

THE SECOND DIGITAL DIVIDE: Unequal Access to Social Capital in the Online World

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Received: 20th November 2017 Revised: 26th December 2017 Accepted: 15th March 2018

There exist two major “digital divides” in the age of the Internet: (1) the divide between those with access to valued online technologies (notably the Internet) and those without, and (2) the divide between those with access to valued online social networks and those without. Existing research on the digital divide has mostly focused on the first divide. This article examines the second digital divide. Drawing on Goffman, Bourdieu, and others, we argue that equal access to the Internet does not ensure equal access to social resources on the Internet, and access to valued online networks is presently unequal, reflecting inequalities in the offline world. We suggest that, to achieve more online equity in a nonequitable society, calling for differential use of the Internet may serve the disadvantaged better than requesting mere equal access to the Internet.

Introduction

In recent years, the term “ubiquitous connectivity” has been used with increasing frequency to describe the phenomenon of constant connections among people everywhere through the Internet. For most of history, human interaction has been both spatially and temporally confined. Humans engaged in simultaneous contact with each other only under the condition of corporeal copresence, when they gathered face to face in a common physical locale. Such gatherings were by nature place-dependent and small in size. More distant communications through postal delivery among geographically dispersed individuals were marked by significant temporal lapses, the duration of which was a function of the distance separating the individuals and the mode of transportation employed to deliver the messages. The emergence of electronic communication, which began with the invention of the telegraph in 1837 and the telephone in 1876, made it possible for messages to be transmitted instantaneously from one place to another regardless of distance. For the first time in history, the spatial and temporal barriers to human contact were both penetrated, in principle allowing people to communicate with each other anywhere and at anytime.

The notion of ubiquitous human connectivity through electronic mediation, which is almost a household idea today, can be traced back to Marshall McLuhan, who proclaimed forty years ago that:

We live today in the Age of Information and Communication because electric media instantly and constantly create a total field of interacting events in which all men participate. ... The simultaneity of electric communication, also characteristic of our nervous system, *makes each of us present and accessible to every other person in the world.* (1964: 248; italics added)

Several points are worth noting here. McLuhan was among the few people who foresaw the “Age of Information and Communication” even before the word “electronic” had come into use. Second, McLuhan anticipated the rise of “a total field of interacting events” on a global scale in which “all men [and women] participate,” which had in fact not become technically possible until the advent of the Internet. Third, and perhaps most important, McLuhan equated the possibility of global electronic connectivity with the prospect of universal human accessibility. While it is true that the instant and constant connectivity created by modern communications technology enables human individuals to be “copresent everywhere at once” (McLuhan 1964: 248), it does not follow that people can or will therefore make themselves readily available and accessible to each other for contact. Apart from the naturally limited number of people a person can possibly communicate with at any given time, it is inevitable that some people for some reason will choose not to be contacted by some other people, hence making themselves selectively unavailable and inaccessible.

In fact, McLuhan was not the first to view a technological possibility as a sufficient condition for its realization. As early as 1797, six years after the appearance of the optical telegraph technology, an entry in the new edition of the Encyclopedia Britannica predicted with great enthusiasm that “The capitals of distant nations might be united by chains of posts, and the settling of those disputes which at present take up months or years might then be accomplished in as many hours” (cited by Standage 1998: 14-5). The attempt to associate a technological advancement with the improvement of some aspects of human relationships was equally evident in the following comment on the social impact of the telephone:

With the spread of the telephone a person’s network of social relationships was no longer confined to his physical area of residence; one could develop intimate social networks based on personal attraction and shared interests that transcended the boundaries of residence areas (Aronson 1971: 162).

In both instances, a technical possibility, e.g., linking capitals of distant nations with chains of optical telegraph posts or connecting physically scattered urban dwellers with the spread of the telephone, was hailed as a

solution to some existing social problems, e.g., national disputes or urban apathy. This kind of “technofix” optimism, for lack of a better word, re-emerged after the advent of the Internet.

Unlike any of the previous modes of communication, the Internet provides a global network of computer networks that renders people capable of being connected to each other instantly as well as constantly anywhere on the planet. The creation of this ubiquitous online connectivity has generated tremendous amounts of technofix optimism that permeate the research literature on the social impact of the Internet. For example, the Internet has been extolled as the “Great Equalizer” (see Wolf 1998) that eradicates barriers of race, gender, class, and power in online communication. The Internet has also been described as a technology that enhances democracy, political participation, and civic engagement. The most well known technofix argument about the Internet is undoubtedly the notion of a “global village” where everyone can communicate with anyone at anytime no matter who you are and where you are. This utopian idea of ubiquitous human connectivity on the Internet has been well presented by Segaller (1998:359) in the following paragraph citing Larry Tesler, former Xerox PARC chief scientist now at Apple Computer:

When we were human beings in small tribes hunting and gathering, everybody you had to deal with was somebody you saw everyday. We’re a species that’s based on communication with our entire tribe. As the population grew and people had to split up into smaller tribes and separate, they got to the point where they would never see each other for their whole lives. The Internet is the first technology that lets us have many-to-many communication with *anybody on the planet*. In a sense, it’s brought us back to something we lost thousands of years ago (*italics added*).

The basic tenets of the “ubiquitous human connectivity” thesis, which will be closely scrutinized in this article, can be summarized as follows: (1) the Internet has made it technically possible for people on this planet to communicate with each other regardless of distance and time (global connectivity); (2) people all over the world will therefore avail themselves of this opportunity to contact and be contacted by others regardless of social differences (universal accessibility); and, as a result, (3) the entire globe will become a single village like an ancient tribe (tribal intimacy). This is a strong version of the ubiquitous connectivity argument. A weaker version of it can be constructed by dropping the “tribal intimacy” claim, which accepts the idea of universal accessibility without embracing the concept of one global village. This weaker version can be further modified to subsume various other technofix positions that view the Internet as a “technological solution to social problems” (Lax 2001: 2).

The present study attempts to show that the ubiquitous human connectivity thesis is sociologically unattainable. A central argument of this article is that what is technologically possible must be distinguished from what is socially plausible, for the actualization of a technical possibility often requires social conditions that technology alone is unable to generate. Global connectivity through electronic mediation is indeed technologically feasible now thanks to the spread of the Internet, but this by no means suggests that people all over the world can or will therefore connect with each other to form a global community. With an estimated 1.6 billion of the world's population without electricity and only about 900 million accessing the Internet, the difference between feasibility and plausibility is apparent (International Energy Agency 2005; Miniwatts International, Ltd. 2005). This Internet access differential, which has been widely studied in sociology, is called here the "first digital divide." Research on this "digital divide" has shown that, even where the technology of Internet access is available, many people in many countries still cannot access the Internet due to class, race, gender and other social barriers (Hoffman *et al.* 1996; Compaine 2001; Norris 2001). However, among people with access to the Internet, there is a further divide between those who have access to valued social networks with significant social capital and those who do not. This is called here the "second digital divide," which occurs despite the ubiquitous electronic connectivity on the Internet. Our focus on access on to valued social networks and the sharing of social capital distinguishes what we term the second digital divide from what Hargittai (2002) calls the "second level digital divide"—her phrase for the differences in "online skills and uses" found among users. Our concern is *with whom* one can consistently and reliably communicate online and how that communication may offer a means of improving the one's quality of life. This digital divide has been mentioned tangentially by a number of scholars—mainly through the examination of demographic correlates of networks (Norris 2001; Dimaggio, Hargittai, Celeste, and Shafer 2004)—but the role of networks themselves has never been systematically examined and explicitly articulated. We focus on this divide in the present study.¹

The remainder of this article consists of four sections. In the first section, we seek to differentiate between two types of barriers to human contact in the offline world: the physical and the social. Drawing mainly on Goffman, we maintain that the communicative space is regulated by a set of normative rules that can block access to others in places where there is no physical barrier. In the next section, we examine various social barriers to human connectivity on the Internet. We contend that even where the physical barriers to distant communication have fallen, the Internet is incapable of penetrating the social barriers. In the third section,

we focus on the problem of unequal access to social capital in the online world. We argue that, as in the offline world, individuals have differential access to valued network resources on the Internet according to their positions in the existing social hierarchy. In the concluding section, we discuss the policy implications of the second digital divide. Drawing on Castells and others, we argue that inequalities in access to valued online social resources reflect and perpetuate the existing gaps between the haves and have-nots in the offline world. We end our discussion with some proposals for dealing with the second digital divide.

Social Barriers to Human Contact in the Offline World

A key sociological contributor to understanding the issue of accessibility in human contact is Erving Goffman. Goffman draws a crucial distinction between “within range” and “copesence.” “Within range” refers to “the physical distance over which one person can experience another with the naked senses” (1966: 17). However, Goffman points out that just being physically within range of a person is insufficient for having access to that person, for the person may not be paying attention to anyone around him or her or may be deliberately doing that to avoid being engaged. According to Goffman, the condition that allows for a face-to-face encounter with someone is “copesence,” where “persons must sense that they are close enough to be perceived in whatever they are doing, including their experiencing of others, and close enough to be perceived in this sensing of being perceived” (1966: 17). In other words, copresent individuals are not only in close physical proximity to each other but also pay close attention to each other, thus rendering them “uniquely accessible, available, and subject to one another” (1966: 22). Under the condition of copesence, individuals can then engage one another in either “unfocused” or “focused” interactions.

How can people move from being merely within range to being mutually present? Obviously, this is not an issue of overcoming the barrier of physical distance, but rather the issue of overcoming the barrier of social distance. According to Goffman, in every society, attainment of the “communication rights” to engage others always “comes under strict normative regulations, giving rise to a kind of communication traffic order” (1966: 24). In a Western culture, Goffman maintains, the communicative space is divided into two realms: one for the acquainted and the other for the unacquainted. As a general rule, people who know each other have the rights to approach each other for interaction, strangers, on the other hand, do not have legitimate access to each other without being properly introduced. However, there are circumstances under which unacquainted people are permitted to communicate with each other. Anyone who holds what Goffman calls an “opening” or

“exposed” position, such as a priest, a policeman, or a shopkeeper, can approach and be approached by strangers. Moreover, in “mutually open” situations, e.g., carnivals, cruise ships, bars, and cocktail lounges, strangers have the right to initiate an encounter with each other.

However, even under circumstances where mutual accessibility is normatively granted, people for various reasons may choose to block others’ access to them using different “involvement shields” (Goffman 1966: 39). The most effective blocking strategy is, of course, “to refrain from entering the situation in the first place” (1966: 38), namely, to avoid being “within range,” but there are other strategies that individuals can use to make themselves inaccessible for contact by people who are physically nearby. One such strategy is to create a “situational closure” that symbolically closes off a region into which one retreats. For example, a door curtain, even if transparent, “leads persons inside and outside the region to act as if the barrier had cut off more communication than it does” (1966: 152). Secretaries often play a similar role by serving as “gatekeepers” to protect their bosses from interruptions. Another strategy is named “away,” whereby a person avoids being drawn into communication by pretending that he or she is “woolgathering, daydreaming, or autistic thinking” (1966: 70). These examples illustrate that physical proximity is a necessary but insufficient condition for gaining access to others, as others may erect “normative barriers” to block the unwanted overtures for contact.

The question is then on what grounds do people decide to be accessible to some and unavailable to others? There are undoubtedly many factors that influence such complicated decisions, but one factor that Goffman has singled out is particularly important from the sociological standpoint—the factor of social status. Goffman notes that differences in social status affect patterns of social access. People of higher status tend to avoid being accosted by people of lower status in fear that the encounter may be used as a “relationship wedge” to gain leverage for something else (Goffman 1966:105). This concern is often reflected in the way people are introduced to each other in everyday life. As Goffman (1966: 121) writes:

[A]n introducer may feel an obligation to make sure that no harm resulting from the new relationship will come to those whose communication relation to each other he has altered. Since harm of this kind seems to flow from *the poor to the affluent, the male to the female, the weak to the powerful*, the introducer may feel obliged to check with the one who has the more to lose before effecting the introduction, and assume that the one who has something to gain will have no objection to the relationship (italics added).

The impact of status difference on personal accessibility is also evident in the way “involvement shields” are used in the workplace. High status typically means that people have more demands on their time. As people

of higher rank are likely to feel that they have more to lose by making themselves easily accessible to those of lower rank, they tend to protect themselves by restricting access from them. For example, in her study of the gendered use of space, Spain (1992: 215) observes that:

Spatial arrangements in the workplace reinforce these status distinctions, partially by providing more “closed doors” potential to managers than to those they supervise. Although sales and production supervisors may circulate among their employees, their higher status within the organization is reflected by the private offices to which they can withdraw.

The ability to withdraw to private offices thus reflects not just the practical reality that managers must limit access to accomplish their task but also the symbolic significance of the status distinction between supervisors and subordinates.

Goffman’s research on the issue of accessibility in interpersonal contact in the face-to-face contexts proves to be particularly important for the understanding of the second digital divide in the online world. In a way, “getting online” to the Internet is the equivalent of “getting within range” of others in the physical space, but, as Goffman has shown, physical proximity does not necessarily lead to copresence. There are normative rules in society that regulate access to others in different situations, and individuals themselves also use various “involvement shields” to block undesirable contacts. Among other things, where people are in the existing social hierarchy plays an important role in determining their accessibility to and by others. The next section of the article applies Goffman’s findings to online communication, showing that the Internet does not provide users with ubiquitous access to everyone in the online world; rather, access opportunities are unequally distributed on the Internet through a stratification system that reflects inequalities of social status in the society at large.

Social Barriers to Human Contact in the Online World

A popular belief derived from the notion of ubiquitous online connectivity is that, unlike the offline world, the online world is essentially an unrestricted domain where resources are equally shared among the users. Off the Internet, there are inequalities in access to valued goods and services, on the Internet, however, access to information and communication becomes free and equal for all. As Putnam (2000: 171) notes, “enthusiasts for ‘virtual community’ see computer networks as the basis for a kind of utopian communitarianism.” Ubiquitous connectivity, a technical capability, has thus been interpreted as universal accessibility, which is a form of social condition. In other words, this belief assumes a technological determinism that ignores the social context into which the Internet is being used. That social context produces both inequalities in

access to the Internet—the first digital divide—and inequalities in access to the information and social networks on the Internet—the second digital divide. While the first divide has now been closely studied, the second divide has not received the attention it calls for.

As we have pointed out earlier, two major types of online inequalities can be differentiated: inequalities in access to online information, which Hargittai (2002) calls the “second-level digital divide” and inequalities in access to online social networks, which we call the second digital divide. Although they are related to each other, access to online information and access to online social networks involve different mechanisms that require separate analyses.² In this article, we focus on inequalities in access to online social networks. By online social networks, we mean the individuals, groups and organizations that are interconnected by way of the Internet. Online social networks are different from computer networks in that, while computer networks are inter-linked machines that allow for data transfer and human contact across time and distance, online social networks are human connections established through electronic mediation (Hiltz and Turoff 1978). As we noted earlier, the Internet—being a technology that facilitates human contact—is a computer network, not a social network.

So it makes sense to think of the Net as community support, not a community (communities) in itself ... People can put up their own home pages describing themselves, but what makes a community is the interaction among people, not their mere presence (Dyson 1998: 63).

Because the Internet is a computer network, not a social network, “being online” is not the same as being ‘connected’ to a community of others” (May 2002: 89). Even though the spatiotemporal barriers are removed and going from one continent to another becomes only one mouse-click away, it is entirely possible that a person is up online yet has no one else to connect to. For the Internet has brought its users “within range” of each other in the electronic world, but it has not brought them together as a community. What stands in the way of human connectivity on the Internet is a set of social barriers deliberately erected by some users for the purpose of limiting others’ access to them. Strategies for creating such barriers are varied, and they include the techniques of “ignoring,” “hiding,” “blocking,” and “relegating.

As in the offline world, the online world is divided into two major realms: the realm of strangers and the realm of acquaintances.³ Contrary to the common belief that people are free to interact with anyone on the Internet regardless of whether they know each other or not, it is generally considered inappropriate to approach strangers even in the online world.⁴ An exception to this general rule occurs in the specially designated online public domains where either everybody is “mutually open” for contact

(e.g., on chat channels, bulletin boards, or such social networking sites as *myspace.com*⁵) or some of the individuals hold “opening” or “exposed” positions to be contacted (e.g., online helpdesk assistants and sales representatives). In places other than those, unacquainted individuals are not supposed to approach each other without being properly introduced; and if they do try to make contact, their solicitations for communication are likely to be ignored by those they attempt to engage. In other words, one is certainly free to approach strangers on the Internet, but those being approached are equally free to ignore such overtures.

The practice of ignoring contact solicitations from others also takes place among acquaintances. In a face-to-face situation, it is usually hard to pretend not seeing each other in order to avoid contact. In the online world, it is not too difficult to do so. For instance, it is not uncommon to hear people complain that the messages they sent to certain friends always got “lost” and they never heard back. However, a somewhat unobtrusive way of shunning acquainted others is to go into “hiding.” In the online world, one can hide from others by pretending that he or she is away and cannot check email. Individuals can set their email accounts to the auto-response mode that sends out an “I’m away” notice in reply to each incoming message. People can also use new email addresses and screen names when logging onto an online public domain to avoid being spotted by acquaintances. Research has found that many Internet users, especially teenagers, have multiple email addresses and screen names and they give different contact information to different people as a way of regulating others’ access to them (Lenhart, Rainie and Lewis 2001).

The third strategy for curtailing interpersonal access is to directly block unwanted engagement attempts using various online “involvement shields.” Despite the fact that the electronic form of contact (e.g., telephone and email) has been described as “an irresistible intruder” (McLuhan 1964: 271) or “thieves in the night” (Meyrowitz 1985: 117), it is surprising easy to fend them off. In email exchanges, “junk mail” folders can be created to filter out “trash messages;” in instant messaging, a “block” function can be activated to foil attempts from others to make contact; and even on public chat channels or listservs, norm violators can be “kicked” or removed from the forum. A formal method of blocking unauthorized access, which has been employed by many institutions and organizations, is to set up “cyberwalls” that require special user names and passwords to enter.

“Relegating” the means of contact to a lesser mode is the fourth strategy of access control. In situations where encounters with others become unavoidable, access restrictions are then given way to restrictions on the immediacy of contact. Giddens (1984) has coined the phrase “modalities of copresence” to refer to different modes of interpersonal

access, which can be grouped into corporeal copresence and electronically mediated remote copresence. Kellerman (1993) further divides remote copresence into “audio conversations” and “audiovisual exchanges” based on variations in the level of embodiment. Kellerman (1993:29) contends that these three modes of contact make up “a rather stratified hierarchy of communications,” with the most restricted form, audio conversations, at the bottom, a more upgraded version, audiovisual exchanges, in the middle, and the most embodied form, face-to-face meetings, on the top. Other things being equal, according to Kellerman, different forms of contact convey different degrees of intimacy among the users. Similarly, Pappano (2001: 56-89) observes that modes of communication can be manipulated to exert control over interpersonal space. For example, email can be used to “relegate” others to “a subrelationship in which one can respond when one chooses,” and the email contact can be “elevated to phone or live interactions” if the relationship is deemed important.

The above analysis has shown that the online world is not a barrier-free world, where individuals can go anywhere to meet anyone at anytime. The removal of the spatiotemporal barriers by the Internet has only provided a technological possibility for ubiquitous online human connectivity, but this possibility has so far failed to materialize due to the rise of various access barriers that are deliberately erected by some users to keep others away.⁶ Such socially constructed barriers, which the Internet cannot penetrate, reproduce the “sociorelational distance” (Ferrand et al 1998: 213) existing in the offline world that separates people into a hierarchy of social strata defined by, among other things, wealth, power, and fame.

Unequal Access to Online Social Capital

In the early days of Internet development, the cyber world was for the most part a “free land,” where there was little restriction on access to online resources, including online social networks. The nationwide computer network, initially known as the ARPAnet, was built as a defense project with government money and used primarily by people affiliated with universities and research institutes. The non-commercial use of the network and the relative homogeneity of the users made the emerging Internet appear to be “free and equal for all.” As Segaller (1998: 98) recalls:

The entire ARPAnet project was unclassified, despite being run by the Department of Defense. It was also provided to its users as a free good. There were no access charges or service charges. There was also an absence of concern over who gained access to the network, though the project was entirely government funded.

However, the situation changed dramatically after the Internet was commercialized in 1992. The ensuing “.com revolution” has turned the free “Information Superhighway” into a great “Information Marketplace” (Dertouzos 1998) where virtually everything can be put up for sale. Online social networks, which were once free “public goods,” now become private “social capital” to be owned and guarded. Some online networks begin openly and move to a more closed status such as Excite’s “communities” and “Private Access Lists.” Others have moderators who grant access to the network based on the characteristics of an applicant or the payment of a subscription. Still others require specific credentials such as university alumni online networks and the many intra- and interbusiness organization networks.

The “social capital” concept has been used differently in the sociological literature.⁷ According to Bourdieu, social capital is the aggregate of resources linked to the possession of a network of “relationships of mutual acquaintance and recognition” (1986: 248). Such a network provides its members with “the backing of the collectivity-owned capital” (economic and cultural or symbolic) which “entitles them to credit” in times of need (1986: 249). The volume of social capital owned by an individual depends not only on the size of the network of connections the individual can mobilize but also on the range of the resources possessed by each of those to whom the individual is connected. Granovetter (1995: 150), reviewing the literature on the resources offered by networks, has suggested that the value of “networks of mutual acquaintance and recognition,” or, in his terms, networks of “weak ties” lies in the diversity of the resources they offer and that the importance of diversity increases with socioeconomic status. Similarly, Fischer (1982) argues that “multi-stranded” or diverse networks are more likely to provide assistance than those which are simpler. Thus social capital exerts a “multiplier effect” on the capital an individual possesses in his or her right. Since “membership investment” takes “labor time,” individuals will seek to join networks that are rich in capital to maximize the “profits which accrue from membership in a group,” and, for the same reason, standing members of capital-rich networks will seek to keep their membership “as homogeneous as possible” (1986: 250).

Bourdieu’s theory of social capital, buttressed by the empirical work of Granovetter, Fischer, and others, helps to explain the occurrence of the second digital divide—the unequal access to social connections and network ties in the online world. The Internet, being “the network to end all networks” (Putnam 2000: 171), has served as a fertile ground for the growth of various social networks. However, despite the potential for ubiquitous connectivity on the Internet, online users have not been able to access and join different social networks with equal opportunity. As in the

offline world, "connectivity seems to go to the connected: greater social benefit from the Internet accrues to those already well situated socially" (Haythornthwaite and Wellman 2002: 28-9). Bourdieu has differentiated three types of benefit-generating capital: social capital (social connections), cultural capital (symbolic goods), and economic capital (money and wealth). Although acknowledging that "economic capital is at the root of all other types of capital" (1986: 252), Bourdieu believes these three forms of capital can be converted "from one type to another." On the Internet, people with more capital in these three areas have both more freedom to access other social networks and more control over others' access to their network resources. This unequal access to online network resources, which occurs "both by default and by design," causes the online network environment to be "stratified and segmented" (Gandy 2002: 456).

The Internet has helped business organizations to better connect, aiding the rapid increase of corporate expansions and mergers that have been occurring around the world since the early 1990s. Although many top business leaders themselves may still prefer to conduct networking through travel and face-to-face meetings, their companies have all benefited from the easier access gained through the Internet to "global networks of financial transactions and flexible, lateral connections" (Shaviro 2003: 446). As a result, the new managerial elites can now "ride the light" and "follow the delirious flows of money around the globe" (2003: 136).

At the same time, the Internet has increased companies' abilities to regulate customers' access to their network resources.⁸ An increasingly common practice in today's business world is to relegate communication with consumers to computerized automation. ATM machines, automated voice response systems, and interactive web portals have now been widely used by companies to restrict customers' access to direct human assistance in the name of reducing operation costs. Preprogrammed computer responses leave little room for negotiation and consumer complaints, which effectively places capital-rich business organizations in the position of control and domination. Dertouzos (2001: 4), former director of the computer science laboratory at MIT, has denounced the dehumanized corporate use of automated answering machines in the following scathing words:

You [human customers] are serving the inhuman machines, and its inhuman owners who got away saving a few dollars of operator time by squandering valuable pieces of your life and that of millions of other people. What glory: The highest technology artifacts in the world have become our masters, reintroducing us to human slavery more than a century after its abolition. Our docility in putting up with this abuse is reprehensible.

Of course, access to direct human assistance remains available in certain situations, but consumers will have to pay for the utilization of such

“privileged” connections. Commodification of access privileges and network services by way of registration fees and membership charges is therefore a new form of control and domination in the increasingly commercialized online world (Rifkin 2000).

In the political sector, the Internet seems to have helped both the politicians to better connect with their constituents and the constituents to better self-mobilize and participate in the political process (Krueger 2002; Best and Krueger 2005). Two-way online interactive media, such as email, listservs, discussion forums, and bulletin boards, have played an important role in promoting civic engagement and political involvement. However, online communication between political leaders and the masses are not as bilateral or bi-directional as they appear. While the Internet has certainly made it much easier for political leaders to reach a larger audience, it may not have made it equally easy for the masses to reach the political leaders. It is true that citizens nowadays have convenient online access to their political representatives, but, as Seeley and Duguid have argued, “the ability to send a message to president@whitehouse.gov ... can give the illusion of much more access, participation, and social proximity than is actually available” (cited in Putnam 2000: 174). Indeed, it is unclear how many of these messages are actually being read by the intended leaders themselves.

Moreover, there have been instances where the feedback function of an online network is disabled for the purpose of restricting “upward access,” turning a fully interactive medium into a one-way broadcast system. A study of worldwide trends in “e-government,” for example, has revealed that “government websites rarely facilitate unmoderated public feedback, few publish public reactions to policy proposals, or used discussion forums, listservs and bulletin boards” (Norris 2001: 130). Similar practices also have been found in political campaigns. In a study on Internet use for political participation in the 1996 presidential and 1998 gubernatorial campaigns, Stromer-Galley (2000: 112) reported that:

Candidates used the Internet as another medium through which to articulate their campaign message. In particular, their websites gave them a space to detail policy positions, share personal history, and herald past legislative successes. Campaigns chose not to use the Internet to engage in deliberation with citizens. To do so would open up the possibility for burdensome exchange among candidates, campaign staffs, and citizens, which could entail losing control over the communicative environment and losing the ability to remain ambiguous in policy positions.

Here, again, the evidence shows that online human connectivity is far from being equal and ubiquitous. Those in power have more access to online network resources than those who are not in power do, and such inequality has been mostly a result of access control and manipulation.

However, deliberate control over network access is only one source of online inequality. Another important factor that contributes to differential access to online social capital is the unequal ownership of cultural capital. Castells (2000: 446) notes that “the real social domination stems from the fact that cultural codes are embedded in the social structure in such a way that the possession of these codes opens the access to the power structure without the elite needing to conspire to bar access to its networks.” An example in support of this viewpoint comes from Hewitt’s (2005) study of the readership of weblogs on the Internet.⁹ Hewitt found that, although millions of weblogs had been created, few had even been read. The gap in blog traffic rating was huge, ranging from no visit at all to over 250,000 daily circulation (p. 79). Anyone online was indeed free to post a blog, but the majority of such postings were either soon abandoned or rarely updated. Hewitt (2005: 105) wrote that

What is new about the blogosphere is that there are no barriers to entry to a world offering a nearly limitless audience. Key point: *offering*, not guaranteeing. Anyone can post, and if it is worth reading, it will be read. There is a vast audience of wisdom/entertainment seekers. Whether your product is economic analysis, NASCAR boosterism, sexual gossip, or political smack talk, the blogosphere will allow you a chance to peddle your text wares (italic original).

Analogously, this is the equivalent of saying the sky is free for everybody to use, but bring your own airplane. The basic vehicle needed to “fly” in the blogosphere or the entire online world, for that matter, is literacy. Those who are illiterate are automatically excluded from text-based online communication; furthermore, those who are “poorly educated” also are self-selected out of “high cultured” bloggings, listservs, and discussion forums. Consequently, a segment of the general population would be unable to access the online social networks, either partially or entirely, even if they were granted access to the Internet.

There is no question that online network resources do not exist solely for the rich and the well educated. For example, anyone on the Internet, assuming they can read and write, can visit online public places like chat rooms and bulletin boards. “Affinity relationships” (Calhoun 1998) established with others in those domains can be a useful source of social and emotional support especially to the marginalized minorities, but the “multiplier effect” of such network resources is no comparison to that of the elite groups. For the amount of social capital possessed by an individual depends not only on the “size of the network connections” the individual can mobilize but also on the “volume of the capital” possessed by those to whom the individual is connected (Bourdieu 1986: 249). Not surprisingly, as in the offline world, people who possess similar volumes of capital tend to group together. In a case study of an online gathering

place called BlueSky, Kendall (2002) discovered that this presumably open online network consisted of mostly computer professionals with “relatively homogenous backgrounds”:

BlueSky resembles a professional club or association, through which members can network and make professional contacts. Like many such clubs, it allows its members to augment whatever local job resources they have, giving them countrywide connections and opportunities (2002: 198).

Kendall points out that the connections between BlueSky participation and participant job status follow a somewhat “circular logic:” “Not only does participation help people get computer-related jobs, but these are in fact the types of jobs that allow them to continue their participation on BlueSky” (2002:198). Kendall believes that this phenomenon “relates partly to the computer-oriented culture on BlueSky but also to some basic requirements for participation in online groups” (p. 198). Thus, as in the offline world, online groups are mostly formed by “birds of the same feather.”

A similar conclusion emerges from Hampton and Wellman’s studies of Netville, a “wired suburb” of Toronto. Survey and ethnographic evidence showed that broadband access strengthened weak ties and supplemented rather than replaced face-to-face interactions (Hampton and Wellman 2002: 2003). The similarity of feathers here was household socioeconomic status. Quan-Haase and Wellman’s (2004) recent review of the literature suggests that the strongest evidence for the effect of the internet on interactions is that it supplements other forms of communication.

In sum, access to social capital in the online world has been extremely unequal. Even though the Internet has removed the barriers of physical distance and allowed people to be “within range” of each other anywhere on the planet, the barriers of social distance have continued to keep people apart and enabled certain individuals to gain privileged access to valued online network resources. As such, the existing structure of social stratification that divides and separates people in the offline world has been effectively reproduced in the online world.

Conclusions

In this article, we have examined the issue of unequal access to social capital in the online world. We have argued that, despite the instantaneous global reaches rendered possible by the Internet, online human connectivity is far from being ubiquitous and equal. Rather than being able to contact anyone from anywhere at anytime, people in the online world encounter various social barriers that the Internet cannot penetrate. This argument is self-evident from the sociological standpoint, for the online world is after all a part of the real world that is known to be

stratified and unequal in the distribution of goods and services. Differential access to online social capital, which has been named here the second digital divide, is simply a reflection and extension of the institutionalized inequality that exists in the offline world. The same normative rules operating offline also regulate human contact online, allowing certain individuals and organizations to acquire a greater share of valued online network resources because of their favored positions in the social hierarchy. While this is not a surprising finding, acknowledgement of this fact has significant policy implications regarding Internet use and network access.

First of all, access to the Internet and access to the social networks on the Internet are two separate issues. Although Internet access is a necessary condition for access to online networks, provision of equality in the former by no means ensures equality in the latter. It is therefore important to differentiate the second digital divide from the first digital divide, and draw attention to the issue of unequal access to social capital in the online world.

Second, inequality in access to valued social networks on the Internet is a social problem that cannot be fixed by technological means. The Internet has solved the technical problem of human contact over distance, making it possible for people to communicate with each other, one on one or many to many, instantaneously or asynchronously, anywhere at anytime. However, the actualization of ubiquitous human connectivity requires a social condition that the Internet cannot provide.

Specifically, universal human connectivity would require a barrierless society in which everyone is equally accessible to everyone else for contact and interaction. Beyond the natural limits set by the characteristics of human biological makeup (e.g., the number of people an individual can possibly be in contact with at any given time), there should be no social constraints that prevent people from accessing each other. Obviously, such a condition is hardly attainable in real society. A less utopian form of human copresence is differential connectivity with minimum inequality, in which case individuals have different opportunities for accessing each other, but such differences stem mostly from personal characteristics rather than social status. An example of this type of contact is "the serendipitous encounters between strangers—often across class, race, and gender lines—that ...[took place in] New York City's Time Square, before it was 'renovated' and gentrified" (Shaviro 2003:133). It is certainly questionable whether such open encounters can take place throughout the online world given the marked inequalities in the offline world.

Third, as mentioned earlier, commercialization of the Internet has turned the cyberspace into a crucial component of the market economy. The traditional place-based society is being rapidly transformed into a

“flow-based” network society. An important step toward the completion of this transformation is the actualization of ubiquitous access to the Internet. Total integration of the online and offline worlds will allow for maximum flows of everything “flows of capital, flows of information, flows of technology, flows of organizational interaction, flows of images, sounds, and symbols” (Castells 2000: 442). However, such flows do not necessarily benefit everyone in society. It can be argued that, if digitalization is used as a cheap substitution for improving the material conditions of the disadvantaged, then removal of the first digital divide in the presence of the second digital divide may actually increase the gaps between the haves and have-nots (Barney 2004).

Attempts to “jump-start” Internet use in poor neighborhoods and countries have been made in different parts of the world as a way of combating poverty and promoting development, yet few have been successful. After investigating several “national connectivity programs” launched in Latin America, Robinson (2004: 105) concluded that those “market-driven” Internet projects had nearly all failed, for the new form of “community networking in fact never arrived in the region, ... The networking to be found reflects the polarized social hierarchy of rich and poor.”

There are to this day still many places in the world where face-to-face contact in close physical proximity constitutes the only mode of daily exchange for the majority of the population. Other forms of contact, such as those mediated by the telephone or the postal services, are not merely unaffordable but also unnecessary, as life there is primarily locality-based. In those places, lack of access to the Internet is in fact not particularly detrimental to the everyday life of the ordinary people—there are plenty of other things that are more urgent to them.¹⁰ Forcing a quick transfer from in-person to online in such places could jeopardize the local support needed for the maintenance of daily life, thus causing more harms than good. As Sclove (2004: 46) points out,

The likely outcome of enshrining universal access as an unqualified social good will be a world of inescapable, compulsory access, in which cherished offline modes of life become more expensive, less available, or in some cases extinct. At that point, lack of Internet access *will* constitute “deprivation.” (italic original)

Instead of making Internet access “functionally compulsory,” which will mostly penalize the unwired, Sclove proposes an Internet use policy that promotes “universally affordable, voluntary access to online and offline life” (2004: 47). Sclove argues that it is essential to ensure equitable accessibility to a diversity of choices—both online and offline.

Finally, a sound Internet policy aiming to address social inequality must therefore go beyond the call for equal Internet access. While it is

important to make access to the Internet universally affordable, it is also crucial to preserve and improve offline social networks that remain vital to the poor. Attainment of equal Internet access at the expense of unequal loss of offline social support simply trades one type of inequality for another. For the same reason, it is also important to develop online network resources that are attuned to the particular needs of the disadvantaged. A total eradication of the second digital divide is unlikely given the nature of market economy, but a variety of useful online connectivity programs and service networks can be established for and made available to those who are not well connected. It thus appears that, to obtain more equity in a non-equitable network society, calling for differential use of the Internet may serve the disadvantaged better than requesting mere equal access to the Internet.

Notes

1. We also distinguish our focus from Brown and Duguid's point that a divide occurs because of privileged forms of communication: "Generations of ... technologies for tele-presence are still far from capturing the essence of a firm handshake or a straight look in the eye" (2000: 4).
2. Although these two types of inequalities are closely related, access to information on the Internet does not always involve direct human-to-human contact through which social networks are formed. For more discussions on unequal access to information and knowledge on the Internet, see Lax (2001) and Katz and Rice (2002).
3. Although there are millions of users on the Internet at any given moment, the majority of these people are unavailable to us for contact because we do not have their personal contact information (e.g., email addresses and screen names).
4. There is a parallel here to writing a letter to a stranger in the offline world. It is perfectly possible but seldom done because of the writer's uncertainty as to how it would be received.
5. Even sites designed for the purpose of making new social contacts such as myspace and friendster offer means of limiting access.
6. It should be mentioned that the failure of universal connectedness the Internet provides to lead to universal connections among people is partly a function of limits on time and attention—the social network must be sparse because each of us can only interact with a limited number of people due to the limited amount of time we each have. However, the scarcity of time itself cannot explain the practice of queuing potential interaction partners by status.
7. For example, Coleman (1988) regards social capital as a set of resources that inhere in family and community, whereas Putnam (2000) sees it as social networks and the resulting norms of reciprocity and trustworthiness. Despite the differences in definition, most scholars consider social capital as useful resources residing in social networks. For a review of this concept, see Portes (1998).

8. Virtually all computer networks within organizations are designed to prevent or limit access from the Internet except for those whose status specifically grants them permission, e.g., employees or suppliers. It is both a question of organizational security and a critical means of insuring that the everyday routines of staff responsibilities are not disrupted.
9. Weblogs, or online journals, is generally regarded as a one-way broadcasting medium. However, this new online medium has become increasingly interactive through the use of inter-blog links and the comment function.
10. This explains the general lack of interest in Internet use among the disadvantaged populations. A survey of Internet use in 30 countries found that 40% of non-users said they had "no need" and 25% said they had "no interest." In other words, "nearly two-thirds of the reasons given were related not to access or resource issues but to a basic lack of need or interest" (Katz and Rice 2002: 29).

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