks. For instance, 24 groups related to the proposed electoral reform were created during the Ontario campaign. Eight of these groups were against electoral reform, two were neutral, and fourteen were in favour. While the group "Vote for MMP" reached the largest membership, with 3685 members on October 5, 2007, there were only five other groups about electoral reform with more than 100 members. The other 18 groups ranged from 1 to 78 members. An effect of satellization is thus created in that small groups echo the same message (e.g., "Vote 'Yes' for Ontario Electoral Reform" and "Vote YES!!! To Election Reform"). The re-articulation of the process of publicity through the personalizing and me-centric informational dynamics of Facebook reshape our conception of the public from a large body of concerned citizens to smaller aggregations of users. Overall, in the case of Facebook groups and the Ontario election, the Facebook platform enabled new kinds of participation through the double articulation of, on the one hand, tools for participatory communication and underrepresented publics and issues and, on the other hand, personalized informational networks and issues of common interest.

Reifying a public: The "Great Canadian Wish List"

While the tracking of Facebook groups during the Ontario election made it possible to identify the double articulation of code and politics taking place at the level of the user interface, the case study on the "Great Canadian Wish List" showed how the double articulation of code and politics, through the transposition of issues into the specific communicational and informational regimes of the Facebook platform, can give rise to new hidden power dynamics that play an essential role in defining which publics can come into being. The Great Canadian Wish List was an attempt to link together citizens, traditional mass media, and online social networks in a novel way. In the summer of 2007, Canada's national broadcaster (the CBC) launched a Facebook campaign to uncover the top wishes of Canadians. People, whether from Canada or abroad, were invited to join the Great Canadian Wish List group on Facebook and define their own wish to see what "Canadians hope for the country's future" (CBC, 2007).

The Great Canadian Wish List illustrates how processes of double articulation can take place at the intersection of informational dynamics and the representational economies of the user interface. Indeed, the user interface is not only about content and discourse, but about representing and translating political actions that are mediated by informational practices. A click of the mouse, for instance, is equated with a political act and represented as a vote or an agreement in the case of an online petition, but this very equation quickly becomes problematic because the conditions of political participation differ as different technologies of communication are used. The Great Canadian Wish List underlined the double articulations that connect informational dynamics with the representational interface and the critical importance and limitations of the user interface as a mode of existentializing and reifying informational processes as cultural ones.

The CBC, as explained in their FAQ section (2007), invited people to express their support for one or more wishes by becoming friends with a wish: "Facebook will automatically rank the wishes: the more 'friends' your wish has, the higher its place." The premise of the Great Canadian Wish List was thus to use Facebook as a tool for democratic and participatory communication, enabling a broad public to define their own issues. In an effort to fulfill the CBC's mandate of representing Canada to Canadians, the Great Canadian Wish List was an attempt to bypass traditional filters in order to enhance direct communication among citizens. The event was directly linked with a mass media system, as the final wish list was announced on TV, radio, and the Internet. In so doing, the Great Canadian Wish List was an experiment in articulating a political practice—voting for a cause—with a specific informational practice—"friending" a wish on Facebook. This articulation, however, led to a redefinition of what it means to be an active citizen, especially as the Facebook architecture does not allow broad public discussion on wishes. In order to post a comment, video, or photo on a group page, one has to be a friend of that group wish. Thus, the Great Canadian Wish List delineated the discursive agencies of members of different publics by imposing a structural barrier on a horizon of citizenship.

The Great Canadian Wish List was a notable mass-media event because of the controversy it raised, which revealed a second process of double articulation, in which pre-existing publics intervened in the equation between the communicational practice of "friending" on Facebook and political voting. At the end of the campaign, the top wish in terms of number of "friends" was "Abolish Abortion in Canada," launched by pro-life activists, followed in second place by a wish that abortion remain legal. This example of how a pre-existing network of interest (the anti-abortion movement) could push for an issue online and have it reified as a Canadian wish supposed to be representative of all Canadians revealed how political strategies can make use of informational dynamics ("friending") in order to legitimize an issue. This type of strategy is known on the Web as "freeping," a term that originates from calls by members of the U.S. conservative Free Republic forum to influence online polling by voting en masse [(Wikipedia, 2009). The Great Canadian Wish List revealed a new set of informational politics intervening in the process of constituting and legitimizing issues and their publics.

The final wish list showed that, far from representing the wishes of everybody or even representing wishes corresponding to the demographic profile of Facebook users, the mediation of a large-scale communication campaign undermined the cultural assumption that ease of participation via online tools leads to balanced representation and democratic communication (Szklarski, 2008). The Great Canadian Wish List experiment highlights that what at first would seem like a simple transposition of politics onto an online communication platform actually requires the alignment and stabilization of a series of informational, political, and representational processes. In the case of the Great Canadian Wish List, the possibilities of intervention at the level of the articulation of informational dynamics (number of votes, number of clicks) with representational processes (participatory media as democratic representation) highlight the growing importance of these new techno-political practices. Thus, examining the constitution of issues and publics on SNSs requires one to take into account the unique techno-political possibilities and horizons offered by different online spaces.

Opening the black box: Critical reconstructions of publicity

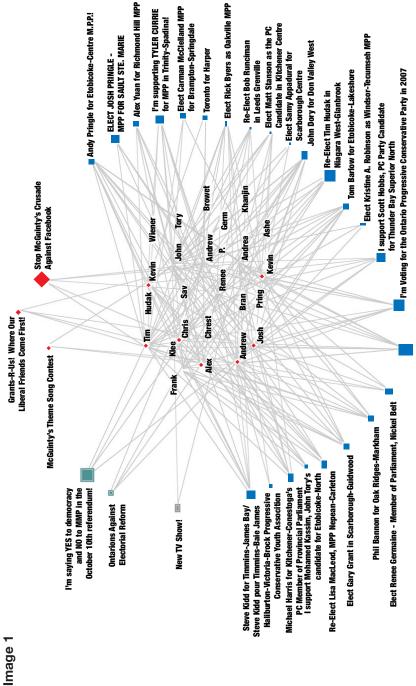
The first two case studies showed the constitution of publics through the double articulations between the plane of code and the plane of politics on Facebook at the level of the user interface. The user interface provides a rich set of processes to be analyzed, whether by looking at content as expressive of participatory communication or by looking at the processes through which politico-informational dynamics are represented and therefore reified and legitimized on a website. While the interface is an important site of analysis, however, it offers a limited perspective, in that the informational dynamics that shape the interface are invisible to users and, to a large extent, to communications researchers. Facebook is a black box (Latour, 1999), and therefore it is difficult to examine some of the opaque techniques at the informational level that participate in shaping specific representations of users and political processes.

In that sense, Facebook epitomizes the paradox of the representational interface: it reveals a specific range of communicative possibilities while hiding and rendering invisible some of the core informational processes that might reveal

something about the ways in which we perceive ourselves and others as members of a public and about how we experience our social and political world online. Wendy Chun (2005) describes software as ideological, and there is an ideological component to Facebook in that the interface hides the technical elements and informational processes that shape political practices and the horizon of political subjectivation. It is interesting to notice that, for instance, the old "Web 1.0" standard of the site map as a means for users to get an overview of the informational space of a website does not exist anymore on Facebook, because the platform is geared toward personalization and customization. Being forced to put on the blinders of personalization and me-centricity is a challenge for communication research, especially with regard to studying issue publics from a limited first-person horizon. Opening the Facebook black box, or at least understanding its functioning, can not only give clues as to the social and cultural assumptions embedded within specific informational dynamics, but also allow for a re-articulation of our online political horizons with regard to how researchers and citizens could reconstruct modes of critical inquiry that challenge the me-centric perspective.

As an illustration of the limits of interface-based research and of the need to develop an approach that focuses more on the hidden informational dynamics of Facebook, we conducted a series of experiments related to group membership. These involved using the Facebook Application Programming Interface (API, http://developers.facebook.com). APIs enable connections between different software—in the case of Facebook, between third-party software applications and the Facebook databases that contain information about users, events, groups, pages, et cetera. The Facebook API is actually a central component of the Facebook platform in that it allows for the production and distribution of the many Facebook applications (e.g., games) developed by third parties. When collecting groups during the Ontario election, we noticed that one of the blind spots of the Facebook user interface was that it did not enable the visualization of links between groups, something we wanted to investigate, because it would answer the question of whether members of different publics share common issues. Lists of groups are suggested to a user on a group page, but those are personalized to one's network. One way of visualizing how groups are linked together (or not) is to see which members subscribe to more than one group, something that is not visible via the Facebook user interface, but which is accessible via the Facebook API. We therefore collected the user IDs of the Facebook groups related to the Ontario election via the Facebook API and identified which users subscribed to more than one group. We then asked the API for the names of the users and identified which users were political figures. Using the visualization software Réseau-Lu (Aguidel Consulting, Paris), it was then possible to visualize this network of connections (see Image 1).

Through these visualizations, it was possible to see which politicians had strategized their Facebook presence—which politicians subscribed to more than one group and whether there were clear patterns of subscriptions according to party affiliations. In the case of the Ontario election, it became clear that members of the Conservative Party strategically subscribed to pro-Conservative groups (in blue/squares) as well as to anti-Liberal groups (in red/diamonds). The



John Tory next premier of Ontario

strategy of supporting one's party while undermining the party in power became visible through the visualization and revealed the extent to which groups have to be studied not only in terms of their content, but also in terms of their location within strategic networks. Such an experiment illustrates the possibility of critically assessing the constitution of publics by tracing the discursive and informational networks and bypassing the user interface altogether, and of constructing other interfaces that would reveal invisible informational and communicational processes that nevertheless speak to how users build their membership to diverse issue-publics.

Public sphere, issue publics, and networked publics

These three case studies demonstrate a progressive departure from a focus on content (e.g., a group title) as the object of analysis to study the constitution of publics to consideration of the networked routes that assemble members of publics and connect them with issues. This methodological shift in objects of analysis has some theoretical consequences as to how we should conceptualize public participation and political agency on social networking sites and Web 2.0 platforms in general. While the content of public discourse has traditionally been a central methodological object to start investigating the power relationships at stake in the constitution of publics and the scope of public discussion, such analytical dimension needs to be supplemented by a greater focus on the constitution of publics. The case studies show that the analysis of the constitution and assembling of publics first involves examining how political processes, issues of public interest, and public discussion and action take part in the double articulation of code and politics—how they are reshaped within specific communicational spheres that employ specific informational architectures.

In the case of Facebook, these double articulations take place within a me-centric/public continuum that involves different layers: the user interface, informational dynamics, and hidden networks. Noortje Marres' work on issue publics offers a theoretical starting point for further reflecting on the constitution of issues and their publics. As Marres (2007) recalls, the interest in the constitution of heterogeneous networks through which a public issue comes into existence, and in the processes through which it is addressed by members of a public, bridges science and technology studies (STS) in the pragmatist tradition of John Dewey and Walter Lippmann. In particular, Bruno Latour's examination of how issues and problems that cross through scientific, political, and social dynamics (e.g., global warming, genetically modified foods) have been ignored by social and political sciences is a central reference (Latour & Weibel, 2005). For Latour, the analysis of the procedures of democratic deliberation is too often focused on either discursive or formal elements to the detriment of paying closer attention to how a public's involvement in an issue goes beyond the strictly institutional apparatus for political decision-making. In continuation, Marres' (2005; 2007) exploration of issue publics argues that a public is constituted as a heterogeneous assemblage that comes into being through the process of defining the scope of an issue, or problem, of common interest.

Invoking Dewey and Lippman as well as ANT, Marres (2005) argues that the definition of an issue and the modalities of public participation arise from specific

conjunctural dynamics. Thus, critical attention has to be paid to how the definition of an issue includes not only human but also non-human actors, such as the objects and techniques that organize public responsibility, how different groups (politicians, citizens, NGOs) fight over the boundaries of an issue, and how these participations and affordances are shaped through specific practices and communicative processes.

The concept of issue publics seems to present a strong framework for looking at the double articulation of code and politics in the case of the assembling of publics on Facebook and potentially on the Web. The inclusion of technologies as actively participating in the constitution of issues and their publics opens up avenues for examining how Web communication technologies intervene in the political process. The concept of the issue network (Marres & Rogers, 2005; Rogers, 2004) was developed as a way to examine the unfolding of issue publics on the Web and to analyze online politics as a form of political action. The tracing of issue networks involves examining how different actors (e.g., NGOs, political parties) involved in an issue of common interest debate and define the scope of the issue and the relationships among themselves through hyperlinking patterns. Analyzing issue networks traditionally includes following the evolution of a hyperlink network of a range of websites related to an issue to understand the dynamics among different political actors. In that sense, an issue network can be understood as a "heterogeneous set of entities (organizations, individuals, documents, slogans, imagery) that have configured into a hyperlink network around a common problematic, summed up in a keyword such as climate change" (Marres & Rogers, 2005, p. 928). The relationship between issue public and issue network on the Web is based on the assumption that the Web functions as an archive that enacts traceability. Thus, online communication practices (e.g., hyperlinking) are seen as enacting the unfolding of issue publics and the Web becomes a "site for the performance of a controversy" (Marres, 2005, p. 109).

The transition from issue public to issue network is problematic, especially in the case of online social networks such as Facebook. The first set of problems is methodological, in that the shift from Web 1.0 to Web 2.0 has undermined both the centrality of hyperlinks as the organizing principle of online communication and the status of the Web as a relatively open and traceable archive. SNSs such as Facebook are characterized by their enclosed, portalized model, which invites users to stay within the website and forces them to explore the site through limited me-centric perspectives. As researchers, this informational structure was particularly frustrating, especially when we discovered that search results differed from one account to the next because of the constant personalization taking place on the website. Furthermore, the linking of information on SNSs relies on new languages, protocols, and practices, such as embedding videos. In this new configuration, traditional hyperlinking becomes only one informational tool among others. With this new technological context, it becomes difficult to use the same methods of data collection that were commonly used in a Web 1.0 environment.

Our conclusion from the case studies is that the issue-network approach needs to be re-conceptualized and expanded to take into account the specificities of Web 2.0 platforms. This does not simply mean incorporating other protocols

that enable the circulation of content on Web 2.0 platforms (e.g., IDs, tags, software applications that share content between platforms), but also dealing with and finding ways around the growing black-boxing of Web 2.0 spaces and thus the difficulty in tracking and recording content. Furthermore, platform-specific methodologies that go beyond what is represented at the interface level and tap into the data collected by the platform are a promising, yet challenging, site of analysis for communication research. Indeed, apart from the very experimental use of the Facebook API in the third case study in this paper, there are no other examples of using the Facebook API for critically analyzing political communication on Facebook.

While the Facebook API can thus give more clues as to unrepresented practices by members of a public, the use of the Facebook API requires sustained reflection on issues surrounding the privacy of Facebook users. All these challenges point toward the need for further research into platform-specific methods. As researchers struggling to peer into the black box, we hope that other researchers will help develop these tools.

A final methodological consideration is that the case studies point out that the issue-network approach needs to be thought of not only in horizontal terms (the expansion of a hyperlink network), but also in vertical terms. That is, the different layers and processes involved on the back end might allow for the exploration of dynamics that are not visible at the level of the user interface but nevertheless play a central role in regulating and allowing for new forms of political and critical intervention. There is thus a need to transition toward a greater attention to the dynamics of the online informational milieu (Terranova, 2004) in order to understand the micro and macro changes that take place in the transition from the political to the techno-political. In this new configuration, the methodological challenge lies in identifying the many sites and layers of articulation of code and politics and in tracing the movement—the new trajectories of power and knowledge—that links informational dynamics with political practices in specific contexts.

At the theoretical level, the assumption that online communicative practices enact, transcribe, or represent the constitution of issue publics is not tenable in the case of online social networks. Rather, the double articulations of code and politics, in the case of SNSs, is not an unproblematic translation of one dynamic into another communicative plane. Indeed, the rise of software, protocols, and networks as actors that intervene directly in cultural and communicational processes through the production of automated recommendations operating under specific social and cultural assumptions, and through the production of first-person-perspective interfaces, needs to be acknowledged. That is, the rise of software as a new type of actor and of Web 2.0 platforms as new types of technocultural spaces fundamentally changes the dynamics of constitutions of issues and their publics. As Ulises Mejias (2008) points out: "Networks—as assemblages of people, technology and social norms—arrange subjects into structures and define the parameters for their interaction, thus actively shaping their social realities. But what does the social network include, and what is left out? Informational dynamics cannot be seen as supports of communicational dynamics anymore, but as directly intervening in the communicational, cultural, and by extension political planes.

The issue-public approach would benefit from Lazzarato's exploration of contemporary capitalism and of the role played by informational labour in control societies. Drawing not only from Marxism, Foucault, and Deleuze, but also from Gabriel Tarde's monadology (a central tenet of actor-network theory), Lazzarato (2004) looks at the constitutive relations between human and non-human actors and more particularly at the diverse elements and fluxes (technological, psychological, economic, political, et cetera) that modulate, regulate, and condition such relations according to specific power interests. As such, Lazzarato demonstrates that in reversal of the traditional Marxist position, capitalism is not a "world of production" anymore, but the "production of worlds" (p. 96).

For Lazzarato (2004), the characteristic of contemporary corporations in a control society is that they do not create objects of consumption anymore, but they create the world within which such objects can exist. Similarly, the corporation's goal is not to create subjects (i.e., workers and consumers), but to create the world within which such subjects can exist (p. 94). Lazzarato's concern with processes of existentialization belongs to a theoretical genealogy that originates with Foucault (2003) and continues with Guattari's (1996) work on "the pivotal point between semiotic representation and the pragmatics of 'existentialization'" (p. 181), that is, the actualization of subjectivities according to specific power dynamics. Lazzarato helps us reconsider the role played by online social networking sites, particularly private and commercial ones such as Facebook, by inviting us to consider that their primary role is to give us our horizons—our sense of the possible. No longer is the content of a social network a sufficient description—we must treat SNSs as locations of existence with their own limits of possibility. In the same way, Facebook should be seen as creating the horizons, tools, and practices that, through the double articulations of code and politics, give birth to new actors, new modes of agency and subjectivation, and new limitations and power relations. In that sense, the tracing of issue publics in their multidimensionality on SNSs can give way to a critical assessment of SNS politics.

Lazzarato's (2004) work on immaterial labour is useful not only for further examining the assembling of issue publics writ large, but also for examining the specific moment of online transition when a public is networked. We define networked publics as those publics that come into being through online informational processes. The online informational systems provide the material, communicational, and social means for a public to exist, and this takes place through the implementation of a network that defines the parameters of agency of a public and its specific communicative affordances. In that sense, the network provides the parameters for assembling issues and their publics in specific ways. As seen through the case studies, the network can impose a specific communicative discipline at the same time as it can offer possibilities of re-articulation of pre-existing power dynamics. Furthermore, analyzing the networking of a public, as demonstrated in the third case study, makes it possible to envision critical interventions, from a research perspective, into the process of public participation online by uncovering unrepresented dynamics.

In terms of rebuilding a critical approach to the democratic potential of the Web and Web 2.0, analyzing the networking of publics and issues finds some

echo in Chris Kelty's (2008) exploration of the open source movement as a "recursive public," which he defines as a "public that is vitally concerned with the material and practical maintenance and modification of the technical, legal, practical and conceptual means of its own existence as a public" (p. 3). While the open source movement described by Kelty includes both a commitment to democratic discussion and decision-making and awareness of its means of existence online, current understandings of publics on SNSs and Facebook in particular mostly focus on the traditional concern with the content and scope of public discussion. From that perspective, SNSs are democratic, as they offer seemingly infinite and free spaces of communication. However, a critical approach that includes awareness of the networked means of existence of a public would make it possible to trace the new power dynamics in the shaping of issue publics that arise through the double articulation of code and politics. Such critical analysis, as demonstrated throughout the case studies, is rife with practical, methodological, and theoretical challenges. Collaborative efforts across disciplines therefore need to take place in order to develop the tools and theoretical understanding of the different, concurrent, and sometimes paradoxical modalities of Facebook, SNSs, and Web 2.0 sites in general.

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Notes

- According to Facebook (2008), "more than 500 U.S. politicians have Facebook Pages.... These
 include all the major presidential candidates, most Members of Congress and many state governors." According to a 2008 report from the Pew Internet Project, the use of social websites during elections has taken off, with 10% of Internet users using social networks. Social networks are
 particularly popular with younger generations ("The Internet's," 2008).
- For an up-to-date list of Facebook controversies around censorship, privacy issues, account termination, and spamming see Wikipedia, 2009.
- 3. Dave Gilbert, the creator of the anti-abortion wish on Facebook, himself admitted that the results from the Great Canadian Wish List do not constitute an official poll, but shows that the potential for further mobilization exists (The Interim, 2007).

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Appendix: Facebook Groups on Electoral Reform

| Name of Group | No. of Members | Tone |
|--------------------------------------------------------|----------------|----------|
| I'm saying YES to democracy and NO to MMP | | |
| in the October 10th referendum! | 953 | negative |
| Ontarians Against Electoral Reform | 119 | negative |
| Vote No! - Ontario Referendum, October 10 | 119 | negative |
| Ontario Electoral Reform Referendum: | | |
| I'm Voting NO to Change | 67 | negative |
| Vote against MMP in Ontario on October 10th | 28 | negative |
| Vote NO on mixed member proportional electoral system! | 6 | negative |
| Vote Against MMP | 1 | negative |
| Vote against mixed member proportional | | |
| representation in October | 1 | negative |
| (Ontario) Referendum October 10, 2007 | 71 | neutral |
| Ontario's Referendum Oct. 10th | 16 | neutral |
| Vote for MMP | 3685 | positive |
| I Say YES to MMP Because More Women | | |
| Will Be Elected to Queen's Park | 503 | positive |
| Canadians for Proportional Representation | 131 | positive |
| Vote for Mixed Member Proportional representation | | |
| in Ont Referendum 2007!!! | 42 | positive |
| ONTARIO - VOTE FOR CHANGE!!! | 39 | positive |
| Vote for MMP for a Better Toronto!!! | 30 | positive |
| I Say YES to MMPR Because More Women | | |
| Will be Elected to Queen's Park | 25 | positive |
| Vote 'Yes' for Ontario Electoral Reform | 21 | positive |
| Vote YES!!! To Election Reform | 17 | positive |
| I am voting YES to MMP on October 10. | 15 | positive |
| MMP: Why changing the electoral system will | | |
| improve Canadian democracy. | 13 | positive |
| Yes on MMP - Georgian Triangle | 12 | positive |
| Ontario Reforendom, Spread the Word | 11 | positive |
| YES! for Proportional Representation in Ontario | 2 | positive |