

# Community as an icon

## Gilson Schwartz

**Brazil is often praised as the ‘country of the future’ and this prospective success makes it even harder to bear the accumulating social and cultural genocides that pervade Brazilian history. On the other hand, Brazil is also mythically praised for her flexible adaptation to all circumstances, a feature very often resembling malice and perversity.**

**B**razilianity became a cultural icon in the 1930s, as populism, dictatorship and mass media made their way through an increasingly urban society with deep historical roots in slavery of black and indigenous peoples. Peace and violence of all sorts—sexual, physical, mental and social—coexist in Brazilian society simultaneously feeding hopes and scratching scars.

Institutional building and the ‘rule of law’ never take root in Brazilian soil: the most celebrated and oftentimes execrated essence of the national soul is the “jeitinho”, a tricky dealing with circumstances with a very pragmatic sense of justice and rights.

In other cultures and nationalities there are also all sorts of tacit, pragmatic or idiosyncratic treats of identity at local, regional and national levels. The fabrication of such sociolinguistic networks as well as its mediatic and iconic expressions makes up the bulk of civilized social life. But violence and destruction are always at bay, while creative and collaborative processes support the flame of political and intellectual development in space and time.

### Local Networking

Networking practices with digital media intensive projects at the local development level represent a new, promising research program with important theoretical as well as

practical mentors in areas such as grounded research, action research, netnography and social network imaging methodologies.

New semantic mappings are also in the making, such as the Information Economy Mark-up Language (IEML) led by Pierre Lévy at the University of Ottawa.

New levels of knowledge management and innovation governance are at stake as both developed and developing nations invest in science, technology and innovation, with growing relevance of issues such as sustainability, indigenous and traditional knowledge, freedom and intelligence.

New theories, doctrines and research methodologies are emerging as fast as the companies that populate the virtual sphere (maybe a noosphere) that houses new business models, innovation processes and marketing experiments (as subsystems of an experience economy). Research, development and innovation take place at a global scale while struggles for territorial and energetic control become even harsher.

Social, cultural and even spiritual dimensions in the challenging business of knowledge management have been stressed out since the 1980s as East and West economic

interactions became the leading axis of 21<sup>st</sup> century economic development.

## Massive Communities

The massive combination of military and business innovations, rising public and private research and development investments and political alignment among globalization interests led to the information revolutions, pluralistic and multi-layered, rich in its potential for icon and value creation in different designs of space-time specific challenges and issues.

The paradoxical emergence of a multi-player massive global game of local actions is changing both the economic and metaphysical structure of life in the planet.

Although technology is always path-dependent, never in History has one specific technology had such a pervasive influence—the ‘exceptions’ being only its previous manifestations as the alphabet and the print.

The third wave of intelligent evolution evolves around the creation of icons, through the intelligent combination of codes and advanced skills in symbolic analysis. Operating icons define the space-time options involved in my living decisions.

## Iconomics

The space-time of icons conforms an Iconomy. Research and action in this evolving and innovative networked environment defines Iconomics as a new program and paradigm.

The quintessential and visible evidences of this state of affairs are the groupware innovations that characterize the evolution of the internet, generating both R&D prodigies (such as the genome project) and commercial blockbusters (such as MySpace, Orkut, Napster, BitTorrent, iTunes and similar networking communities for the average Homer Simpson on the block).

The challenging mixes of global, local and individual (even intimate) aspects of life inspire new business models and creative cultures in all aspects of the economy. A mass market for niches (such as described in The Long Tail<sup>1</sup>) can be viewed as one of the tangible effects of the pervasive computing model we are dressing our bodies with.

The design of connections as combinatory of symbols and codes entices art and science. There is a truly richer perception of complexity, but the genius of design comes from focusing on simplicity as the triple source of value,

identity and effectiveness.

## Community as icon-creation

Our research challenge in this world of ‘me’s’ and ‘myself’s’, where the expression “community” became an icon in itself, thus making room for the exquisite and paradoxical of a myriad of ‘individual’ communities (my son created or participates in hundreds of Orkut communities, but he refers to this database as ‘my communities’), is to design human connections that make sense for the intelligent development of ‘real life’ communities (this is not to say that avatar communities such as those existing in gaming environments such as SecondLife are not real in a deep sense).

My space-time is framed by slums, street crime, child prostitution, vast networks of drug, arms and body parts operating from within prison cells, extreme income inequality and entrenched prejudice against indigenous, black and other groups, softened by equally extreme freedom, solidarity and informal carefulness in social relations, coexistence and cultural variety.

‘Community’, in the Brazilian context, has become an expression for designating those that pertain to low-income areas in the periphery of cities small to big, unstable architectures with religious, criminal, political and cultural articulations.

Mediatic capitalism is a new regime of capital accumulation regulated by the value aggregation of knowledge creating activities and the development of intangible assets (brands, consumer habits, technological standards and service-based value chains). This new form of capital accumulation has also led, for policy purposes, to the increasingly relevant clustering of ‘creative industries’.

The term ‘mediatic’ stresses not only the growing role of media (ICTs or information and communication technologies) but also the key function of intermediaries in the organization of productive and distributional networks. Infomediaries, regulators and knowledge-based business consortia and local informational clusters are examples of economic agents and institutions defined by their skills in the production and management of information, communication, knowledge and cultural networks in value chains, power dynamics and organizational structures. This perspective requires new approaches to governance in the context of rapid globalization and emerging organizational semiotics.

For the peripheric nation-states of the world system, a new threat emerges: there is a growing concern not only

1 See [longtail.typepad.com](http://longtail.typepad.com)

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with technological and knowledge gaps, but also with the emergence of a 'digital divide' within developing societies. On the other hand, neo-illuminists preach on the creation of development opportunities led by new technologies (such as the infamous US\$100 computer).

The purpose of this paper is to showcase one possible strategy in order to bridge the development gaps between the local and the global in the context of asymmetric globalization, thus creating an economic space that has oftentimes been characterized as 'glocal'. The digital creation of this emancipatory space-time is the utopia within the research and development of a City of Knowledge.

This glocal space-time is the result of weaving digital networks geared to the solution of local development challenges (projects). The City of Knowledge, a pioneering research-action program at the University of São Paulo, Brazil<sup>2</sup> has led for the past 5 years numerous local development projects, funded mostly by State agencies (federal and local), focusing on the exploration of opportunities for socio-economic inclusion and, as we have stressed since 2005, on "emancipation" through digital but also from digital media and tools, especially targeting real life improvements in employment conditions, tangible income, self-respect and other intangible assets.

### **Mediatic capitalism, knowledge economy and peripheric development**

One important consequence of techno-based optimism has been the emerging markets mania which finally led to the so-called Asian crisis of 1997, as a matter of fact a global crisis that severely affected most of the developing world, which

became even more dependent on global economic and geopolitical leaders. Brazil, in particular, was one important space for the privatization of telecommunication networks, surfing the same speculative bubble that overthrew the rest of the connected or globalized financial markets (and forms of life). Brazilian society is then soaked into a new wave of telecom and digital media global expansion and bubble as the State and regulation zoom out of the scene.

Before the 1990s crises, several countries became known as 'big emerging markets' as a result of their earlier economic successes: South Korea, Brazil, China, India, Mexico and South Africa are some of the most often mentioned. They seem to achieve, despite recurring crises and institutional instability and corruption, new levels of regional and global power. But for many segments of the population in these societies the opportunities of globalization have also created higher unemployment, dislocation and financial uncertainty.

It should be noted that these countries have come to great efforts in developing indigenous information technology industries. India is certainly the most notable case (from software to Bollywood), but South Korea and Brazil also developed peculiar paradigms in the ICT and creative industries sectors. These developing nations are also entering a stage of mediatic capitalism centered on the expansion of the knowledge economy and its more creative industries (iconic capitalism or iconomies, literally accumulating wealth on the basis of branding and property rights on knowledge assets in cultural, scientific and political spaces).

Notwithstanding, from political, epistemological and institutional perspectives these late capitalist forms are only beginning to build up confidence and local organizational cultures akin to the new global development paradigms based on networked ICTs. ICT for development (ICT4D) is now a notorious research agenda. Sustainable development issues much closer to environmental sustainability are also at stake. Strategic and oftentimes military or security issues come to the fore.

### **Community values, mobile markets and public university in between**

In India, the university system produces 240,000 engineers a year, but only 40% of Indian women and a quarter of the men can read, while 35% of the country's population lives below the poverty line. Only 19 of every thousand people have access to telephone main lines, and 2 of every thousand have personal computers. The cost of Internet access is approximately US\$42 for 20 hours/month, or 8% of per capita GDP. In Brazil, the typical access cost would be

<sup>2</sup> See [www.cidade.usp.br](http://www.cidade.usp.br)

lower, about US\$15 for 20 hours/month, but this amounts to about 12% of the national minimum wage set by the federal government.

However, Indian engineers thrive in the Silicon Valley and Bangalore has become a landmark in the globalization of the software industry. Brazil is Latin America's Internet powerhouse. With half the region's population, it is the single largest market for Internet services and e-commerce. Because 49% of Brazilians are 24 and under, in the next decade this baby boom will form a potentially lucrative internet market. The number of Brazilian adults (over 18) who use the internet more than one hour per week is expected to grow from 4.25 million in 2000 to 10.34 million by 2003. As a percentage of the wealthiest 15% of the population, the penetration rate is 25.27% in 2000 and expected to more than double to 58.11% in 2003.

The main question in face of these inequalities is: "whose Internet is to be developed?" Are we condemned to a natural expansion of the Market or can we alter this profile through policy-led changes in the organizational cultures of companies and communities? What should be the role of universities (especially large, public universities) in the 'tropicalization' of emerging ICTs?

The Internet and the digital economy look quintessentially American. The core technology was developed and has diffused most rapidly in the U.S. The lead firms in e-commerce are American. The lead governance functions, such as the granting of domain names, are American or dominated by American interests. While on the other hand, the Internet is by its very structure culturally pluralistic and, in its structural openness, it represents the ultimate vehicle for global economic liberalization, integration, and dynamism.

For these very reasons, the rise of the Internet and the digital economy threaten entrenched interests and arouse fears of loss of control over collective life and cultural identity.

In order to face these challenges, the role of networks must be stressed and their communitarian, public nature should be ranked first among the organizational features of the emerging development paradigm. However, this is clearly contrary to the ideology of the U.S.-led, privatist and corporation dominated development model (although the American scene also stages opposing, community-based and libertarian attitudes as well as views of communities as the most adequate economic space for marketing and economic development, v.g. My Space bubble).

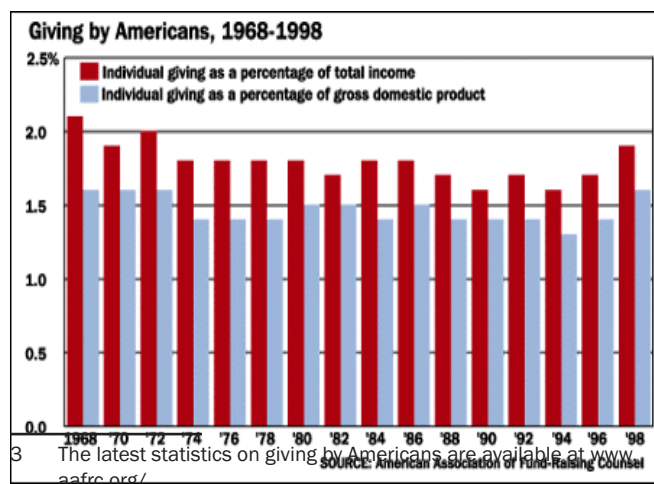
The perception of this new agenda is gaining momentum—and the so-called Asian crisis certainly contributed to a positive, pro-active revision of the totally free markets approach. Notions of shared knowledge, shared global priorities and an updated reflection on the theory of public goods come to the fore as well as a renewed interest in the commons (creative commons, open source economics, complementary currencies and freedom of the code are the components of this new utopian toolkit).

The revolutionary implications of the Internet and the digital economy now require the State and non-governmental organizations from civil society (NGOs) to take on new roles and develop new policies and governance institutions, while corporate interests reign in earlier innovators and digital networks become increasingly populated by corporate blogging.

The global character of the digital economy has prompted the advocacy of international governance bodies, the incorporation of foreign interests in American dominated institutions and the development of new organizational forms for governance of the digital economy such as privatized or quasi-private governance institutions (even companies beginning to favor self-regulated agencies to tame market forces or build up compensatory policies).

### Emancipation through public spaces in the new economy

It should be stressed that the US has been one of the leading territories for the expansion of community-based construction of collective organizations known as "non-profit organizations". In 1999 alone, Bill Gates and his wife have poured US\$16-billion into the Bill & Melinda Gates Foundation—he recently announced his resignation from Microsoft in order to dedicate himself fully to the Foundation. Donations to charity in the US reached US\$260 billion in 2005, confirming a very stable level of commitment (the 40 years average for individual giving as percentage of income is 2.2%)<sup>3</sup>.



The development of this community-based development of social life is finely pictured by Peter F. Drucker, Clarke Professor of Social Sciences at the Claremont Graduate University in Claremont, California:

Society in all developed countries has become pluralist and is becoming more pluralist day by day. It is splintering into a myriad of institutions each more or less autonomous, each requiring its own leadership and management, each having its own specific task. This is not the first pluralist society in history. But all earlier pluralist societies destroyed themselves because no one took care of the common good. They abounded in communities but could not sustain community, let alone create it. If our modern pluralist society is to escape the same fate, the leaders of all institutions will have to learn to be leaders beyond the walls. They will have to learn that it is not enough for them to lead their own institutions—though that is the first requirement. They will also have to learn to become leaders in the community. In fact they will have to learn to create community. This is going way beyond what we have been discussing as social responsibility. Social responsibility is usually defined as doing no harm to others in the pursuit of one's own interest or of one's own task. The new pluralism requires what might be called civic responsibility: giving to the community in the pursuit of one's own interest or of one's own task. There is no precedent in history for such civic responsibility among institutional leaders.

According to Drucker, the last pluralist society in the West existed during the early and high Middle Ages.<sup>4</sup> The Roman Empire tried, quite successfully, to create a unitary state in which Roman law and the Roman legions created political uniformity throughout the empire while cultural diversity was preserved. But after the collapse of the Roman Empire, this unity splintered completely. In its stead arose a congeries of autonomous and semi-autonomous institutions: political, religious, economic, craft oriented, and so on. As we enter what might be the end of the U.S. hegemony in world affairs, a similar state of decentralization might emerge, a condition that can only be diverted from chaos and instability through the buildup of local, regional and transnational communities.

One important institution that bridged the transition from medieval to capitalist society was the medieval university, autonomous and a law unto itself. But as Drucker stresses, there were also the “free cities, the multi-nationals of the medieval economy. There were the craft guilds, and there were the all but autonomous major orders and great abbeys of the Church”.

Moreover, “statesmen and political philosophers tried throughout the Middle Ages to re-create community”. This was the beginning of modern political philosophy, which finally converged into the bourgeois philosophy of law and the advocacy of a lay State. A similar revision of political philosophy and thus of the associated political economy is needed nowadays.

“The trend toward the total monopoly of power by one institution, the government, still dominated the first half of the twentieth century. The totalitarian regimes, whether Nazism in Germany or Stalinism in the Soviet Union, can be seen as the last, extreme attempts to maintain the unity of power in one central institution and to integrate all institutions—down to the local chess club—into the centrally controlled power structure. Mao in China tried to do exactly the same with a major effort to destroy the prime autonomous power in Chinese society, the extended family.” Drucker favors a new pluralism and reminds us that the first new institution that was not part of government was the large business enterprise, made possible around 1860 to 1870 by the two new technologies of transportation and information.

What should be taken as an input for an updated view of pluralistic societies is the fact that information and transportation technologies have only continued to revolutionize and be revolutionized by continuous innovation processes centered on knowledge creation.

However, if one takes into consideration the collective nature of knowledge creation, it then becomes clear that it is not the large business enterprise in itself that will define the new scope of a networked society, although the new paradigm of public spaces regulated by a non-centralized polity must be built on the inherited and unstable structures of industrial capitalism and financial globalization.

For Flores and Winograd, “all new technologies develop within the background of a tacit understanding of human nature and human work”, for “we encounter the deep questions of being when we recognize that in design tools we are designing ways of being”.<sup>5</sup>

4 “The New Pluralism”, chapter 1 of Peter F. Drucker, *Leading Beyond the Walls*, Iain Somerville et al. (Editor), Drucker Foundation, 1999.

5 Flores has had experience with social and political organization at the highest level of government, in his posts as director the state-owned corporations, Minister of Economics and Minister of Finance



Among many fruitful insights that cannot be examined at length here, Flores and Winograd adopt an evolutionary perspective that stresses computer systems which need not have “a fixed structure built by a programmer but can be an evolving structure shaped by interactions”.

The central challenge for the construction of knowledge-creating public spaces which involve intercourses among different organizations (and thus among different organizational cultures) is to rank interaction as a priority, so that the changing potential of the structure becomes continuously evident and tacit knowledge resides wherein as permanent flow. A new mode of knowledge production could then be supported by project-based connections to public universities.

The idea of weaving a knowware, of community-based information design through shared and diversified learning practices in hybrid (virtual and real) time-spaces, embraces current research on the anthropology of digital networks wherein work, learning and innovation exist in a state of flow.

These communities of practice can only be grasped through “composite concepts” such as “learning-in-working”, which represent “the fluid evolution of learning through practice”. In these spaces, “the actual noncanonical practices of interstitial communities are continually developing new interpretations of the world because they have a practical rather than formal connection to that world.”<sup>6</sup> The increased pace with which knowledge is now being created, compiled and exploited has pulled modern-day societies towards a new paradigm known as the “economy of knowledge”, which is “a system in which knowledge is the true essence of competitiveness and the driving force behind long term development”. While the new economy is now widely acknowledged as a local development frontier, it is also urgent to stress that this economy “is not restricted to the revolution in information and communications technology, nor to e-commerce or the possibility of sending information to any point on the planet in a matter of seconds” but rather it is a human development challenge. The new economy demands “the creation of inter-institutional networks for solving problems and an intensive use of knowledge on a social level”<sup>7</sup>.

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in the government of Salvador Allende in Chile between 1970 and 1973. Winograd has worked with artificial intelligence research at the MIT, Stanford University and the Xerox Palo Alto Research Center.

6 John Seely Brown and Paul Duguid, “Organizational Learning and Communities of Practice: Toward a Unified View of Working, Learning, and Innovation,” *Organization Science*, February, 1991. Quotes from the online version available in: [www.parc.xerox.com/ops/members/brown/papers/orglearning.html](http://www.parc.xerox.com/ops/members/brown/papers/orglearning.html)

7 From “Continent Digital.Net—Research Program on Knowledge Economy in Latinamerica and the Caribbean”, at [www](http://www.continentedigital.net).

## Conclusion: Telementoring digital emancipation

The design of cross-cultural organizations through the combination of mentoring and Internet has led to telementoring programs in the U.S.<sup>8</sup> Working as an editor of a newsletter on technology and career directed towards high school students in Brazil in 1998, it became clear to me that students faced growing difficulties to choose among careers and even to understand what a “career” is becoming under the impact of technological change and globalization.

The development of a City of Knowledge then represented a hands-on approach to connecting schools to companies and other organizations (mostly NGOs) through internet portals. Company executives act as mentors, while high school students and undergraduates are mentorees (undergraduates, if engaged a mentorees, must also play the role of mentors with respect to lower level students in high schools). The basic target were underserved public schools and students. The average student has no stable economic condition and many have problematic families.

Government officials from the Ministry of Science and Technology, the Ministry of Education and the Ministry of Planning have been active in the project and have provided funding and monitoring its progress since 1999, when the Board of the Institute of Advanced Studies of the University of São Paulo approved the telementoring program as one of its research activities. Among other results, we expect to:

- generate a “collaboratory” for the creation of knowledge communities (testing methodologies, database designs and network architectures),
- develop innovative metrics with respect to online behaviour,
- implement “talent databases” that can foster local employment opportunities,
- build networks of experts in knowledge creation, intangible assets and creative industries in Brazil and abroad, supporting digital production in local communities,
- create an interinstitutional space beyond the existing boundaries of the educational system as well as corporate organizations and regulatory agencies,
- promote a flexible and evolutionary consciousness of the role and risks of ICTs, favoring free culture and open source practices,
- to offer a permanently updated portal with links to worldwide centers of excellence in innovation, knowledge creation and development finance, thus

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[continentedigital.net](http://continentedigital.net).

8 For a list of links to telementoring programs, see [www.tnellen.com/tesd/telebook.html](http://www.tnellen.com/tesd/telebook.html).

promoting the competitive insertion of the Brazilian society in the global knowledge economy.

Current progress of the project can be observed at [www.cidade.usp.br](http://www.cidade.usp.br). Since 1999, US\$2 million were invested in the incubation and diffusion of networking practices that could result in new public policies for human development under ICT-related investments.

Knowledge and content management systems are used, both web-based and mobile, as cellular telephony expands at spectacular rates in Brazil (but also topping as local income barriers become clear, at about 90 million users, against about 30 million with access to computers and networks).

Thus our decision, in the modeling of local development practices through digital media in the Northeast village of Pipa, Rio Grande do Norte, to focus on the production of local knowledge and its digitalization in different forms, waking the community (especially young people and artists) up to the challenge of producing digital emancipation by generating income with 'exports' of cellphone downloads of local content.

The creation and telementoring of this emerging national cultural network, fostering its connection to the market was part of a project sponsored by the Presidency of Brazil's Council on Social and Economic Development in 2003, 'Saber Global' (funding institutions since 2003 have been Caixa Econômica Federal, the 3<sup>rd</sup> largest bank in Brazil, National Institute for Information Technology at the Civil House of the Presidency and the Ministry of Science and Technology).

The expansion of this local production network mediated by the largest public university in Brazil may also illustrate in the near future one of the many possibilities open to 'distance education' as the networking projects further the open source collaborative spirit into community projects both academic and civic in 'real' cities and villages in different parts of Brazil.

Revenues generated are channeled into local development

and democratic distribution of intellectual property rights. The ongoing research, development and innovation process is funded by the FINEP agency of the Ministry of Science and Technology of Brazil (Financing Agency for Research and Projects). The rapid prototyping of this social innovation has also opened opportunities with social responsibility areas of corporations in the telecom sector.

New regulatory controls and grassroots development of networks could work as antidotes for the ultraliberal approach to mediatic capitalism. One should look for alternative governance strategies at various levels (family, companies, governments and international public spaces). Glocal pipelines based on the reengineering of digital production chains are a new possibility once the internet is contextualized within the digital emancipation paradigm.

Alternative views of the new society could emerge out of the new economy (or even new business models and organizational cultures as symptoms of a new economy now blossoming in 'knowledge cities'), as opposed to the ultraliberal view.

As new e-commerce technologies, uses, business models, and legal frameworks develop outside the U.S., they challenge the early dominance of ultraliberal policies and market-friendly regulations. In this view, the outcome of these divergent or conflicting technological, economic, and regulatory developments may be a number of differing knowledge economies reflecting local, national and regional communities.

These communities may drive distinctive lines of technology development in which local firms may have an advantage. Differences in policy will affect the development of technology, markets and products. The tremendous expansion of mobile telephony in Brazil presents itself as a promising opportunity for this policy-oriented approach.

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