



Fuzziness of Inclusion/Exclusion in Networks

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This article addresses the concept of fuzziness of inclusion/exclusion in networks. It argues that the conceptualization of inclusion/exclusion is more complex than a static, binary dichotomy of in/out and requires that we take a viewpoint that examines the changes in the dynamics of power among the stakeholders. With this viewpoint we begin to examine the balance of power between gatekeepers and gated (the entity subjected to gatekeeping). The power dynamics are manifest through processes by which transient elites (gatekeepers) emerge and mature. Contrary to traditional thinking about gatekeepers controlling the whole process, we argue that the collective patterns of behavior of the gated have a crucial role in the emergence and sustainability of gatekeepers. Fuzziness is essential to the dynamics of these processes.

Fuzziness from a Bird's Eye View

This article discusses how the power dynamics among stakeholders in networks are changing. Essential to understanding these changes is the concept of fuzziness of inclusion/exclusion in networks. Fuzziness is defined as ambiguity about, and uncertainty of, an entity being "in" or "out" of a network. The fuzziness is caused by new processes by which the gated designate (crown) gatekeepers who act as transient elites, actors of transient empowerment and domination. Once the gated (and the gates) have determined the gatekeepers, the latter control these gates and the structure of the network in an attempt

¹ Many of the arguments presented in this theoretical paper originated from a dialogue among interdisciplinary network scholars in the Network Theory Seminar which was held in the Annenberg School for Communication & Journalism at the University of Southern California. I am indebted to this dialogue that crystallized my arguments. Since the seminar, I have developed some empirical data that further highlight these concepts. More specifically, I would like to deeply thank Frank Capra, Manuel Castells and Yochai Benkler for their insightful remarks during and after the Annenberg Networks seminar. I thank Robert Mason, who spent many hours working with me on editing the manuscript, and Jochen Scholl, Muzammil Hussain and Shawn Walker who commented on earlier versions of the manuscript.

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to promote the gatekeepers' interests and to discipline the gated according to these interests. This fuzziness of inclusion and exclusion is expressed in three main ways in the network ecology when actors: (1) are present and active simultaneously in multiple networks, spheres, and dimensions, or when they are transitioning between them; (2) include/exclude certain of their characteristics inside a network for a particular context; and (3) are included/excluded by their ability to understand actions and content produced by others. Finally, the implications of these inclusion/exclusion activities and their fuzziness emerge as discrepancies in the patterns of behavior of individuals. The fabric of each individual is comprised of all of these discrepancies created in these networks and dimensions. These may eventually lead to a higher participation and therefore deliberation, contrary to many empirical studies which show patterns of higher power law, fragmentation, polarization, and homophily of information. Next, I will elaborate these arguments while using the Network Gatekeeping Theory and providing examples from various empirical studies.

Changing the Power Balance between Gatekeepers and Gated

One of the main claims of this article is that fuzziness of inclusion/exclusion in networks is determined, to a great extent, by the changing balance of powers between gatekeepers and the gated. To understand these changes through the Network Gatekeeping Theory (NGT), we need to ask ourselves how gatekeepers in networks emerge? What is the meaning of power in the basis of their relationships with the gated? And how does this relationship change in the context of networks?

Setting the Stage: Vocabulary of the Network Gatekeeping Theory (NGT)

NGT emphasizes the subject of power as a main component in understanding the interactions of stakeholders in networks (Barzilai-Nahon, 2008, 2009). Its vocabulary is comprised of the following elements: gate (the passage point); gatekeeping (the process which relies on a broad sense of information control); gatekeeper (who performs gatekeeping); the gated (on whom gatekeeping is exercised); and gatekeeping mechanisms (the means used to carry out gatekeeping). The main strength of this approach is in its ability to reveal interests and dynamics of latent power struggles among political actors, even actors who are perceived as apolitical.

The gated is defined in NGT as the entity subjected to gatekeeping. Consider the following two examples. In the first example, users (playing, in this case, the role of the gated) search for information using search engines (playing the role of gatekeepers). Here, search engines exercise gatekeeping (information control) by channeling and ranking particular content at the expense of other content. In the second example, search engines like Google and Yahoo! (this time playing the role of the gated) localize search results to users according to the local regulations of countries (the gatekeepers in this case) (e.g., Neo-Nazi results are omitted from the local search of Google in Germany, Google.gr [Zittrain & Edelman, 2002]). These two examples emphasize the dynamic role of actors in networks, which act as gatekeepers in one instance and as gated in another. A literature review recently conducted in eight fields—mainly social science and management—showed that although most literature does acknowledge a relationship between gatekeepers and the gated, it does not include in-depth investigations into the meaning of the reciprocity or the enduring nature of these relationships. In many cases, traditional literature focuses

mainly on gatekeepers as elites who hold the power in their hands while the gated usually are treated as powerless, or as a low-level type of gated (please refer to [Barzilai-Nahon, 2009] for a full typology of the gated). Examples of research on gatekeepers as elites include the gatekeeper as: editors of journals (Braun & Dióspatonyi, 2005; Shoemaker, Eichholz, Kim, & Wrigley, 2001); public relation practitioners who decide which information to pass along (Porter & Sallot, 2003); leaders of communities who decide what type of information to preserve and store in the community (Awazu & Desouza, 2004); and law firms that determine which clients get access to which investors and vice versa (Suchman & Cahill, 1996). In networks, however, it is necessary to give sufficient weight to the role of the gated, since being subject to gatekeeping does not imply that the gated are powerless, lack alternatives, or that gatekeeping is forced on them. Actually, being a gated sometimes is a matter of choice.

Network gatekeepers are defined, according to the NGT, as entities (people, collectives or institutions) who have the discretion to exercise gatekeeping through a gatekeeping mechanism in networks, and can choose the extent to which this gatekeeping is exercised, contingent upon the standing of the gated. There is a contextual, dynamic interaction between gatekeepers and gated that we further refine in this paper. The NGT posits that we can identify the gated and their salience to gatekeepers (the degree to which gatekeepers give priority to competing gated claims) by four attributes: (1) gated political power in relation to the gatekeeper; (2) their information production ability; (3) their relationship (directness, reciprocity and endurance) with the gatekeeper; and (4) their alternatives in the context of gatekeeping. A combination of these four variables creates sixteen archetypes of gated, each of which can transform into a different archetype at any given moment.

A theoretical quandary should be raised at this point—if the gated manifest all four attributes (i.e., political power, alternatives, information production, and relationships), are they still gated—or would that make them gatekeepers? The possible transformation of the gated into gatekeepers is not achieved through mere possession of certain attributes. The transformation is achieved by having the capability (and choice) of the gated to perform an act of information control, the power to carry out this act, and the context surrounding this act that makes one a gatekeeper. Being a powerful entity does not necessarily make one a gatekeeper. Certainly, affiliation with powerful circles or elites increases one's chances to play the role of a gatekeeper, but gatekeeping is a dynamic state that can change at any given moment, contingent upon the social context from which it evolves. In other words, gatekeepers can turn into the gated, and vice versa.

There certainly is a preference to think of powerful organizations or certain entities as perpetual gatekeepers (e.g., governments). The NGT takes a dynamic approach and claims that even these potential perpetual gatekeepers serve as the gated in certain circumstances and during interactions with other stakeholders. Most actors switch roles from gatekeepers to gated interchangeably, and seldom can we point to and regard an entity as a perpetual gatekeeper. Even if one has the discretion to control information, the context determines the role. Hence, in order to identify gatekeeping, it is necessary to identify the boundaries of the network that are responsible for these boundaries, and that manage the rules of the game and the discourse in this network.

At this point, we have defined the gatekeepers and the gated. To analyze the dynamic relationships between these roles, we first need to explain the concept of power in networks, and then we will be able to show how gatekeepers emerge in networks.

What is Power in Networks? A Dialogue with Castells

Similar to Castells (2009), this paper considers power as the central component in understanding social structures and processes in networks. However, there are some differences in the way we approach this concept that are worthwhile to discuss. How should we study power in networks? Castells gives a broad formal definition of power to encompass most forms of social power: “. . . power is the relational capacity that enables a social actor to influence asymmetrically the decisions of other social actor(s) in ways that favor the empowered actor’s will, interests, and values” (p.11). In this definition, Castells intertwines power in networks with influencing the decision making of other actors as the crucial component of power execution. This formal definition may do injustice to the richness embedded in Castells’ later discussions of power.

Studying power through the influence of decisions, as Castells suggests in his definition of power, would be compelling to most positivists, because it stresses the study of concrete, observable behavior. This approach was developed in the 1950s and 1960s by pluralists like Robert Dahl and Nelson Polsby, who assumed that decision making would be the best way to determine which individuals and groups have more power in social life, and that decisions involve direct, i.e., actual and observable, conflict (Dahl, 1957; Polsby, 1963). It assumed that A has power over B to the extent that A can get B to do something that B would not otherwise do—in other words, influence the decision making of B. For example, in the late 1990s, Microsoft bundled its operating system, Windows, with the Internet Explorer browser in a way that disfavored competing browsers. As a consequence, many users who used Windows as an operating system switched to Internet Explorer instead of another third-party browser like Netscape or Opera for surfing on the net. In this example, Microsoft exercised power over its users by making them use Internet Explorer by default.

While decisions are a major reflection of power, focusing solely on that aspect can hide other modes of exercising or possessing power. One such mode is the shaping of the political agenda, which happens when “A devotes his energies to creating or reinforcing social and political values and institutional practices that limit the scope of the political process to public consideration of only those issues which are comparatively innocuous to A” (Bachrach & Baratz, 1970, p. 7). A satisfactory analysis of power thus involves examining decisions as a choice among alternative modes of action, and also non-decisions as decisions that result “in suppression or thwarting of a latent or manifest challenge to the values or interests of the decision maker” (p. 44). The question of control over the political agenda and the ways by which potential issues are kept out of the political process and public spheres becomes a crucial dimension to understanding power. For example, Twitter, a micro-blogging service, constrains the number of tweets (content) posted by its members to 140 characters. Designing Twitter like that had major ramifications on the content that is flowing in that service. When users are bound to 140 characters, their posts must be short, laconic, and abbreviated in many cases. One would not start discussing the philosophy of Marx in Twitter with followers, but one might use it to alert followers about a new post in a blog which analyzes

Marx's theories. More than that, it is not coincidence that Twitter is mainly used to report ongoing events that occur in real time. It was purposely structured this way by its designers, imitating SMS and consequently appropriating this behavior of users as a tool to report what they are doing at present (Sagolla, 2009). By setting the agenda to 140 characters, Twitter ensured a particular type of content (real time) from its users at the expense of other content, such as deliberative content. Note that this dimension of power, like the one focusing on decisions, would still be compelling to positivists as it emphasizes observable behavior.

The last mode of power worth discussing, which is ignored by looking solely at decisions as the main manifestation of power, is an attention to *inactions* that aim at shaping and influencing one's preferences and awareness (latent or observable). This mode is emphasized by scholars such as Steven Lukes (2005) and Michel Foucault (1977, 1980). This mode may be a challenge to positivists, since it is hard to observe processes of such inaction; this mode requires someone to interpret this lack of action. In September 2010, the Google search engine launched a service called Google Instant. Its aim is to provide a dynamic return of results. While users type their query in the search engine, Google provides them with results that change dynamically for every letter they add to the query. Such a service has a tremendous impact on the preferences and awareness of users. Before this service was launched, users did not see the results until they ended typing their query. Prior to the introduction of the service, they saw results for queries for which they purposely searched. Now, the main advantage offered by Google Instant is the ability of users to change their search queries according to the results in real time. It also localizes results according to context, such as a geographic area. For example, if you live in Seattle and Google the word "sand," you will get the following dynamic results: "Seattle Times" for typing "s," "Safeway" for continuing to type "sa," "San Juan Island Chamber of Commerce" for continuing to type "san" and "Sandra Bullock" for finishing typing "sand." Only when you click on <enter>, do you get the Wikipedia page for the term "sand." None of the dynamic results may be in the scope of your intended search. This demonstrates that by controlling the dynamic ranking of results, Google may now change preferences and awareness of users to particular websites or content to a much greater extent than before. You could have stopped typing halfway through the word "sand" and wandered to an alternative content, contrary to your initial intent and according to someone else's (Google) preference. While inactions are hard to measure, we still need to acknowledge this important facet of power with the other two modes of power (agenda setting and decision making).

In networks, the nodes, links, content flow of information, and structures provide us with a high degree of observable traces of power through decisions and agendas. Social network analysis, for example, has flourished as a visualization tool for this purpose. Nevertheless, we should note that the structure of networks by itself may mislead and conceal deeper layers of the values, awareness, and consciousness of the stakeholders involved, characteristics that may not be manifest in a direct manner. Although Castells' formal definition of power makes us think that he is attached to power only as reflected in decision-making processes, the rest of his book does not leave any doubt about his stance. Castells actually is a big proponent of the third dimension of power, the one which influences preferences and awareness: "power is primarily exercised by the construction of meaning in the human mind through process of communication enacted in global/local multimedia networks of mass communication, including mass self-communication" (Castells, 2009, p. 417).

Up to this point, we defined the concept of power in networks and the main stakeholders (gated and gatekeepers) according to NGT. In order to be able to explain the fuzziness of inclusion/exclusion in networks, we need to examine in more detail the changing balance of powers between them and how these changes lead to the emergence and sustainability of gatekeepers in networks.

How Do Gatekeepers Emerge in Networks?

My main argument is that networks introduce us to an increasing phenomenon of transient elites: gatekeepers. The traditional notion of elites becomes obsolete then in the ecology of networks because its interpretation is crude. The term *elite* implies a type of group with power. But in networks the notion of power is so dynamic that the term itself, *elite*, becomes too generic to imply anything. The concept of *gatekeepers* better fits the context as it allows us to discuss the dynamism of stakeholders in networks—the gatekeepers and gated. Gatekeepers are transient elites, transient actors of domination or empowerment. To explain why these elites are transient, let's take a look at the life cycle of how gatekeepers emerge (see Figure 1).

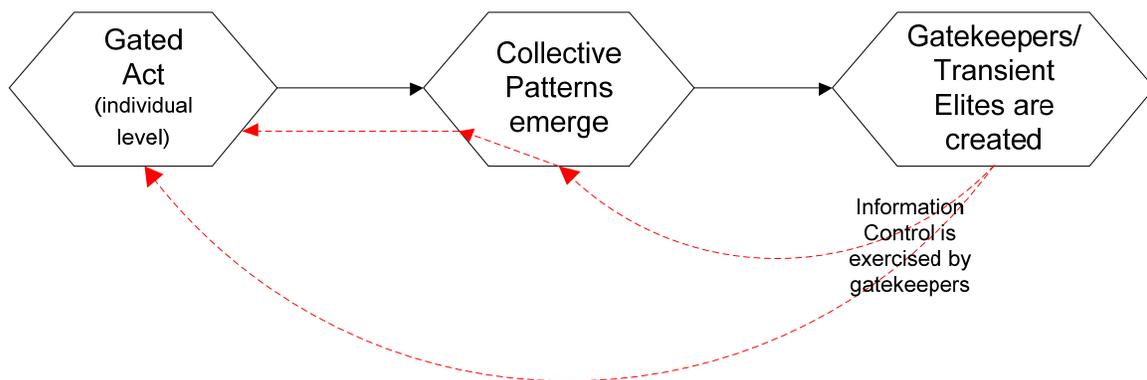


Figure 1. Formation and Maturity of Gatekeepers.

The emergence and maturity phases of the life cycle of gatekeepers in networks depend on a recursive relationship with those gated. While the traditional literature on gatekeepers observes both nominated and elected gatekeepers (Metoyer-Duran, 1993), networks strengthen to some degree the types of gatekeepers who are elected over those who are nominated. The gated act as individuals in networks on different levels: they play, chat, upload photos, interact in social networking, read news, pay bills and more. Some of their actions on the individual level emerge as collective patterns of behavior with

other gated in their ecology.² The gated individuals may not be aware of their association with a more macro behavior until the pattern becomes visible due to its mass scale or newsworthiness. At this point, the collective patterns define the type of gatekeepers that would need to develop the gates that enable their gatekeeping behavior. These collective patterns comprise many micro-actions of gated and crown gatekeepers as transient elites. Powerful actors cannot exist as transient elites without the masses who crown them. Facebook, the social networking site, was launched in February 2004. More than 500 million people are active users of Facebook, and over half of these active users log in to the site daily, interacting with more than 900 million information objects (Facebook, 2010). These collective patterns of usage constitute Facebook as a major gatekeeper in the Internet. Facebook would not be a gatekeeper without the consent, support, and active participation of the gated.

Once the gatekeeper is crowned and identified in the ecology of networks, the collective patterns that constitute the gatekeeper become the gate and the gatekeeping mechanism through which gatekeepers exercise information/control and actuate their gatekeeping roles (see the red arrows in Figure 1). These gates exercise rules of inclusion/exclusion according to the patterns *created by* the gated themselves and according to the structure of meaning that the gatekeepers (and to some extent, the gated) have promoted. We will discuss this process further in the next section.

Gatekeepers rely not only on the gated to define their gates, but they use the structure of the network to discipline the gated. The circular relationship occurs because once the collective patterns constitute gatekeepers, gatekeepers later are able to define and use these patterns to sustain their roles and to reprogram these patterns. Once Facebook was considered a gatekeeper due to the masses' activity on its platforms, Facebook started to change its privacy regulation to better fit its own interests. For example, in the beginning (2005), Facebook restricted the visibility of users' personal information (posts on their walls, contact information and information about friends) to just friends and friends' networks. Over time, Facebook changed the default privacy settings of users' personal information to be more permissive. Now, for example, the default of privacy in most Facebook features is that users' information is open to everyone unless the user defines it differently. Through these changes, Facebook redefined the gate (in this case the default settings), and the result changed the collective pattern of the gated (the activities of Facebook users).

To summarize this section, I argue that conceptualizing social interactions in networks through the dynamic and interactive roles of gatekeeper and gated allows a greater flexibility than thinking in terms of traditional political elites. Although the level of the individual gated is where the patterns originate, the important unit of analysis should be the collective level and the resulting patterns of behavior. Another important thing to note is that as opposed to past literature, this paper manifests the important role the gated have in determining and defining gatekeepers and gates. In the next section we elaborate on the power balance between gated and gatekeepers.

² Rheingold referred to the collectives/masses and their power in the Internet as "the mob" (Rheingold, 2002). Here I refer more to the patterns they create while acting in a similar trajectory.

Power Balance: Information Production and the Alternatives of the Gated

It is difficult to separate the question of what is power in networks from an analysis of relationships among stakeholders. Power is not a standalone concept, and it does not have a meaning without social actors. One does not exercise power without having something or someone on which to exercise the power. Castells addressed the relations among stakeholders by examining the balance of power among them and posited three main assumptions:

1. Associating power with domination, coercion, violence, potential violence, and conflict: "Power relationships are framed by domination, which is the power that is embedded in the institutions of society. The relational capacity of power is conditioned, but not determined, by the structural capacity of domination" (Castells, 2009, p. 10).
2. Treating cooperation between social actors as an ephemeral situation: "Conflicts never end. They simply pause through temporary agreements and unstable contracts that are transformed into institutions of domination" (Castells, 2009, p. 14). That is, for Castells, the basic mode of relations among social actors is conflict and domination, and all other modes of social interactions are temporary.
3. Conceiving power among actors as asymmetric and as a zero-sum game: "The empowerment of social actors cannot be separated from their empowerment against other social actors, unless we accept the naive image of a reconciled human community, a normative utopia that is belied by historical observation" (Castells, 2009, p. 13).

The last few years have introduced many interactive and user-centered tools and platforms in networks. These information technologies have yielded an increasing pattern of co-production of information and cooperation among users of "mass self-communication."³ If we also take into account the life cycle of the formation of transient elites, presented in the previous section, it obliges us to reexamine these assumptions. Are these patterns of behavior temporary in nature, as Castells suggests? Is conflict—not cooperation—the state of nature? What is the basis for the relationship among the stakeholders? Are elitist lenses appropriate any more for analyzing social phenomena in networks?

Transient elites, like traditional political elites, seek to use power for domination purposes. But networks create and reify a new context. Because gated now constitute to a large extent gatekeepers, this new context may prioritize cooperation and symmetric power distribution as a better alternative to all stakeholders, elites and non-elites, and this distribution may be more stable than assumed by Castells. Networks may induce, and in some cases enforce, elites to step out of the conflict mode and move toward collaboration, mutual definition of goals and actions, and even deliberation with gated. The final result of cooperation may occur as an intended or unintended consequence of networks; it can happen as a strategic choice by elites, who prefer to cooperate in order to gain more power in the future, but it can

³ This concept was introduced in Manuel Castells' book, *Communication Power*, and refers to a combination of mass communication and self-generated communication (see page 55).

also be enforced upon the elites. Examples are Facebook and Twitter. Both enjoyed extraordinary growth from a traditional business perspective, showing that the gated (users) and gatekeepers (Facebook and Twitter owners) are collaborating.

The challenge in understanding the dynamics between transient elites and others in networks is not whether power is exercised symmetrically or asymmetrically by them. In most cases, it is asymmetrical. The main challenge is to identify and understand the increasing number of situations in which power is exercised asymmetrically by non-elites over transient elites. A good example is the use of Twitter by supporters of the opposition candidate, Mir-Hossein Mousavi, to protest against the government and the disputed victory of the Iranian president, Mahmoud Ahmadinejad, in Iran in June 2009. The opposition was able to exploit the decentralized nature of Twitter in networks and transfer a lot of information that was censored in more traditional channels from within Iran to the outside world. The ability to communicate about what was going on in Iran in real time changed the balance of power between the masses (the gated) and the Iranian government (allegedly acting as a nominated gatekeeper). The non-elites (the masses) exercised power over the Iranian government via the three dimensions we discussed earlier: by influencing decisions of citizens in Iran to take measures against the government; by changing the agenda of the Iranian government, which aimed to suppress their alternative voices in the local public sphere in Iran; and by influencing the awareness and preferences of people about the situation. It does not imply that the opposition in Iran is more powerful than its government. However, it means that networks have changed the balance of powers among the stakeholders.

While power, as a concept, is the main component in network dynamics, the NGT proposes looking at three additional, complementary, concepts that are crucial: the information production and dissemination capabilities of the gated, their relationship with the gatekeeper, and the alternatives they have in the context of gatekeeping. NGT proposed that these four attributes of gated can identify the salience of the gated in the eyes of gatekeepers. Figure 2 proposes an evolution and refinement of NGT. Instead of treating all of these attributes as equal, I suggest that the information production of the gated and the alternatives impact directly the balance of power between gatekeepers and gated. This shifts the attention to the balance of power as the main concept in the relationships of gatekeepers and gated.

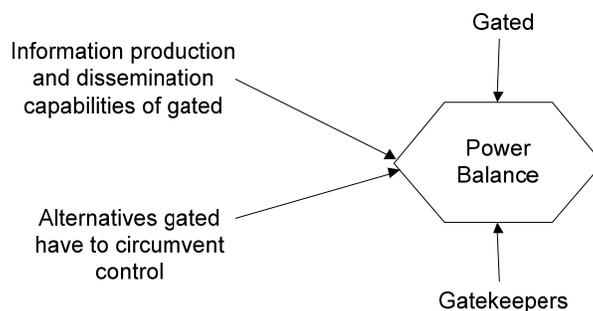


Figure 2. Factors Influencing the Power Balance between Gated and Gatekeepers.

Traditional literature in information science, management, and communication has emphasized the capabilities of traditional gatekeepers (e.g., mass media and governments) to produce information (Bagdikian, 2004; Metoyer-Duran, 1993). Networks have shifted the focus to the ability of the gated and not only the gatekeeper, to produce information (Benkler, 2006; Lessig, 2006; Sunstein, 2006). But how does the ability of information production impact the analysis of social dynamics in networks?

The emergence of multiple ready-to-use technologies and easy-to-use tools to produce and design content empower the gated with greater autonomy and change the dynamics of the gatekeeper-gated relationship. Additionally, the low cost of producing information allows the gated an easy way to reach out. At the same time, despite new opportunities for the gated to self-express and produce content in online networks, empirical studies show a power law distribution in the attention of users. According to these empirical studies, the attention of users is concentrated on a very small number of content and infrastructure providers (Adamic et al., 2000; Drezner & Farrell, 2008; Nahon, Hemsley, Walker, & Hussain, 2011). Therefore, although content is apparently easy to produce, some political, economic, and social impediments constrain the gated capability to reach other users. Moreover, in many cases, the gated use platforms created by gatekeepers and are dependent on the gatekeepers' designs and policies. This is why the availability of alternatives to gatekeeping also plays a very significant role in understanding the dynamics of interaction between gatekeepers and the gated. Information production is merely a necessary prerequisite for information transfer but is insufficient for the realization of this transfer. The ability of the gated to produce information does not necessarily ensure information will reach other people, but it does impact the balance of power with the gatekeeper. It reflects a duality of dependency and control. While the gatekeepers are dependent on that information production ability in many cases to create the scale and mass which crowns them and maintains their position as gatekeepers, they also need to pay attention that this ability does not threaten their existence.

One should not ignore the caveats of reaching the attention of others, and the domination mechanism that gatekeepers can hold onto through enabling/not enabling and including/excluding users with the ability to produce information. Since content is represented by means of visual symbols including language, it has a strong ability to be seen as a reality and constructed realities (Bourdieu, 2003). Therefore, content creation, design, mash-ups, and recreation of content transforms power through an observable discourse between gatekeeper and gated.

The final concept that we need to consider is the alternatives that exist for the gated. Benkler (2006) claims that the emergence of the networked information economy increased individual autonomy by increasing "the range and diversity of things that individuals can do for and by themselves" and by providing "nonproprietary alternative sources of communication capacity and information, alongside the proprietary platforms of mediated communications" (p. 133). Nevertheless, this growing autonomy in many cases is not translated into more freedoms or power due to users' self-regulation of themselves (Sunstein, 2001), and strong control by the gatekeepers that makes the transformation from one gatekeeper to another an impossible mission. It is important to note that in traditional gatekeeping, the gated had few or no alternatives. For example, readers of newspapers were limited to very few information sources. Networks have increased the number of alternatives. While having alternatives is

important, it is more important to make sure these alternatives are practical and can be materialized and viable. This can be done by securing the right of exit of gated from gatekeepers' networks.

To summarize, this section discussed the power balance between gatekeepers and the gated and two components that impact this balance in a critical way: the information production and dissemination capabilities of the gated and the alternatives gated have to circumvent the control gatekeepers exercise on them.

Fuzziness of Inclusion/Exclusion between and in Networks

Once the gates and the gated have determined the gatekeepers, then the gatekeepers can use these gates and the structure of the network to promote their own interests, attempt to discipline the gated, and mold the collective patterns according to their interests. These attempts do not always show success as the dynamism of the process entails unintended consequences that do not always align with the gatekeepers' interests. This section discusses the fuzziness of inclusion/exclusion while moving between gates in and between networks. What are these gates? Who is included and excluded in networks? In the early days of networks, having an e-mail address meant you were "in" (included). Later scholars debated whether having infrastructure is enough to be digitally included, or whether skills and usage are the benchmark to be included. Later for the users who were "digitally included," the notion of inclusion/exclusion was formed in a different trajectory, one of inclusion/exclusion between boundaries of networks, spheres, dimensions, or their sub-parts.

Five interrelated factors determine the fuzziness of inclusion/exclusion. The first factor is the circular relationship among the gated, collective patterns that emerge from the gated behavior, and the gatekeepers, as shown in Figure 2. These relationships are dynamic and change constantly. They may be regarded as an endless race of redefining the gates and their interpretation. Each one of the social actors (the gated, the collective patterns, and the gatekeepers) has a certain role in the life cycle of creating and maintaining these gates. As opposed to traditional gatekeeping, gatekeepers, as transient elites, have power but are dependent on the collective pattern as their constituencies. They are not the sole players in defining the gates of in/out. Gated and also gatekeepers enact gates that reflect their self-regulation, norms, and habitus around a certain topic. For example, writers in Wikipedia France follow more strict rules regarding exposure of the private lives of politicians compared to Wikipedia in English. This is self-regulated by the users and editors of Wikipedia France (Cosgrove, 2010). Having so many actors involved in the definition, redefinition, and interpretation of the gate makes the boundaries fuzzy.

The second factor is the increasing integration and interoperability between platforms and applications. To increase visibility and attraction in the eyes of gated, many gatekeepers allow applications to communicate with each other. For example, you can click the "like" button of Facebook on posts of blogs or online newspapers. When you do so, this statement also is recorded on your Facebook platform. As a result, the boundaries between these networks or their sovereignty of spheres blur.

The third factor is the dynamism of gatekeeper-gated roles between and among networks. While one can be a gatekeeper in one network/sphere/dimension and enjoy a certain level of power, in another

network, one can be a gated. The interplay between power and information changes over time according to the sphere and context in which one operates. It is possible to transform power as one moves from one sphere to another, but this is not a linear process. The dynamics of the network transforms gatekeeper to gated and vice versa according to the context. The possible situation of the same social actors wearing different hats (having different roles and personae) in the network ecology widens the definition of inclusion/exclusion.

The fourth factor is the interpretation of meaning of gated content. Information production of the gated is a strong way to induce inclusion/exclusion in and from certain spheres. Information production is an expression of discourse, which serves as a mechanism of symbolic power. Characteristics of that power allow one to be included or excluded. The fuzziness is increased as the gated are provided with more alternatives to express themselves and the capability to produce and disseminate information. Moreover, actors may include/exclude others by writing contextual content that only "the included" would decipher, according to a common denominator that is known to the group. For example, while your network of friends may include many who are first, second, and third tier friends, a message like "it is a special moment" may be understood by first tier friends who see you frequently and interpret the message as "it is a special moment because I finished writing this paper," yet your friends in the second and third tiers would be excluded by the vagueness of the message.

Finally, the fifth factor is the holistic fabric of the gated that ties the other factors together. The gated are present and sometimes active in multiple networks and spheres simultaneously. They also may include/exclude certain characteristics from their identity, as they find it necessary. However, all these activities and identities on different networks are interpreted by the gated as continuous and are conceived as a holistic fabric of oneself. Therefore, while boundaries of particular networks may be formally clear, these boundaries are ignored by others who see a single actor, resulting in fuzziness on the notion of in/out.

Thus, in one moment you are engaging with your followers in the network of Twitter, and in another moment your attention is with another network or platform. Castells claims that "the network society works on the basis of a binary logic of inclusion/exclusion, whose boundaries change over time, both with the changes in the networks' programs and with the conditions of performance of these programs" (2009, p. 26). The inclusion/exclusion is a partial representation of the power struggle or cooperation we discussed earlier. The fuzziness of the ex(in)clusion is not only in terms of the boundaries of the networks, as Castells suggests, but also in the meaning and interpretations of these boundaries in the eyes of the gated and gatekeepers. The gates operated are not only gates that are virtually situated at the entrance to networks but also inside them. This fuzziness occurs when the gated: (1) are present and active simultaneously in multiple networks, spheres, and dimensions, or when they are transitioning between them;⁴ (2) include/exclude certain of their characteristics inside a network for a particular context; and (3) are included/excluded by their ability to understand actions and content produced by others.

⁴ Inclusion/exclusion can occur also along the lines of digital divide(s). In this case, the gate is the Internet itself, and the discussion of inclusion/exclusion becomes one of connected/disconnected.

One might ask at this point, why do these gatekeepers allow this fuzziness to happen? Doesn't it risk their existence as elite, even as transient as they are? Network gatekeepers in many cases may be the formerly gated, who—by exercising information control—were transformed from gated to gatekeepers. The positioning in networks is temporary and so is how it is conceived by the stakeholders. It does not mean that the gatekeepers do not want to dominate. Even transient elites want to dominate, but their power is bounded by the crowd and the dynamic ecology enabled by evolving technologies.

Implications of Fuzziness: a Pendulum of Control

This article argues that the conceptualization of inclusion/exclusion is more complex than a static, binary dichotomy of the notion of in/out. It forces us to analyze the changes occurring in the balance of powers among the different stakeholders in the Internet and in networks and consequently to direct our attention to the patterns of fuzziness of inclusion/exclusion. What are the implications of this fuzziness? Does this fuzziness imply more patterns of distribution of powers and equality of voices? How does it reconcile with empirical studies that show a clear tendency for polarization, power law, and fragmentation of content in a way that some would argue endanger basic elements of democracy?

Determining the conditions that are sufficient for creating or maintaining stable democratic practices have been in the center of the debate for the last years between two camps of research. Empirical studies consistently show a clear tendency for polarization (Hindman, 2008; Lawrence, Sides, & Farrell, 2010; Sunstein, 2008), power law (Adamic et al., 2000; Nahon, Hemsley, Walker, & Hussain, 2011), homophily (Barzilai-Nahon & Hemsley, 2011; Hargittai, J., Gallo, J., & Kane, M., 2008), and fragmentation (Sunstein, 2001) of content. Another camp offers an opposing view, focusing on the affordances on technology, claiming that the Internet has increased the available spectrum of choices and therefore provides users with a growing capability to participate and deliberate (Benkler, 2006; Woodly, 2008). This paper argues that expanding the choices is important but insufficient. It is important to ensure that the gated can exercise these alternatives and choices.

Empirical studies show no major change in the consequences of information control. Power law still prevails despite the fuzziness and the dynamic pace of the emergence and fall of transient elites. Users still concentrate their attention on a few sources, enabling these gatekeepers to dominate the gated with minimal resistance. However, these studies also show that this power law is transient. For example, Drezner and Farrell (Drezner & Farrell, 2008) show that a high degree of disparity in the visibility of blogs leads some to become elite blogs, attracting attention from both other bloggers and political elites. In other words, they imply that the role of elite blogs is a transient and dynamic one. This paper claims that the transient elites not only are determined by their ability to attract views, they also are constituted and reified by the masses that actively link to them, thus crowning them as elite. These transient elites cannot rule without active participation and support by the masses. In other words, the passive consent of the masses is insufficient for an elite to emerge and be sustained; a gatekeeper needs active production of information by the gated to attain (and maintain) gatekeeping status.

The fuzziness of inclusion/exclusion and the dynamic relationships of gatekeeper-gated may lead us towards a growing capability of users to exercise alternatives, specifically to exercise the right of exit from gatekeepers' networks. Ironically, providing greater opportunities, such as this capability to exit networks, may result in even higher participation and deliberation, although the participation may be distributed among a greater number of channels.

The fuzziness of boundaries of activities of users who experience inclusion/exclusion in multi-spheres and networks create discrepancies among norms and behavior in different spheres and networks of the represented oneself. A gated can join different networks as an individual with different collective patterns. Each one of the collective patterns maintains different rules and a narrative central to its identity. So while empirical studies show homophily (the tendency of people with the same inclination to link to each other), polarization, and power laws, we have to take into account that in each one of these networks and dimensions, these are mono-homophily, mono-polarization and mono-power-law patterns. That is, it is homophily, power law, and polarization that are exhibited in one dimension among many. But we, as *individuals*, participate simultaneously in many dimensions. Collective patterns in one dimension may have discrepancies with collective patterns in another. These discrepancies in the way we perceive ourselves may create an opportunity, and demand, for deliberation within ourselves. And, this self-reflection may later be translated and transformed into greater participation and greater discursive practices of democracy between the self and multiple others.

The emergence of transient elites in the Internet did not reduce their will to dominate. However, the power balance between gatekeepers and gated has changed. This has opened the door to wider interpretations of information control by gatekeepers. Moreover, NGT stimulates us to consider the collective patterns of gated as quasi-elites that emerge according to the context within which they operate.

NGT and recent empirical studies have directed our attention to the dynamic and changing nature of gatekeeping in networks and revealed a shortcoming to our traditional binary view of network inclusion/exclusion. The full implications of such a perspective are not yet clear, but we see the need for thoughtful studies along two directions, one along the fuzziness of inclusion and the other along the issue of dynamics.

First, the concept of identity, as a core component of communities and networks, may need to be formulated in a more comprehensive way. Even individual identity, as one's self is distributed across and among different communities, each with unclear boundaries, may need to be re-examined and perhaps redefined.

Second, the complex dynamics of network formation and the emergence of possibly transient ecologies of networks may require new analytic tools that reflect the reality of the temporal and possibly ephemeral gatekeeping roles. It is not clear, for example, that our approaches to formulating public policy are adequate for this new view of networks and inclusion/exclusion.

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