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Social networks and society of control

Sérgio Amadeu da Silveira

Sérgio Amadeu da Silveira is Sociologist and PhD in Sociology, Professor at Federal University of ABC, Member of the Scientific Council of ABCCiber (Brazilian Association of Surveyors Cybercultura), Ex-president of the National Institute of Information Technology.

Introduction: space and information

We must move forward in attempt to understand the relationship between information and physical space, between cyberspace and the spaces of presence, as well as between the concrete and the virtualized space. Apparently, this relationship may not arouse interest, but is a complex set of extremely socio-technical importance, whose mutual implications are still being detected. It is estimated that in 2012, monthly traffic data across the Internet will reach 20,000 petabytes (PB) per month¹. A petabyte is equivalent of 1024 terabytes (TB) or 1,048,576 gigabytes (GB). The exchange of digital information tends to acquire unimaginable numbers and turn the attention give to spaces without digital intervention in favor to mobility devices and hybrid scenarios.

A petabyte may represent the capture of approximately 2 billion and 684 000 2-megapixel images. It can also store somewhere around 1 billion and 73 million sound files of 1 megabyte or 766 million books of 250 pages in PDF format. This number multiplied by 20000 may be Internet traffic in less than 24 months. It's intriguing that these figures translated into storage

¹ Social Networks will have 800 million users until 2012, said study. Available at:
<<http://oglobo.globo.com/tecnologia/mat/2009/03/03/redes-sociais-terao-800-milhoes-de-usuarios-ate-2012-diz-estudo-754667658.asp>> [Accessed 12 November 2010].

and transference of texts, sounds or videos do not scare the younger ones who walk around with devices that usually have more than a thousand digital songs.

The spaces of cultural media are being greatly affected by digitization and nanotechnology. Soon, the majority of Brazilian libraries shall contain less information than a doctorate researcher's 1-terabyte external hard drive. The pen drives and PCMCIA cards or similar with 5 gigabytes can hold hundreds of videos. The reduction in the size of physical structures that stores the cultural production has spatial and environmental impacts indeed and must be analyzed.

The speed and quality of digitization and the increased capacity of data transfer over physical networks are strategic needs in the current scenario and tend to create economic, cultural and social consumption of different mechanisms for access to information networks. Corporations compete for models to attract consumers and machines with processing and connectivity increasingly lighter, more manageability for the smallest expenditure of energy.

Simultaneously, the owners of physical networks of fiber optic, submarine cables and backbones, ie, the telecommunication companies become the most powerful communication intermediaries, in a society increasingly dependent of information.

Connected space

Two important points need to be properly observed. First, the informational capitalism expands in private physical networks in which the flow of electrical signals that carry bits conform another space not colonized by capital. Cyberspace is a hybrid that includes market relations, public and private interactions, and many other undefined, but as a whole it resembles a common collective space, of various uses and possibilities. Therefore, the capitalist infrastructure of telecommunications, based on points physically divided into national territories and controlled by stock exchange dynamics led by hired executives, not stay well with the idea that cyberspace, the space of flows of information should not be commodified. The current debate over the principle of net neutrality is a disagreement about the power to control and deny access in cyberspace².

Second, cyberspace has been configured according to a specific mode of communication that enhances the formation of a society of control, defined by Deleuzian thought. This means that digital networks will covering almost every area of the planet, including the various bands of the radio spectrum. This process of informational capitalism reinforces the communication potential of the locations and allows your connection to any points and network nodes, compressing and annulling the long distances. What may seem contradictory to common sense

² See the debate about the net neutrality in site: <<http://savetheinternet.com/>> [Accessed 12 November 2010].

is the fact that the possibility of freedom of communication and content sharing is performed on a giant control infrastructure that has a physical layer and other logical layers. All these layers are metaphors for grouping a set of communication protocols that define how a machine should communicate with other machines generating a network which also follows a series of protocols to interact with other networks.

In this sense, the Internet is a space of control. Perhaps the greatest expression of the control society, one that, according to Deleuze and following Foucault's historical periodization, supplant the logic and dynamics of disciplinary societies, fundamental social constructions of the industrial world. By the disciplinary context, body should be cast, and in the control scenario the bodies must be free so they can be modulated. The disciplinary societies require clear boundaries of physical spaces, the societies of control do not care about the spatial dispersion and freedom of movement, they seek in the living the catchment of the needs to reduce uncertainties. This search typically informational requires connectivity therefore requires access and web presence. The existence in the network is only possible by accepting their protocols, so your control.

Space of control without controller persons

Galloway begins his book *Protocol: how control exists after decentralization* - with a scathing description of our current living sociotechnical:

"The diagram is the distributed network, a structural form without center that resembles a web or meshwork. The technology is the digital computer, an abstract machine able to perform the work of any other machine (provided it can be described logically). The management style is protocol, the principle of organization native to computers in distributed networks. All three come together to define a new apparatus of control that has achieved importance at the start of the new millennium.³" (p.3)

The interesting here is to realize that the management protocol of the World Wide Web (currently involving several process information machines) is performed with no center, no owner, articulating the software operated machines that converts the symbols into bits, or even using digital metalanguage as base for their interaction.

How is it possible to build an anarchical network without a center? From rules to be followed by all members of the network. These rules are the protocols. One of the main sets of protocols is called TCP / IP (Transmission Control Protocol / Internet Protocol). For many it is the soul of the Internet. It should be noted that IP is a tracking system and also a number within this

³ GALLOWAY, A. R., 2004. *Protocol: how control exists after decentralization*. Cambridge: The MIT Press.

system.

Our communication in digital networks based on packet switching paradigm, or rather the exchange of datagrams, a unit of information transfer. These information packets have headers that allow your routing and forwarding from a source to a destination. The origin and destination on the Internet are necessarily numbers called IP addresses. Can not find a point in the network without knowing your IP number. Thus, network protocols require that, to exist communication, all machines are located to send and receive the flow of information that is no more than several datagrams departing from an IP address to another. These datagrams carry e-mails, videos, photos, text, web pages, voice, payment methods, etc..

It is important to notice that all architecture contains a aesthetics of control. It delimit and often imprison. The architecture of the Internet, which contains the cyberspace, is an architecture consisting of communication protocols. Therefore, Lessig (1999) said that the codes have a role of laws in cyberspace. They condition and often prohibit certain actions, and that such restrictions amount to physical barriers that can not be broken. Thus, the Internet architecture that ensures the freedom of communication is also a cybernetic arrangement, ie a control architecture. Its controllers are protocols and not people. Despite this, these protocols concentrate human decisions laden of ideologies, worldviews, perspectives and hopes.

Social networks as expressions of the society of control

The Internet, while changing the ecosystem of communication, facilitated the provision and offer of content, but raise difficulties in get attention. The hard part is not talking, but be heard. This new economy of attention features the large concentration of traffic on relationship sites also called social networking. Their characteristics and their modes of operation are clear expressions massive adherence of interacting users to one of the most important expressions of sociotechnical relations of control.

The "Survey on the Use of Information Technologies and Communication in Brazil" - 2009, organized by the Center for Information and Coordination Point BR⁴ indicated that this year 45% of brazillians had accessed the Internet. In the age group ranging from 16 to 24 years, 78% have already accessed the network. From the standpoint of socioeconomic, inequality is still a mark of connectivity, because while 90% of the Class A had access to the worldwide network of computers, this number drops to 18% among members of the class D / E. It is important to observe that among the online users, 58% access the Internet daily, 67% participate in social networks and 15% run blogs and websites.

In the U.S., the Pew Research Center & American Life Project has been conducting a series of

⁴ Available at: <<http://www.cetic.br/publicacoes/index.htm>> [Accessed 12 November 2010].

surveys with young north-american adults on Internet use. The survey called "Social Media & Mobile Internet Use Among Teens and Young Adults"⁵, conducted in 2009, found that 73% of adolescents and 47% of online adults use social networks. Of their users, 52% have more than one profile. The survey found that users of social networks, 73% have a profile on Facebook, 48% has on MySpace and 14% on LinkedIn.

It is remarkable that the social networks involve more than half of Internet users in the United States and Brazil, and their presence is even greater in the younger segments of the population. Undoubtedly, there are cultural differences between different national, regional and local cultures, that would help explain the preferences of groups of Internet users by adhering to certain social networks and not others. For example, Orkut has low insertion between the U.S. and a major presence among adolescents and young adults in Brazil. Regardless of these differences, adherence to social networks is observable in almost all countries (the exceptions are countries like North Korea that prohibit access).

The basic structure of social networks is composed of a platform that allows the interactor to create a profile and choose the people who prefer to establish relations. In general, social networks create mechanisms that guarantee privacy options to the user to show content only to authorized friends or for certain groups. Obviously, these contents can also be opened for the viewing of the entire network. According to the surveys site "Alexa", the most accessed social network over the Internet is "Facebook" (in July 2010, exceeded 500 million users⁶), followed by *YouTube* (there are controversies in the definition of *YouTube* as a social network, but it is framed this way by various research firms) and *Twitter* (microblogging)⁷ already in tenth position. Also have a significant traffic *LinkedIn*, *Myspace* (which was already much larger than *Facebook*), *Orkut* seems not be important but in Brazil and India.

Empirically we can see that social networks are more accessed than all the large corporation websites of the old industrial culture (Fox, CNN, Globe etc). This allow the hypothesis that in the scenario of network communication the most active groups and individuals have gained a space that did not exist in the world dominated by mass media and this has become more important with the launch of platforms on which Internet users could create their own content, and to comment on the contents of his friends and colleagues too. Thus, social networks advance horizontalized communication and at the same time, wide-ranging, in several cases, with the same impact that the massive media. In social networks entertainment, conversation between acquaintances and news stories are mixed and end up generating a hybrid and

⁵ Available at: <<http://www.pewinternet.org/Reports/2010/Social-Media-and-Young-Adults/Summary-of-Findings.aspx>> [Accessed 12 November 2010].

⁶ One of the creators of Facebook, Mark Zuckerberg, announced in his blog that his social network exceed the mark of half billion users. <<http://blog.facebook.com/blog.php?post=409753352130>>.

⁷ This positioning in audience of social networks express the data of Alexa, <<http://www.alexa.com/>>, day 12/11/2010. Alexa collects and shows data about the ranking of web sites daily.

intense communication space. It is important to report that the idea of social networking platforms started to be reproduced for smaller groups, for business and to create links to specific purposes, such as with *BuddyPress*'s *Ning*, among others. However, it's noticed that people want to be in the most relevant social networks, what seem to attract more of your group and discuss the topics of most interest to you.

But what is the relationship between these social networks and control society? First, adherence to social networks is voluntary. The users adhere for different reasons, but being in contact with good opportunities and the best potential that social life can offer is a strong matter for the attraction that the networks offer. Also it is interesting to note that the definition of best potential can be quite diverse in networks, in other words, the networks allow each one to find "their". Freedom of membership and the construction of narratives and groups of friends and relationships is an important characteristic of so-called social networks.

Second, the more living-users adhere to social networks, are the networks most important for corporations, states, economic and cultural groups, individuals, and finally to market forces, but also for the anti-market. The economic importance not only to achieve the possible buyer, but to know what to sell to a potential buyer, especially, to find patterns of behavior and desires that allow constant inventions that might satisfy them.

Third, the Internet living already could be classified *ciber-living*, because their friendship is increasingly conducted through the cyber networks. However, social networks increase the dependency of *ciber-livings* by interactive technology platforms. These platforms ensure freedom of expression and even the creation of applications, widgets, new creations from the networks wich release their Application Programming Interfaces. Simultaneously, to communicating with these featured platforms wich functionality conditioned by its developers, made the ciber-living once more traceable, its life identified and modulated. Communication and control are inextricably linked in social networks. All you do is recorded, traceable and passible of analysis.

Spaces of control

The control is not synonymous of something bad. It is the reality of post-industrial era. The industrial capitalist societies have created social-technical arrangements that improve the living conditions, introduce new working methods and sophisticate the recreational dimension of existence in the entertainment and constructed situations of overcoming the disciplinary surveillance technology to encourage freedom modulated. Our once more "civilized" socializing is nothing more than a socialization certainly more controlled.

In the informational scenario, societies articulate biopolitical arrangements which they can not escape, more than that, no one thinks to escape. The digitization of symbolic goods moves to

the digitalization of bodies and the formation of biological sciences who consistently fall in the micro and nano world in order to understand the basic coding of life forms. It is no other reason that we observe today agricultural and fertilizer companies turning into biotechnology companies doing genetically modified organisms production. The seed is no longer sold, user licenses is that are marketed. The genetic coding of the seed is the key to the new mode of reproducing life, increasingly hybrid, mixed and recombined.

The goal of biotechnology in the quest of translate the genetic code in bits is to decode the protocols of existence, the re-creation and reproduction of life. This massive scientific effort does not seem passible of being paralysed otherwise to be accused of an unacceptable infringement of free initiative in cognitive capitalism. In this sense, biotechnology is nothing more than a branch of cybernetics, an attempt to understand communication and control of machines and living beings. So, the sociotechnical arrangements walking to control the biology and genetics of living beings. Thus, the programming of artificial codes, symbolic and genetic, is a hallmark of informational capitalist societies that are also control societies in transition to uncertain futures.

In addition to the physical structures of databases, data centers, laboratory servers , server farms or server clusters, the space of the codes for excellence is the cyberspace. In cyberspace, the interactions between humans and between humans and robots generate effects in the presential spaces, meetings, disagreements, actions of varied importance, from dating to political conspiracies, from crime to altruism and diverse activism . A large number of examples can be provided to indicate the bidirectional path between cyberspace and the effects of socio-presential: an north-american student uses a cell phone to warn his friends on Twitter what he was arrested by Egyptian police and can be released ⁸; couples ⁹ known each other by Orkut, a site that shows empty houses to highlight risks of the information posted on social networking ¹⁰; the creator of Wikileaks is persecuted for revealing documents and videos that expose the atrocities committed by U.S. Army ¹¹; Twitter is used by activists and popular to denounce the flawed election process 2009 in Iran ¹² etc..

Nothing seems to indicate a decrease in the expansion of digital networks in the near future. Therefore, the trend is the growth of cyber communication, and thus the size of the dimension of control. The more networks absorb aspects and features of our daily lives, we will have

⁸ Available at: <<http://g1.globo.com/Noticias/Tecnologia/0,,MUL404259-6174,00-TWITTER+ME+TIROU+DA+CADEIA+DIZ+ESTUDANTE+AMERICANO+PRESO+NO+EGITO.html>> [Accessed 12 November 2010].

⁹ Available at: <[http://virgula.uol.com.br/ver/noticia/diadosnamorados/2009/06/02/206458-confira-a-historia-de-casais-que-se-conheceram-na-internet->](http://virgula.uol.com.br/ver/noticia/diadosnamorados/2009/06/02/206458-confira-a-historia-de-casais-que-se-conheceram-na-internet-)> [Accessed 12 November 2010].

¹⁰ Available at: <http://www.bbc.co.uk/portuguese/noticias/2010/02/100218_roubositeg.shtml> [Accessed 12 November 2010].

¹¹ Available at: <<http://wikileaks.org/>> [Accessed 12/11/2010].

¹² Available at: <<http://blogs.estadao.com.br/link/eleicoes-no-ira-e-o-twitter-uma-licao-de/>> [Accessed 12 November 2010].

more digital traces of our actions, which implies more control and possibility of analysis and modulation of our behaviors in virtual and presential spaces. The very freedom of the post-industrial society depends on the maintenance and expansion of information networks. This involves more technical control. Social groups must face democratic conservative forces that are already looking and seek to turn technical controls on old forms of surveillance and disciplinary actions for maintaining political and economic models typical of industrial capitalism.

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