

Challenges of Popular¹ and Community Communication in Cybercult@: approximation to the proposition of Emergent Local Knowledge Community*₂

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Abstract

Study on the conception of cybercult@, which investigates if it would help community movements in redefining communication practices including the collective empowerment of information, communication – and knowledge – technologies. The objectives are to identify the main theoretical assumptions of cybercult@ in the mark of dynamic restructuring of communication in contemporary society, to place the issue of the presence of popular communication, and alternative community in cyberspace, and to examine whether there is relevance to relate the concepts of cybercult@ and its applicability to the study and practice of this type of communication in Brazil. The approach is based on theoretical and methodological principles of historical and dialectical materialism. The procedures presented in this study are part of the bibliographic and documental research.

Keywords: Emergent community. Social communication. Alternative. Community. Cybercult@. Cyberspace.

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¹ 'Popular' in this context is used as derivation of the word 'povo' (people), which in portuguese is used to identify the communication made by segments of the lower classes.

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1. Introduction

In the context of contemporary society, characterized as information society, there is a whole social dynamic in pursuit of autonomous appropriation of digital technologies and Computer Mediated Communication (CMC). But despite the progressive increase of internet access, considerable population contingents in Latin America are still on the sidelines of the benefits of this communication environment. However, somehow, even people with low purchasing power and their social organizations, which are in peripheral areas of cities or in the countryside, seek to insert themselves in this environment of change of communicative structures and of social relations. Such inclusion occurs as part of a social dynamic where the concrete world and cyberspace are not detached. In other words, there is a process of individual and community inclusion in the sphere of internet that does not preclude the continuity of physical engagement and action, in their various forms of organization, such as struggles for rights of social, communicative, cultural, or political citizenship nature.

At this level we study the possible intersections between cybercult@³ and popular, alternative and community communication. We investigate whether the theoretical proposal, especially of *Emerging Community of Local Knowledge* (ECLK), can help community movements in the redefinition of communication practices, including the collective empowerment⁴ of Information and Communication Technologies (ICT)⁵ in order to effectively achieve these dimensions, including Knowledge. The social cost of not collective empowering the ICT for the purpose of implementing durable alternative

³ The use of the symbol '@' indicates a differentiation that we will later discuss, with the idea of a feedback spiral, in line with the Laboratorio de Investigación y Desarrollo en Comunicación Compleja (Labcomplex).

⁴ "Empowerment" as being capable of using ICT (control power and direction) by popular groups and communities.

⁵ In portuguese *Tecnologias de Informação e Comunicação*, TICC, with a double 'C' to indicate the idea of existing knowledge in the whole technological process.

communication community contributes to the delay of the transformation of the local reality.

We begin with the question of whether it is relevant to interrelate popular and community communication to the theoretical and practical proposal of cybercultur@. The hypothesis is that popular and community communication could be reinvigorated by undertaking cybercultur@ as praxis (theory and practice), as it would help to configure self-managed organizational processes of high connectivity towards building a new society.

In broad terms, our objective is to identify the main theoretical assumptions of cybercultur@⁶ – within the framework of the dynamics of cultural and communicational restructuring in contemporary society, and their possible intersections with the community communication. More specifically, we seek: a) to introduce the theme of popular, alternative and community communication of collective character, in order to explore their presence in cyberspace, and b) to analyze the relevance in relating the concepts of cybercultur@ and its applicability to the study and practice of popular, community and alternative communication.

From a methodological perspective, this text refers to part of a broader research consisting of theoretical study and field work developed along with the *Laboratorio de Investigación y Desarrollo en Comunicación Compleja (LabCOMplex)*, coordinated by Jorge A. González, which involved field research through participatory investigation in Emerging Community of Knowledge in Charcas, in the Altiplano Potosino, San Louis Potosi, Mexico. The technical procedures relating to the section presented in this paper are those of bibliographical and documental research. The approach is based on historical and dialectical materialism (Minayo, 2007), as it seeks to understand the object in its entirety and provisory character.

⁶ As indicated by Labcomplex (in CIBERCULTUR@..., n.d.). Refer to <http://labcomplex.ceiich.unam.mx>.

2. Brief conceptual aspects and signs of popular, community and alternative communication today

Popular, community and alternative communication generates cooperative processes of organization and is structured in order to transmit info-communicative content treated differently from those that circulate in the traditional mass media, although it is not "alternative" in the sense that it does not replace or dismiss access to conventional means of communication⁷. In other words, as communication of the organized sectors of the subaltern classes (as explained in Peruzzo, 2009:132), it will guide itself by a proposition different from the one normally present in the large private (commercial based) and in the public (bound to governments) media. It has a civil public character, thus non-governmental and non-business. Their specificities are perceived through multiple factors such as the political and ideological platform (critical and purposeful); the modes of organization (grassroots, collective, and sometimes taking place in private spaces, such as in militants' homes); the link with the civilian non-profit organizations; the production strategies /action (collaborative, local based, active participation and freedom of expression, used for mobilization); and through its editorial proposal (regarding the focus given to the content and to the issues addressed).

Authors Isabel Gatti and Raúl Bermúdez (2010:18-19), have also observed similar aspects in their analysis of the situation of community communication in Argentina:

the construction of the message is not performed by an individual practitioner – the social communicator that responds to the professional stereotype [...]. It is a collective and participatory process that adopts a viewpoint set and linked to specific interests and concrete popular projects with no pretense of objectivity such as predicated by the large multimedia in order to make opaque the real enunciators of the message, also linked to concrete interests, but not popular ones.

⁷They move in a particular universe due to the scope of information and coverage range and extent, which characterize the practice.

The effectiveness of such communicational proposition carried out by segments of the lower classes refers to a peculiar situation of Latin American history, which, as shown by Gatti and Bermúdez (2010:17-18), is marked by agreements and disagreements among various groups of antagonistic stakeholders, "during the time of colonization, migrations and beyond, with the imposition of the modern project, which left a legacy of areas of uneven development, large masses of the population in extreme poverty". It is in this context that community social projects develop aimed at ensuring human rights, in the core of which communication is one of the components.

At the end of the 1970s, during the heyday of its resurgence in the context of distension of the military dictatorship in Brazil and the following years, this other communication "represented a cry which had been suppressed, of accusations and demands for change, externalizing mostly in small newspapers, newsletters, speakers, theater, brochures, flyers, videos, audio-visual, banners, billboards, posters, booklets, etc" (Peruzzo, 2004:115), including, therefore, artisanal, as well as face to face and group communication. The dimension of complaint and demand still remains in recent settings, although has lost the character of defiance against the State of the 1980s. Another interesting nuance is that it has incorporated broadcasting technologies (radio, television) and digital (internet) according to the circumstances of each historical time.

There are many the precursors of the study of this type of communication, which had in Paulo Freire an inspiring conceptual foundation, especially in regard to the dialogicity and democracy from the educational process. Fernando Reyes Matta (as cited in Beltrán, 1981:30) developed a macro-operating model of participatory communication. Luis Ramiro Beltrán (1981) developed concepts of horizontal communication emphasizing its multiple purposes: "access, dialogue and participation." Other thinkers like Mario Kaplún, Juan Diaz Bordenave, Gilberto Gimenez, Miguel Azcueta, Max Simpson Grinberg, Daniel Prieto Castillo, Jose Martinez Terrero, Jesús Galindo

Caceres, among many others, also contributed theoretically to the understanding and practice of popular alternative and community communication in Latin America.

Among the exponents of this communicational perspective mentioned above, Mario Kaplún (1998:17) conceived it as an "educational communication [...] [democratically produced] 'in order for the receivers to become aware of his/her reality', or 'to prompt a reflection', or 'to generate a discussion'. "He adds: "we shall conceive the communication media we produce as instruments for popular education as conceptualizers of an educational transformation process."

With the above citation we want to emphasize the procedural nature of such communication practices, that is, it is not just about creating media or communication channels, but about inserting them as facilitators of processes of social mobilization, reason for which their original expressions, as well as several current cases, develop in the context of social movements. An example:

Member of *Rede de Mulheres no Rádio* (Women in Radio Network), the Women's Center of Cabo (CMC) understood, even in 1997, that the feminist movement needed to take ownership of the radio vehicle as immediate media towards establishing a direct communication with in order to the deconstruction of machismo and of patriarchy in the Zona da Mata Sul [state of Pernambuco, northeastern Brazil]. The organization needed to establish a democratic relationship with the population of a geographic area where, according to the Brazilian Institute of Geography and Statistics (IBGE), almost 60% of the women population were illiterate in 1995 (Veloso, Farias, 2011:6).

According to Gatti and Bermúdez (2010:18), community communication "is directed towards an educative function and awareness of their own rights and needs, with the consequent enhancement of territorial identities", and we would add, of historical and cultural identities as well.

This 'other' communication has received several denominations: popular, participatory, horizontal, alternative, dialogical, radical, to refer to the communicative process carried out by grassroots social movements and non-profit organizations of civil society.

Therefore, collective actors come together to incite social mobilization and carry out concrete actions aimed at improving the living conditions of impoverished populations and raising the level of sociopolitical consciousness. In Brazil, in recent years, the terms "community" and "alternative" have been gaining predominance possibly as a reflection of the social practices increasingly present in society.

Given recent configurations, the popular, the community and the alternative communication may be understood in their singularities, that is, it is feasible to treat them in reference to more specific praxis, although in many respects there are interfaces that do not recommend fixed visions or rigid separations between them. In another text (Peruzzo, 2009) we deal with the specificities of the terms. In this article we address them through a vision of conjunction, since we are interested in discussing their possible intersections with the theme of *cybercultura*.

In summary, popular, community and alternative communication's main features are the following: the protagonists are the people (hence the term 'popular'), but only those related to social movements and organizations; it is based on active and open participation; it is not-for-profit; the content is in tune with local realities or with the community of interest that it is bound to; it establishes shared and non-hierarchical processes of production and broadcasting of messages; it is based on collective ownership (and when private, it is put to public service); and it happens in different forms, channels and modes of communication, but changes itself throughout history.

Popular, community and alternative communication in Latin America represents a counter-communication, or "other" communication arranged in the context of social movements, "communities"⁸ and other social groups closely connected to subaltern classes in order to exercise freedom of expression and offer content within their perception. At the same time, it serves as a tool for awareness and mobilization aimed at grass roots organization and social transformation starting always from the mission to

⁸ The quotation marks indicate the existence of contradictory concepts and perceptions about community. However, in this text the term is used interchangeably.

overcome deficiencies and immediate needs of population segments to which they are linked.

In recent years, in Brazil, concurrent to a continuity of traditional communication experiences of organized segments of the lower classes, there has been an increase of new channels, formats and organizations of communication, largely intermediated by the computer-mediated communication (CMC), and has gained more importance with Web 2.0 and Web 3.0, since they facilitate the role of the user as the sender. Despite the disparity in access to the blessings of technology by the population, ICT help to establish a historical moment that enhances two-way and of multiple open sources communication that favor the growing resumption of community initiatives and alternative communication.

In this scenario, community and alternative communication happens through group participation and physical presence, as well through instruments of communication aimed at specific audiences, such as banners, posters, speakers, pamphlets, cordel⁹ poetry, popular theater, video, newspapers, magazines etc. However, it also adopts more advanced technologies such as radio and television and later on the digital technologies. In the universe of the internet, it manifests through virtual pages, virtual communities and interactive platforms, as well as through experiences of web TV, community web radio, blogs, photo logs, video logs, twitter, podcasts, among others. Then again, as already stated, in this paper we are not dealing with the creation of channels of communication per se, or those perpetrated by individuals, but those within the dynamics of mobilization and organization of progressive subordinate groups, as our interest is to understand the collective meanings constituted in this context.

As an illustration, we refer to some collective experiences of alternative communication, such as *Indymedia*, which is in 200 cities around the world¹⁰ and in Brazil is called *Centro de Mídia Independente (CMI)*¹¹, *Overmundo*¹² (Brazilian channel for the production of cultural communities), the *Coletivo de Notícias del Sur*

⁹ cordel is name given to a type of regional poetry in the universe of folk communication

¹⁰ See Moraes (2008).

¹¹ <http://www.indymedia.org> or www.cmiBrazil.org.br

¹² <http://www.overmundo.org.br>

(CoNoSur)¹³, Centre des Médias Alternatifs du Québec (Cmaq)¹⁴, and Nodo50¹⁵ of Spain. They all operate with counter-information in an open publication system and other forms of collaborative communication platforms. In this line of alternative communication, there are also alternative news agencies, such as *Agência de Informação Frei Tito para América Latina* (ADITAL)¹⁶, *Agência Carta Maior*¹⁷, *Informação Social*¹⁸ – news agency that emphasizes the dissemination of themes related to human rights in the Eastern Amazon region of Brazil (Tocantins, Maranhão, Pará and Amapá), and *Agencia de Notícias Red-Acción* (ANRed)¹⁹, all disseminating information through a progressive perspective on issues seldom addressed by the mainstream media, or misrepresented and omitted by them. There is an increase in the number of Media and Communication observatories, which critically monitor the commercial media, as well as analyze events related to communication and media systems. Among the dozens of existing experiences, we highlight three, at different levels: *Observatório Iberoamericano de la Libertad de Prensa* (Infoamérica)²⁰, based at the University of Malaga, Spain and in 19 countries, *Observatório do Direito à Comunicação*, based in São Paulo, Brazil and *Observatório da Mídia Regional – direitos humanos, políticas e sistemas* at the Federal University of Espírito Santo, Vitória-ES (Brazil).

Among the collaborative communication spaces created in cyberspace, some are closely connected to social movements and communities, as others belong to other collective civic networks²¹. In addition to platforms and channels such as those mentioned, there are also other forms of social networks²² that favor the formation of virtual communities of shared interest, or the communities of choice, as described by Goldsmith (1999)²³.

¹³ <http://ar.geocities.com/agenciaconosur>

¹⁴ <http://cmaq.net>

¹⁵ <http://www.nodo50.org>

¹⁶ www.adital.org.br

¹⁷ www.cartamaior.com.br

¹⁸ www.informacaosocial.com

¹⁹ www.anred.org

²⁰ http://www.infoamerica.org/libex/libex_7_d_9.htm

²¹ See León, Burch and Tamayo (2001), Finkelievich (2000) and González (2008, 2009).

²² See Recuero (2009).

²³ See Peruzzo and Berti (2010).

We highlight that the new manifestations of alternative and community communication, as they incorporate digital and interactive media and constitute themselves primarily as collective forms of organization, engender not only differentiated content from new perspectives in view of alienation, but also new procedures for the construction and dissemination of messages, the socialization of expertise (and others), the creation of shared codes of conduct and the establishment of new social relations of production²⁴, which put in suspension traditional hierarchy and bureaucracy, the meanings of private property and of the work force as merchandise, given that, among other aspects, it entails volunteer work (Peruzzo, 2009:143).

The potentials enabled by participatory/interactive digital technologies and computer mediated communication with regard to the creation of autonomous and communitarian instruments to produce, manage, distribute and receive content are indisputable, though they are immersed in a set of contradictions that inhibit or hinder the advancement of communication of the lower classes. These contradictions arise from the structural conditions of society that generate inequalities in the empowerment of technology, antagonisms derived from differences in educational levels, cultural and ideological values expressed in social practices and languages, as well as in local singularities that do not always point to the communicative need via digital platforms. The condition of concrete existence helps to configure specific forms of appropriation by the population and social groups, the ICT. Ultimately, there is an unevenness of access and utilization of the possibilities that the network of networks offers, besides limited effectiveness of public programs that try to solve this problem, both in Brazil and in Latin America as a whole, a theme that will be addressed later in the midst of the discussion of cybercultura@.

²⁴ However, these dimensions were already part of popular and alternative communication of other historic periods. The new which we refer to is relative to each historical period.

3. Cyberspace as a new space for community and alternative communication

An almost consensual vision has been reproduced over time, which can be seen in the citations below, written at different times, and which link cyberspace as virtual or immaterial space created by electronic means and dependent on computers:

According to Heim (1993:78-79)²⁵, for instance, cyberspace

suggests a computerized dimension where we move information about where we find our way around data. Cyberspace renders a represented or artificial world, a world made up of the information that our systems produce and that we feed back into the system. Just as a chessboard sets up checkered game space of its own world and knights, pawns and bishops, so too the computer interface holds its field of moves, file hierarchy or files, places to go, and relative distances between points of interest.

According to Lemos (2008:128), cyberspace can be understood in light of two perspectives: “as a place we find ourselves when we enter a simulated environment (virtual reality), and as a conjunction of computer networks, integrated or not, in the whole planet, the internet”.

However, cyberspace points to a complex phenomenon which this type of technician approach cannot explain.

Departing from the meanings of the word cyberspace as derivative of words cybernetics and space, since Norbert Wiener (1948²⁶), whose studies linked to military programs in the context of the Cold War, the concept of cybernetics (general systems theory) was established. The word cybernetics comes from the Greek *Kybernetes* (Cybernetics) and means pilot, navigator, controller, or the possibility of control and communication, both

²⁵ Citations by foreign authors were published in English, Portuguese and Spanish and translated by the author.

²⁶ In: “Cybernetics, or control and communication in the animal and machine”.

of the machine (engineering) living organisms and language (Miège, 2000; Gómez Cruz, 2007, González, 2008). Therefore, an important element is added, the idea of direction, the ability to direct action, which is not limited only to the technical circuit.

The reintroduction into the academic language of the prefix “cyber” (kyber, cyber) appears to indicate (and in some way reduces itself to) the use of “machines of control” (i.e., computers) (Gómez Cruz, 2007:28). In the end, as the author describes (Gómez Cruz, 2007:28), “in popular language, it began to be applied to everything that has as the center the use of computers, especially those connected to the internet” and new terms emerge, such as cyberspace, cybersociety, cybercity, cyberlaundry, cybercafé, cyberculture.

Now space, according to Wertheim (as cited in Gómez Cruz, 2007:29), until the 14th or 15th century, in the medieval cosmic view, there was a "real" and a "divine" space. From the 18th century, with the shift that made science the prevailing explanation of the world, a more rationalistic and mechanist vision of space came about. In this perspective, the medieval duality was lost in favor of a space that is “physical, total and absolute”. However, the author points out that cyberspace, not only in its narrative but in the way it "manifests", opens the possibility of a "space" that is not Cartesian: by interacting in cyberspace, my location cannot be established merely by coordinates of physical space.

As Wertheim suitably notes (as cited in Gomez Cruz, 2007:30), cyberspace retrieves the cosmic view of "a dual space where physical space is not the only possible space". But, from our point of view, it also constitutes a harmonious cosmos in itself, although, if we think beyond the "machines of control"²⁷, it does not cease to interconnect with the physical world.

Cosmos, from the Greek language, means harmony, order, beauty. Its antonym is chaos²⁸, also from Greek. This world constituted by cyberspace suggests symmetry, a

²⁷ As originally defined by Norbert Wiener.

²⁸ In fact, chaos, or the system of disorder, is how Lévy (1999:111) sees the cyberspace, with which we disagree.

combination and balance of traits in formats of networks²⁹ that conform themselves in mechanisms identified in terms of technological determinism, but go beyond them. It is perhaps worth recalling, with Jesús Galindo (1998:4), that “society and cyberspace is a new ecological form/way in human development. [...] Something that calls for new types of social relations, the construction of a new type of civilization”. Therefore, cyberspace represents a phenomenon of the last decades. According to Heim (1993:84), “something is a phenomenon when captures and maintains the attention of civilization. Only then can our common language articulate the presence of the thing so that it can appear on its ‘static’[sic] identity in the course of history”. This is how cyberspace introduces itself as a nebulous and slippery phenomenon. It attracts distinct societal movements and, at the same time, is continuously renewed.

It is not the intention of this text to go into detail in the discussion of cyberspace, nor to fall into any of the theoretical strands prevalent among the Promethean³⁰ and Faustian³¹, as in Rüdiger’s view (2007:14;184), which, as thinkers of technique, oscillate, respectively, in visions of cyberspace as a cultural pessimism or a societal optimism. For the Promethean, technique would bring an emancipatory and beneficial quality, as it represents the greatest good of the human being, progress or an opportunity to advance in development. On the other hand, for the Faustian, technique is seen as a force of human beings, but able to adopt an autonomous development and destroy it.

We are interested in discussing the possible interconnections between the organized segments of lower classes, based on the Brazilian experience, and cybercult@³², as identified with @, which in essence does not address the digital technologies or computer mediated communication, but is characterized by a process implicated in the development of cultures of information, communication and knowledge.

²⁹ Ver Recuero (2009).

³⁰ Prometheus, the figure of Greek mythology. For the Promethean, technique is, ultimately, the greater good of mankind.

³¹ From the legend of Dr. Faustus (16th century), this view of technology as a force created by the human, from whom it tends to be emancipated, and then assume an autonomous development, leading to its destruction (Rüdiger, 2007, p .184).

³² See www.labcomplex.net

Nonetheless, we cannot disregard the aspects of centrality of information and communication technologies in everyday life and society, and we find it necessary to address community communication today also from the standpoint of cyberspace. Cyberspace is understood as a complex phenomenon which requires interpretations through the perspective of the cosmic vision that it encompasses, through immateriality as its processual essence, but which interconnects to the physical space through people and the organizations that set it in motion, the consequences in real life, the historical processes that do not dissociate the material world and cyberspace from real life that happens beyond infoways.

4. Cybercultur@ and the emerging communities of knowledge

Much has been discussed about the digital divide to describe the exclusion of the impoverished from computer access and internet in a simultaneous process of insertion by the dominant sectors in this communicational environment and their fascination towards the capabilities of interaction and circulation of content that it offers. However, we must pay attention to the fact that the economic-financial dimension does not explain the whole issue of digital divide. There are also educational, cultural and political reasons, which can establish conditions of inaccessibility or even the quality of the level of access achieved by segments of the population, according to each situation. Also, it is important to highlight that it is not only access to the internet which ensures the inclusion of people as a political subject of society, as we shall see below.

In short, considering the importance of ICT today,

Not having access to the main source of mediation of social relations of the 21st century aggravates the social exclusion of all sectors that are “outside”, or on the other side of this ‘gap’. For this reason, it is understood that countries with an abundance of ‘poor’ populations must have to increase their contact with the ICT, qualified as a privileged instrument for access to information and organized knowledge, and created for all, by the others who are on the other side of the ‘gap’ ”(González, 2008:123).

In this context, at first, studies and public policy around the subject consider the distortions in the appropriation of computer services and of the internet, as well as the incorporation people in those new forms of relationships and social structure, would be resolved by providing skills to operate machinery, programs (software) and the provision of services (tele-centers, computer centers, cyber cafes, public booths, etc.), mostly free. But the debates would soon show that these types of initiatives are not enough, although the need to incorporate such conditions is recognized, because the solutions are always insufficient if the problems of economic contradictions political and cultural relations stemming from the unequal inherent in the capitalist mode of production are not resolved.

According to Paulo Cunha (2003:211),

The so called *detritorialization* produced a new type of communication user, but did not overcome the imbalance caused by the different national dynamics. New hegemonic patterns produce new centralities. However, peripheral groups remain isolated in the fringes of cyberspace. The new purely informational centralities live with the real geopolitical and economic centralities, created in the colonial period and enhanced by industrial revolution. On the one hand, we have economic peripheries, full of underprivileged, marginalized and destitute people, on the other hand we see the *central-peripheries* of digital networks, tribes and their subcultures that are happy to participate in the *non-place* of cyberspace, alienating themselves from the contradictions of the communication industry.

Over time, studies and some public policies incorporated the discourse that is not enough to provide technological support or promote training programs to achieve basic skills, but the improvement of educational quality and the resolution of problems of economic inequalities in order for appropriation to occur, as expected, and to the potential that the network offers. However, in practice, the distortions of the access and use – and / or non-use – of the technological supports continue to develop as political dilemmas.

To address this type of problem, in the context of Mexico, Jorge A. González (2008:127) believes it is necessary to review the theoretical instruments and the practical

strategy to enable a different form of appropriation of the internet and of the existing digital technologies, so that they are used not only as access, but as platforms for generating information, communication and especially local knowledge.

The author works with a new concept of cybercultura@, identified by the symbol @, which differs from approaches predominantly used by the academy, and which define it, similarly to Lemos (2003:12)³³, as a “socio-cultural form that emerges from the symbiotic relationship between society, culture and new technologies of micro-electronics basis”. González (2008:127) sees *cybercultura@* from the Greek prefix Kyber (*ciber*), because

Developing cybercultura@ implies to generate, augment, improve, enhance and share the abilities to lead, direct and ‘steer’ social relations, in an exercise of self management which collective, horizontal and participatory. [...] [Culture is used in its original sense, as] ‘cultivation, care, attention and development’. The ability to self-lead and to address others for more intelligent solutions for the enormous challenges facing the 21st century, can be learned, can be shared, can be cultivated with others and for others. [And I use] the symbol @, [...] for its resemblance to a spiral graphic, [...] to represent a positive feedback loop, an open and adaptable process that generates an emerging response that arises from the density of relations of the system and cannot be reduced to the sum of its components.

Developing cybercultura@ means, therefore, a process that “collectively redraws, and from bottom to top, a different attitude” toward the world, and at the same time, learns a series of “transferable skills that allow us to operate well the technologies within our grasp in light of the information needs in order to generate knowledge and to coordinate communication actions that allow us to break the vicious circle of technological dependence” (González, n.d.:8).

The concepts of cybercultura@ are developed within the *Laboratorio de Investigación y Desarrollo en Comunicación Compleja (Labcomplex)* and are based on Liev Vygotsky (zones of proximal development – ZPD – and distributed intelligence), Gavriel Salomón (distributed cognition), Jean Piaget and Rolando Garcia (construction of knowledge

³³ See also Lemos (2008), Lévy (1999), Primo (2007), Felice (2008), Rheingold (2002), Heim (1993) and Recuero (2009).

from the perspective of psychogenic epistemology), Carlos Lenkersdorf (the sense of *nosotros, nosotrificación*³⁴), Pierre Bourdieu (cultural production and class *habitus*), Jesus Galindo (cyberculture), Immanuel Wallerstein and Robert Fossaert (world-system), Enrique Trueba and Concha Delgado (social empowerment), Paulo Freire (dialogical education), Celestin Freinet (development of autonomy and critical thinking), Felix Geyer (sociocibernética and information systems), Alberto M. Cirese (symbolic ecologies) and Antonio Gramsci (hegemony), among others.

The Labcomplex³⁵ works with cybercultura@ as object of knowledge and as value of social development. From this perspective, the idea of empowerment is preached in order to construct procedures for self-determination and to establish conditions for communities to collectively appropriate information, generate knowledge and become capable to communicate among themselves and with society.

The redesign to which González (n.d.) refers to in the citation above, means the recovery of our settings and historical identities as societies that have undergone processes of domination, and as an element to understand the present and to draw our own paths in the construction of a possible world. It is a process (González, n.d.) based on reflexivity – built and shared – within horizontal networks where intelligence is distributed. Thus, cybercultura@ is more directed at understanding the processes of knowledge construction and social transformation and contributing to become effective, instead of latching onto intricacies of cyberspace.

Enabling cybercultura@ in society, in the words of George A. González (2007:18), requires the development and cultivation of three cognitive cultures, which are essentially human: the culture of information, the culture of knowledge and the culture of communication. A commitment that, collectively held, helps redesign the symbolic ecologies and rebuild relationships that are usually negative if seen from the strict technology perspective.

The culture of knowledge refers to investigation, to questions that can be made of the reality around us and of the world and to responses of knowledge that arise from them.

³⁴ Nosotros/nosotrificación, meanings and processes referring to the idea 'us' and 'ours'.

³⁵ http://computo.ceiich.unam.mx/labcomplex/labcc/c_omugf.html

However, it is not just formal research, but also of investigative searches that generate findings and share them among the members of the communities.

Paulo Freire (1987:36) once said that knowledge is constituted in man-world relationships, relationships of transformation, and perfected in the critical problematization of these relations.

Knowing is a human activity because we are the only species that develops meta-instruments and meta-languages. Thus, interactions between humans and their reality, from inferences, allow us to establish relationships between different configurations of information, which in turn are the product of constructions and attributes from subject to object. Hence the necessity to generate patterns of behavior conducive to creating knowledge (González, 2007:18, 25).

Knowledge and information "are inseparable. There is no knowledge without information, but there can be a lot of information without knowledge. Information and knowledge enable and give meaning to communication"(González, 2007:25). The culture of information "develops from an approach to the nature of the information – already constituted in observable elements or data in its spatial, static dimension – and as part of the processes 'communication / cognition' in its temporal, dynamic dimension " (Amozurrutia, 2007:131). It is linked to communication processes. Information is particularly important in the organization and construction of memories, in planning systems and its representation in order to enhance reflection and thus improve decision-making (Amozurrutia, 2007:131-132).

It is, therefore, about extrapolating the notion of data and transforming it into information systems. Information is appropriated or generated, understood, assimilated, transformed and systematized, and thus results in knowledge. Collective knowledge, once obtained through encouraged collaboration – in person and at a distance, is processed in view of the zone of proximal development (ZPD)³⁶. By establishing

³⁶ ZPD, to Vygotsky, refers to mental functions present in the embryonic state, but which advance when there is interaction and involvement of other individuals.

relationships that enforce interconnective dynamics that make visible the ways in which society and social relations are structured, communication and knowledge happen. Communication then enables relationships, the exchange of knowledge, the generation and socialization of knowledge, facilitated by the mechanisms of so-called *distributed intelligence* as an emergent property rather than immanent, according to Vygotsky (1995) and Solomón (2001). The formation of networks and their articulation in emerging communities of local knowledge (ECLK) and investigation (ECI) are interconnected, and comprise the organizational and affective basic "*nosótrica*" ("our") structure which ensures this dynamic.

The culture of communication implies the need for contact between the social actors to compose and rearrange the social world. It signifies the ability to coordinate collective actions and it needs to design and establish three types of conscious modalities of intervention on the social form of organization of the group: evoke differences, change the social order to contemplate the differences, and deal with the adjustment of the organization with the objective of integrating an *intelligent network*, active, effective and affective in the construction of the "*nosótrico*"³⁷ spirit (González, 2007:18,25; n.d.:6), that is, the 'us', the collective spirit.

Communication culture also implies the development of three conditions needed for communication of physical presence and at a distance, namely: "stimulation, connectivity and consistency. Similarly, it requires the basic attitude of listening to discover, inspire, contemplate and generate a difference" (Maass, 2007: 234).

The stimulus is a central element in the process of knowledge construction (Maass, 2007:240). "It consists of achieving the continuous expansion of the *zone of proximal development* (ZPD) [referring to Vygotsky] of each of the participants, and aims to generalize it to the collective whole" (González, n.d.:4).

Connectivity is understood as "the communication process that begins with stimulation and is followed by a step for structurally connecting conceptual components" (Maass,

³⁷ From the Mayan suffix *Tik* which means "nosotros" and was widely applied by Carlos Lenkersdorf (2008) the book "*Los hombres verdaderos*" to explain the *Tojolabal* cosmic vision.

2007:141) and means the "construction, maintenance and expansion of ties between all stimulated elements of a concrete system (González, n.d.:4).

Consistency, however, is relative to the "*nosótrica*" nature of attachment. As it increases, "connectivity enables to start to produce an effect of "*nosotrificación*", the construction of a renewed sense of 'us' which not only manifests itself in the identity of the group, but in the increased capacity to process information, to define the problems and to solve them collectively" (González, n.d.:6), in the Tojolabal perspective (Lenkersdorf, 2008).

Tojolabal is one of the Mayan people of the Upper Chiapas, Mexico, whose way of community living is expressed in their language (Tojolabal), founded in intersubjectivity and participation of each and every one as a subject. As Carlos Lenkersdorf attests in his book "Los hombres verdaderos" (2008:14), among Tojolabal "there are no objects in the context of language or culture."

One of the assumptions on the effectiveness of stimulation, connectivity and consistency in emerging communities is listening, that is, knowing how to listen³⁸ the other and apprehend the reality and the world. It is also a basic principle of Tojolabal culture. For González (n.d.:8), the first step to becoming a community of investigation or of local knowledge "is to establish the foundations of an individual and collective structure of self-determining listening".

Therefore, *cybercultur@* does not refer to the intercommunicative webs, to sociability in cyberspace or to the skills to skillfully operate machinery and computer programs, other than precisely to fostering and generating three types of *know-how* which lead to a) the way that we learn to ask about the world, to convert practical problems into problems of knowledge, b) the skills and abilities to create, manage and use observable elements and data of our surroundings, c) the ability to coordinate actions with others within the

³⁸ Jorge González and Margarita Maass insist in this principle in several passages in their texts about *cybercultur@*.

horizontal organizational structures in which it is possible to distribute intelligence (CYBERCULTUR@..., n.d., online)³⁹.

The key issue is to develop knowledge, but knowledge that is contextualized in its environment, in history and in the world, and in a constitutive process of communicational relations, which are dense and able to facilitate the active participation and continuous sharing of learning, the systematization within the group (community or network), between networks and in society. In short, in the words of González (n.d.:7), cybercultura@ is a form of "empowerment that interests three strategic fronts: information, knowledge and the ability to create networks of action to use information and knowledge in specific self-management projects".

This is a matter of

building networks that increase the critical mass of the generators of information and communication, which dignify the assignment to investigate, allow a horizontal relationship between the various social groups, and thus put to our service the digital information technologies, and not contrary (González, 2007:19).

This process does not mean the rejection of technologies. In order to put it into effect, Gonzalez proposes the creation of communities classified as emerging communities of local knowledge and/or of information, and the establishment of networks between them.

The development of these emerging networks of communities seeking to materialize the practical dialogue, community and creative appropriation of this dimension of the technological apparatus subject to the needs of creation and self-generated information and knowledge, but with an entire self-projected structure, open to share and advance on found particularities, in including them in a network of relationships with other forms of knowledge of other communities, displaced in a similar manner and located in a dispersed manner, but who share the same effects of processes on a global scale (González, 2008:131).

³⁹ See <http://labcomplex.ceiich.unam.mx/labcomplex02/>

4.1 Brief notes on the concept of emerging community of knowledge

Emerging Community of Knowledge (ECK) is a “virtual community network activated for the generation of local knowledge through the intensive use of information and communication technologies (ICT) in an environment of distributed intelligence” (Maass, 2007:312)⁴⁰. Each ECK corresponds to a knot (or node) “of a network in permanent construction [...]”(González, Maass, n.d.:7).

The development of emerging communities focuses on facilitating a horizontal dynamic, in proximity to the popular education of Freire and others, allowing them to collectively take ownership of the technology to generate an ability to narrate themselves and to compose into a self-determining 'nosotros' [referring to Lenkersdorf] and not derived from external impositions" (González, 2009:65).

An Emerging Community of Investigation (ECI) composes a collective that is organized with the purpose of conducting research and generating information and knowledge. In it, "each participant is an interconnected node of work to comply with time, an intelligent systemic network". Once activated in cybercultura@, the ECI is capable of achieving and cultivating skills pertaining to the processes of information, communication and knowledge (González, n.d.:2-3).

Emerging Communities of Local Knowledge (ECLK) are collectives, or networks, which are organized towards building a process of social development. According to Jorge González (2009:64), they are horizontal networks concerned with developing their 'own information systems and of communication to generate responses of knowledge to concrete and significant problems of their locality [...]: migration, poverty, unemployment, pollution, violence, hunger, environmental degradation, water and many more".

⁴⁰ Digital version available in: www.labcomplex.net

Through the application of the principles of cybercultur@, there is an

empowerment process from a new and enhanced collective ability to narrate their past, to redefine their present and to redesign their future and possible worlds through other forms of narration and visualization that emanate from its ability to generate and maintain systems of information and knowledge, first local and subsequently located, when each emerging community becomes a node of a network that is linked to other emerging communities (González, 2009: 65).

Although overlaid by specificities, it is possible to make an analogy between the concept of cybercultur@ and popular social movements in Brazil and other Latin American countries, especially in regard to aspects such as autonomous popular organization and praxis developed from collectivized action in order to solve problems that degrade the living conditions of impoverished populations. Such problems affect large masses of population of the lower classes, but, given that contradictions contain the germ of its own negation, they have also motivated the rise of initiatives to overcome them, whether they are triggered by popular social movements or emerging communities of knowledge and so many other social actors.

4.2 Is it possible to interrelate COM COM to cybercultur@?

Based on the similarities highlighted above, it is possible to identify intersections between popular and community communication when is developed from the perspective of community organizations and social movements, closely connected to the subaltern classes, and cybercultur@, although there are substantial distinctions between them. They share a common vision of the world as contradictory and oppressive, the political and ideological meanings given to mobilization strategies and social organization, besides aspects related to the approach to overcome practical problems arising from social inequality and to the construction of a just society. The

central point of the common methodological issue concerns the active participation of the citizen in processes that construct self-management practices of social organization and, in the case of community communication, in enabling this communication. This type of participation, in its most advanced form, is based on community self-management in regard to the control power and administration of social processes and communication (cyber).

On the other hand, while *cybercultura@* is dedicated to the constitution and organization of emerging communities of knowledge (ECI), popular and community communication of the organized segments of the lower classes results from "spontaneous" organization process and mobilization of sectors of the civil society. If the first envisions a process of social organization from the ECLK and ECI, the later seems to operate from the demands, interests and capacities of mobilization of the civil society, that is, it is circumscribed within the limits of situations, except, of course, the popular movements which are clear on the political option for socialism. While the first addresses the construction of a new project of society, popular and community communication shows a tendency to establish itself more as a process bound to daily struggles for better living conditions and consequently the change in reality, without disregarding that there are social movements and organizations that also have as a strategy the making of another kind of project of society.

This way, it is possible to infer that by incorporating the spirit of *cybercultura@*, social movements, NGOs and community associations could improve their performance by not concentrating on topical actions. It is important to target a project of society, that is, to discuss the type of society we want to build. Otherwise, despite the good intentions, it is possible incur in processes of non-formal and informal education and of mobilization which in fact facilitate the conformity to the system and to the reproduction of the capitalist society instead of to its transformation. In this condition, how to build the counter-hegemony?

It is essential to add two key differential aspects which favor of *cybercultura@*. One is in the premise of the importance of forging information systems (organizing, documenting, systematizing information) and enhancing intra and inter-community communication in

order to generate and share knowledge, comprising a first challenge for social movements and community organizations of communication. In the practice of popular social movements, usually a lot of knowledge is generated, many things are accomplished, but little is documented and the knowledge built is hardly ever systematized. Information and knowledge tend to disperse for lack of practice in creating intelligent information systems. The result is that sometimes information is lost as a structured set. What is left is what each one can make use of or what the organization collects and preserves⁴¹. Knowledge ends up not being socialized to its potential, or even much of what can be gathered remains at the data level, without generating information systems. In the context of cybercultur@ this type of praxis would be forged, after all, such *what to do* is at the heart of its conception.

Another implicit premise in the theoretical conception of cybercultur@ is to forge collective empowerment of ICT. The tactics and strategy around ECK, says González (n.d.:7), lead them to "make theirs the information and communication technologies, not only to access information but to generate their own knowledge". It is still something shy in the universe of the grass roots movements. This is another challenge for community communication organizations and the community movements themselves: to collectively incorporate technologies as theirs and in their full potential in practices related to the processes of consciousness-organization-action toward the fulfillment of citizenship. It's not about the defense or denial of ICT. As constituent and constitutive parts of (and in favor of) society today, there is no other way but to be in and seize them. However, cyberspace does not diminish the importance of physical space or eliminate social manifestations with physical presence.

Finally, the discussion of cybercultur@ is opportune for a change of quality of popular and community communication. In other words, to enable the construction of practices that can help in setting up the cultures mentioned (third challenge) in parallel with the establishment or recovery of close relations between the community and popular

⁴¹ This is the case of Centro de Pastoral Vergueiro (CPV) and of Centro de Comunicação e Educação Popular de São Miguel (CEMI), both located in São Paulo, Brazil, which were once organizations that served as reference for documentation of work and research, but today some of its creators struggle to preserve files which are unstructured and decomposing.

communication media and collective organizations from which they originated and received political support, a fourth challenge.

5. Conclusions

Given length constraints for this text, there is a lot to be added on the matter discussed herein. But the brief notes above highlight the importance of the subject, both from the standpoint of popular and community communication, as an expression of a communication committed to social transformation, as the innovative qualities that its protagonists are led to incorporate because of changes in the communicational environment enabled by cyberspace. It is a dimension seldom studied in the area of communication, in Brazil, since the predominant investigation of cyberspace focuses on studies about technological determinism, on ramifications of the cultural industry on the internet, and on the presence and meanings of the uses of cyberspace by "small crowds" of internet users, especially from the growing phenomenon of social networking sites such as *Orkut* and *Facebook*, also necessary and important studies.

By inserting itself in cyberspace, popular, community and alternative communication contributes to enabling a transformation of constitutive practices of citizenship. It seems that cultural transformations are taking place as an antithesis of inequitable relations between dominants and subordinates historically constructed at all levels.

The theoretical and methodological perspective of cybercult@ developed by Labcomplex⁴² seems appropriate for the understanding of the conditions under which the insertion of popular, community and alternative communication in cyberspace and beyond, would represent a qualitative improvement of the status of citizenship. It corresponds to the assumptions of communication in the context of popular and social movements in regard to popular autonomy and protagonism as facilitators of the process of expansion of citizenship in their civil, social and political dimensions, but also

⁴²Laboratorio de Investigación y Desarrollo en Comunicación Compleja.

explicitly communicational and as a right of the fifth generation⁴³. At the same time, cybercultura@ advances as it points to paths able to solidify processes of information, knowledge and communication and instigate the creation of a new project of society.

Finally, a question arises: could popular and community communication provide inspiration to cybercultura@? This is a matter to be investigated.

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⁴³ See Peruzzo (2008).

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