Title: Netizens, hive-minds, the profiled : new wired identities of the communication revolution era

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Netizens, Hive-minds, the Profiled: New Wired Identities of the Communication Revolution Era

The projects of *connectivity* haunt the modern man. The ability to be connected decides over more and more aspects of life while those *un*-wired are being relegated to the margins of society that are possibly darker than any known before. New environments of human communication have also introduced a new kind of (un)awareness of change – with all data – news, weather reports, private communications, and *spam* – speeding indifferently through cyberspace – the content and meaning seem to many to be lost.

From this context emerged new dilemmas – issues themselves all interconnected in a complex network of references, discussed within new interdisciplinary fields of knowledge. Two notions are central to those recent disputes: identity, what does it mean to be somebody (something?) in those new contexts, and, lately, property, as the Net-discourse, as previously discourse of virtual realities,[1] moved from the marginal, technical and ideological grounds to more, either academically and economically, central discourse of power relations, race, gender, and economy. In this essay I try to present how the two are *inter-connected* in creating new qualities in human subjectivity and *trans-subjectivity*.

As I am totally aware that the issues addressed below have already become the focus of numerous, usually interdisciplinary, researches, nowhere in the

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[1] Cf. Chris Chesher. "Colonizing Virtual Reality: Construction of the Discourse of Virtual Reality, 1984–1992" (english-www.hss.cmu.edu/cultronix/chesher.htm).

essay to follow do I pose myself as an expert in these emerging fields; neither am I able to, nor do I intend to do so. Rather, I believe this article is a collection, already terribly dated (time passes now so quickly), of interrelated[2] notes to my search for a space to visit, a report from a reconnaissance into the space that is fantastically multidirectional, plausibly also *indescribable*. Thus, in places where my account becomes hazy I beg your tolerance, yet such seems the very essence of places I try to depict.

If this work also appears to be excessively chaotic, it is so because, apart from stylistic and methodological faults, its content may be truly desperately misplaced, as it discusses the relatively recent mode of scholarship while making use of the conservative medium. While hoping it will soon be "hypertextual-ized" and available for alternative reading on the Net, for the time being I must expose this neither strictly linear nor hypertextual essay to the somewhat uncomfortable conditions of voluntary detachment.

The Virus of Posthumanity

It is *perhaps* possible today to fashion software that could alter physical qualities of the hardware on which it is run. An adeptly designed virus may enter your system undetected and run the algorithm that is used to change refreshing frequencies and display resolutions of the monitor. This algorithm itself is rather handy as it renders changing those frequencies and resolutions possible, without resetting the machine, that being a time consuming and trou-blesome necessity. Every time a change from one setting to another occurs the monitor screen goes blank for a second and there is "an audible clunk from inside of it as the resonating crystals inside lock on a different range of frequencies."[3] If the virus caused this to happen several times in a row the screen would go blank and after several clunks it would explode in your face. "The front of the tube that is made of heavy glass [...] [would] frag-ment and speed into [...] [your] face, neck, and upper body. The very same phosphors that glow beneath the sweeping electron beam conveying infor-mation to [...] [your] eyes, [...] [would] be then physically embedded in [...] [your] flesh."[4]

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[2] Hence the overwhelming number of endnotes. They paradoxically try to imitate the hypertextual intertextual spectrality. Paradoxically, since the hypertext was originally to imitate and augment footnotes' and endnotes' intertextuality.

[3] Neal Stephenson. *Cryptonimicon* (New York: Avon Books, 1999) p. 349.

[4] Ibid., pp. 349–350.

This happened to Pekka, or the "Finn Who Got Blown Up," a character in the novel *Cryptonomicon* by Neal Stephenson.[5] Pekka, the first victim of the Digibomber, suffered major injuries – amongst others, his voice box was smashed by a hunk of broken glass. Supported by a geek group under the name of Eutropians who paid all his medical bills, he was quickly equipped with a computer voice box, "like Stephen Hawking's,"[6] thus acquiring a new identity of being one with a machine. His thoughts may only be channeled by the machine, without the machine his existence would be limited to an entity devoid of the marvels of oral communication.

Until lately everyday discourse had positioned any such ponderings over machine-as-being-one-with-human identity strictly in cyberpunk prose and futurology. Today we find this culturally marginalizing policy questioned as the cyborg theory and notion of the "posthuman" identity have moved from the (military) margins to the mainstream of academic discourses and are becoming central issues of a new (battle)field of interdisciplinary research: not only cybernetics-inspired information theorists, the military men, neuro-surgeons, rehabilitation therapists, who have been doing that for years, but today also sociologists, philosophers, theologists, students of culture, evolutionists, ethicists, aestheticians, linguists, and possibly others, all look with interest into possible developments of posthuman projects.

Comparable perhaps only to the fervor we see in modern genetics, many of such often heated-verging-on-fiery interdisciplinary exchanges rely on vituperation – condemning the other side for offences and peccant shortcomings ranging, respectively, from technophobic conservatism and redefining – destructively – the human selfhood and subjectivity, to anti-progress rampant ludditism and neo-eugenic, ultra racist manipulations.[7] Thus leaving the general audi-

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[5] The novel is interesting not only for its literary content. It is the first novel ever written entirely on a Linux based word processor. Also, a rather rare thing for a literary work, it cannot (could not?) be exported in its electronic form outside the US, as it features a rather strong two decks of cards based cryptographic system "Solitaire," which falls under the Munitions Exportation Act.

[6] Stephenson, *Cryptonomicon*, pp. 349–350.

[7] One of the most intriguing uses of cyborg theory comes from Donna Haraway, whose influential essay called short "Cyborg Manifesto," first published in 1984, is sometimes regarded as the sacred text of the emerging "cyberfeminists." Most generally, Haraway comments rather optimistically on how it is possible to construct one's identity, sexuality, even gender implementing technology. (Donna Haraway, "The Ironic Dream of a Common Language for Women in the Integrated Circuit: Science, Technology, and Socialist Feminism in the 1980s or A Socialist Feminist Manifesto for Cyborgs," www.rochester.edu/College/FS/Publications/HarawayCyborg.html). The complete version appears in Haraway's book *Simians, Cyborgs and Women: The Reinvention of Nature* (New York: Routledge, 1991), pp. 149–181 and on the University of Stanford based website www.stanford.edu/dept/HPS/Haraway/CyborgManifesto.html). Her latest extravagantly titled book discusses in greater detail the

ence somewhat puzzled not only about the quality of the future but also, that more unsettling, about the possibilities and feasibilities of the present, the ongoing debate contributes to the nearly global confusion, fitting nicely with its chaotic, paranoiac architecture the metaphorical intertwined natural and technological spaces of the information driven cyborg and of the Internet, which paradoxically was supposed to mirror and represent the real spaces.

In rehabilitation and transplantation robotics has been in use already since 1950s,[8] thus Pekka may be a fictitious character, still Stephen Hawking is a man of flesh and blood... and technology. He lives in the present, not in the future. Even not at all eager to call the spectacular scientist a cyborg[9] one could agree that a step further in combining technology with the humans will surely require a new moniker.[10] Just how tiny or huge this step should be is impossible to tell at this time – also because of our lately attained inability to define time in any intelligent way.

The monitor-blasting virus might have sounded science fiction, yet is it really true or false? – can you kill people via the Internet or not? That possibly the mere idea that you could takes you by surprise is only partially caused by

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ways in which biological networks and biotechnology construct human bodies. Donna Haraway Modest_ _Witness@Second_Millennium. FemaleMan©_Meets_OncoMouse® (New York: Routledge, 1997).

[8] A heart-lung machine was used to control the blood circulation of an 18-year-old girl during an operation in 1953. A 43-year-old man received the first heart pacemaker implant in 1958. The term "cyborg" – short for "cybernetic organism" – was coined by Manfred Clynes and Nathan Kline as late as in 1960.

[9] Although many would insist on calling him so. While truly "'parallelism' (*dividing the increased responsibilities among a number of existing subsystems*) and 'integration of efforts' were implemented before we became humans – and actually were an important pre-requisite for our existence" (Alexander Chislenko, "Legacy Systems and Functional Cyborgization of Humans," 1995 www.lucifer.com/~sasha/articles/cyborgs.html. 15.04.2000, comments added), it is also often argued that implementing technology in the form of "intentionally designed extensions" (ibid.) – such as clothing, tools, houses, transportation, heating, cooking, etc. – into functioning of the "convoluted, undocumented and structurally inflexible biological [human] bodies" (ibid.) constitutes a natural evolutionary process of becoming a cyborg (or perhaps a functional cyborg, a "fyborg" (ibid.)). Thus – what follows – "the cyborgization of the humankind – the merger of biological and technological elements – has been, and most likely will be, proceeding, according to the usual scenario of the evolution (*upgrading*) of legacy systems (*i.e. ones basing on the old inflexible, unreliable 'mainframe' 'wetware' and' meat'*)." (ibid., comments added).

[10] For a personal account on plans "of becoming one with his computer" you may check Kevin Warwick's Cyborg 1.0 http://www.wired.com/wired/archive/8.02/warwick_pr.html. Kevin Warwick (kw@cyber.rdg.ac.uk) is a professor of cybernetics at the University of Reading in the UK (www.cyber.rdg.ac.uk). This may well be just a starting point for an Internet survey on cyborgs. I suggest visiting cyborgs and other machinic adventures' web site for a nice collection of links: http://www.t0.or.at/msguide/cyborg.htm

a limited and monitored access to information. The concern here is, of course, not whether we are going to believe any accounts on the digital bombs or functional cyborgs, because this is a subjective issue that needs to be addressed in the intimacy of our own intelligence, experience, and gullibility. Much more generally, what concerns us are the times which are nearly indiscriminate in telling fiction from fact – in other words, the condition of information, space and history under postindustrial postmodernity. The impenetrable spatial vastness of the archive is but one determinant of this impotence, deciding upon the working definitions of intelligence as the ability to make valid selections. The subjective nature of "the present" and the ratio in which changes occur, define this condition just as accurately.

End of History Revisited

As it has become the working Silicon Valley ideology to separate the elements of the ethical triad of Possibility/Feasibility/Usability and merge them all into one catchy slogan: "Act first and request permission later," the strategic control (and hence panoptical information coverage) over ultramodern technologies is disappearing. Phrases like "to be on the cutting edge of something" or presenting "the state of the art" do not seem to mean much these days. Although the cutting edge might still be quite sharp, just no-body knows what it is cutting right now. Bill Gates and the "Wired" crowd may get more of the possible directions of the Net's developments, still they must have been surprised by the Blair Witch Project extravaganza that had shown for the first time the Net's real culture and market programming potentials. "Information is power," but who has the access to all information? History seems to have reached yet another, more personal, dimension. This inability to predict change have also perversely contributed to the return of "end of history" paradigms.

In what seemed its last leap, history played a tremendous trick on societies of the turn of the century. The media reluctantly reported, with few in the public truly amazed, that the coming of the 21st century was indeed nothing spectacular – after all it came down to a few big parties, without any honest devotion to visions of revolutionary transgression or millennial Armageddon. It happened so, amongst other things, because the 21st century had already come the previous year. Possibly the last effort to establish a commonly agreed single turning point of history (or 24 hours, rather) was 00:00:01am, Jan 1, 2000, traveling with the Sun around the globe, as it was when the Y2K bug was supposed to strike decisively. Lingering, erroneously, over millennial topics, many professional commentators and consultants foresaw consequences rang-

ing from minor local blackouts to the annihilation of life on the planet Earth.[11] Nothing like that happened, and a lot of money – in the U.S. solely between $100–600 billion[12] – had been spent in the process of fixing a problem that turned out not to be that serious. Luckily, what seemed to many to be absolutely beyond control was found tame the day after the New Year's Day party.[13] And nobody could have predicted it. Hanged over as some were, nobody could either agree on the present day they were experiencing. The metaphorical "information bomb" that "threatens to eradicate history and to subsume local, disparate times into the 'real time' of the global network"[14] of which Paul Virilio writes, might have exploded and history "stopped," dissolving into subjective narratives.

In the essay „Pataphysics of Year 2000" (don't be misled by the title – originally published in 1992) Jean Baudrillard speculates on how history might end with no regards given to the observer's subjective viewpoint. He suggests a universal yet paranoid "embrace all" theorizing, by showing how seemingly incompatible physical explanations of change – entropic (driven by the energy of centrifugal force) and those based on theory of relativity's prediction that saturation of energy and mass influence time – come to a common end (of history). Baudrillard makes a claim that no matter what you say or do, history ceased to be.

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[11] A list of these prophecies is to be found, e.g. at: Declan McCullagh, "What They Said with Dread" *Wired News*, Jan. 4, 2000 www.wired.com/news/0,1294,33419,00.htm. Here are some samples:

> The Year-2000 phenomenon [...]will be much more pervasive and serious than most of the [disasters] we've "experienced in modern history."
>
> Ed and Jennifer Yourdon

> Economic slowdown [...] unemployment rises [...] interruptions in utilities [...] common use of heaters, cook stoves [...] increase in layoffs [...] some neighborhoods form purchasing associations [...] [probability of this outcome or worse] is 65 percent.
>
> Consultant Bruce Webster

> The problem will not be fixed [...] . I'm saying that it's over. Right now. It cannot be fixed. Whatever it does, the Millennium Bug will bite us.
>
> Christian Reconstructionist Gary North, early 1997

> We're going to suffer a year of technological disruptions, followed by a decade of depression [...] We're likely to be living in an environment much like the Third World countries some of us have visited, where nothing works particularly well.
>
> Consultant Ed Yourdon, February 1999

[12] Joanna Glasner, "Y2K Still Bugging Lawyers" (*Wired News*, May 22, 2000, www. wired.com/news/0,1294,36400,00.htm).

[13] Naturally, with stocks of whole large branches of "survival industry" sky rocketing on the stock markets.

[14] Mark Andrejevic. Review of John Armitage, ed. *Machinic Modulations* (www.otal. umd.edu/~rccs/books/Lévy/armitage.html).

First, following physical imagery of centrifugal force, he outlines how

> the acceleration of technology-, event- and media- driven modernity, as well
> as the speed of other economic, political and sexual exchanges have set loose
> a tempo of liberation whereby we have become removed from the sphere of
> reference to the real, to history.[15]

Once "atoms of meaning" go beyond the gravitational pull "that keeps
bodies in orbit," propelled by the acceleration of technology and "all process-
es in all possible senses and wherein"

> each event, each narrative, each image gets endowed with the simulation of
> an infinite trajectory. Every political, historical, cultural fact is invested with
> a kinetic energy which spreads over its own space and thrusts these facts into
> a hyperspace where they lose all meaning by way of an inability to attain
> their meaning.[16]

This is already enough to declare the end of history, for history, being the
"potential re-narrativization of a sequence of meaning," just as narration, has
become impossible.

The second hypothesis, opposite to the first one, also draws from physics
and states that history, similarly to physical time, is affected by the accumu-
lation of matter. Says Baudrillard:

> Our societies are governed by [...] [the] process of the mass, and not only
> in the sociological or demographical sense of the word, but also in the sense
> of a "critical mass," of going beyond a certain point of no-return. That is
> where the crucially significant event of these societies is to be found: the
> advent of their revolutionary process along the lines of their mobility, (they
> are all revolutionary with respect to the centuries gone by), of their equiva-
> lent force of inertia, of an immense indifference, and of the silent power of
> this indifference. *This inert matter of the social is not due to a lack of
> exchanges, of information or of communication; on the contrary, it is the
> result of the multiplication and saturation of exchanges.* It is borne of the
> hyperdensity of cities, of merchandise, messages and circuits... Neutralized
> and bullet-sprayed by information, the masses neutralise history retrospect
> and act as a screen of absorption.[17]

This opposite vision creates a state in which history reaches its end, "not
because of the lack of actors or participants, not due to a lack of violence [...]

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[15] Jean Baudrillard. "Pataphysics of Year 2000" (Ctheory, http://www.ctheory.net/
printer.asp?id=53).
[16] Ibid.
[17] Ibid. [Emphasis added.]

not due to a lack of events [...] – but because of a slowing down or deceleration, because of indifference and stupefaction."[18]

The third vision, relying on what Baudrillard calls a "stereophonic effect," points to high fidelity of perception, experiencing and consuming, where the disappearance of history is accredited to *"factual* and *information-al* sophistication."

Baudrillard's end of history realizes best in societies stupefied by the acceleration of technology:

> These societies that no longer expect anything from a future succession of things and have less and less faith in history, societies that bury themselves in the backdrop of their futurological [...] technologies, behind their stockpiles of information and in the cellular networks of communication and where time is finally obliterated in pure circulation – these generations may indeed never wake up, yet not be aware of it. Year 2000 may well not take place – of which they know nothing.[19]

Baudrillard's text writes itself into studies set off by the French interdisciplinary researcher Paul Virillio obsessed lately with the "dromological," that is related to the study of speed, aspects of the latest political and technological advancements. Ultimately negative, Virilio's vision criticizes on what he calls a "dromocratic revolution,"[20] the third industrial revolution, the basis for a "technical fundamentalism, a 'cybercult'," which confines physical spaces, reducing real operational human spaces to the desktop area on the monitor, experiencing in "real time" what once took movement and history to happen:

> In fact, there is already a speed pollution, which reduces the world to nothing. In the near future, people will feel enclosed in a small environment. They will have a feeling of confinement in the world, which will certainly be at the limit of tolerability, by virtue of the speed of information. If I were to offer you a last thought – interactivity is to real space what radioactivity is to the atmosphere.[21]

In the similar tone Baudrillard warns "There is no human language or speech (*langage*) that could compete with the speed of light."[22]

The stasis of such ahistorical approaches once what is put in the focus of interest is the condition of "change." That the change is hard to perceive hardly

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[18] Ibid.

[19] Ibid.

[20] "Speed Pollution" An Interview with Paul Virilio by James Der Derian (*Wired Magazine*, 4.06, May 1996, www.wired.com/wired/archive/4.05/virilio_pr.htm).

[21] "Speed Pollution."

[22] Baudrillard.

convinces that it does not take place. A quick look at developments of technology is enough – although we can't intelligibly declare if it is *today* possible to go to Mars, clone a human, transplant human head – with an illicit uneasy dilemma – who is a donor and who is a recipient, it is also common knowledge that all of those events are just around the corner, and they, just as possible developments of cyberspace into cyborgized networks, have to introduce social changes. "The long tradition of the illusion of progress from the Enlightenment, that history has a predetermined direction,"[23] may be the one shared by ahistorical commentaries.

Because of the dynamics of the developments in technology and information the present may only be described as a state of a *permanent change*, which dupes ahistorical commentators into saying the change does not happen, because a possibility to produce a snapshot, a thumbnail, or a map of the momentary state of the reality, in any field of human activity, must be an illusion. Such inability is scarily valid in humanities where it is also impossible to follow all of the latest developments even in highly specialized fields. With the number of yearly (offline and online) publications exceeding human life-long reading capabilities and technological advances beyond the grasp of a strictly specialized mind, academics must experience heavy dizziness and uncertainty about their own status.[24] Some turn to hypertext and the Internet, seeking the interdisciplinary freedom and communicative revolution the new media advertise so extensively.

Future/Present Shock

While already back in the late 1960s Alvin Toffler described a panic state of knowledge and the uncanny uncertainty about what is to come that he named the Future Shock,[25] we may be in need of another notion here, that for the sake

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[23] "Dark Side of the Boom." An Interview with Manuel Castells by Jay Ogilvy (*Wired Magazine*, 6.11, Nov. 1998, www.wired.com/wired/archive/6.11/castells_pr.html).

[24] The "godfather" of hypertext Vannevar Bush already in 1945 in his Atlantic Monthly article, „As We May Think," [*Atlantic Monthly*, 176 (July 1945), pp. 101–108 – here quotes after George P. Landow. *Hypertext: The Convergence of Contemporary Critical Theory and Technology.* (Baltimore & London: The John Hopkins University Press, 1992), p. 14–19] imagined a machine called memex, that should help scholars overcome the "growing mountain of research [...] that extended far beyond our present ability to make real use of the record." Memex is supposed to mirror and amplify the human ways of thinking in automatic selection and retrieval of information from a global archive, which is something present information retrieval systems (search engines) are far from reaching, as they rely more on brute force enumeration than truly interactive personalized "linking."

[25] Alvin Toffler, *Future Shock* (New York: Random House, 1970).

of convenience and for the comfort of a direct reference could be named the Present Shock or the Present/FutureShock. This Present/Future may be most generally characterised as follows:

To set up objective borders separating the contemporary from the future is virtually or fully impossible. We can only describe subjective guesses dividing history into eras, ages, epochs, (as e.g. the pre Y2K and post Y2K era?), etc.

Thus "the present" is a subjective experience and *feeling*, a personal or group illusion about what we have come to call "now." If we do not know where "now," or "the contemporary" started and where it may end – we may never know where the future starts. The difference between (science) fiction and fact may be similarly only an illusion. By making subjective guesses about the future (as about fiction) we are making guesses about the present (as about facts) and by making guesses about the present we are making guesses about the future.

It is then highly tempting to conclude that it is in this Present/Future that J. F. Lyotard's vision of "the postmodern condition" is realized. Subjective understandings of the present and attempts at describing it constitute metanarratives submerged in the context of (subjective) history, all equally important and valid, provoking distrust varying as to its intensity due to subjective experiences, intelligence, or ideology.

Still, disquietingly, due to the same dynamics of change and technical complexity of telecommunications any ability of making correct guesses about the momentary state of history – and making plausible guesses as to the future – is an elitist privilege of the technically competent. Accordingly, humanist definitions often may not apply, while quite efficiently technical metanarratives (the visions of history) may become working scenarios. As all newly acquired privileges, this one also redefines the social structure of power and thus is an augury of ultimate technocracy[26] in one form or another, which by definition is a step of history.

The explicit inconsistency of the two visions – one claiming that no guesses about the future can be made, and the other granting a class of technicians such a privilege – Manuel Castells – an ex-Marxist-cum-anarchist sociologist

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[26] At least two opposite meanings of the word "technocracy" are circulated by the media. According to one reading, technocracy is the system *ruled* by the experts who fight to bring the future under control, manage it and plan. This kind of technocracy it is often argued, "not liberalism or conservatism, [...] has been the dominant ideology of US politics for most of this century." (Virginia Postrel, "Technocracy R.I.P," *Wired Magazine*, 6.01, Jan. 1998. www.wired.com/wired/archive/6.01/postrel_pr.htm). This vision, deriving from "managerism," presents anti-evolution technocracy in which every change is to be verified, and engineered by the ruling class of experts. More plausibly, experts do not need to be granted any official power as they are likely to control, merely by the privilege of competence, all aspects of political and social life anyway. Surely, this technocracy is more liberal-anarchist, than anything else. It is the latter meaning of "technocracy" that I use.

– would classify as not inconsistent at all. Inquired on his calls for social co-ordination, creating autonomously defined cultural identities, while at the same time warning against all Utopias (technological included, of course) as "leading to terror," Castells says:

> the process of change needs knowledge, and research is a necessary tool. On the other hand, to jump from having an analysis to establishing goals and implementing the path toward these goals from a purely theoretical scheme, be it ideological or research based, almost by definition will fail or build a machine that by its rigidity will ultimately fail.[27]

In other words – applying this rather eloquent version of Murphy's Law to current technophobic anxieties – technocracy, as democracy, is a system in which nothing works as planned, yet only technicians (experts), by a permanent and uncontrolled research, acquire competence to deny quick societal disintegration possible in the turmoil of the constant change.

Is then any research of any value? Should we plan, when we cannot plan, or not to plan? Castells, again, has a ready answer: he suggests "to plan the *nonplan*: *that is to equip yourself*. If you have a goal in a very complex world of interdependencies and then try to define all the actions that lead toward this goal, you're going to build a rigid bureaucracy that will collapse,"[28] but we "need Utopias – on the condition of not trying to make them into practical recipes."[29]

Such "complex world of interdependencies," or the potsmodern archive, is what Deleuze and Guattari call a *rhizome*, a network in which every point is potentially connectible to every other point though there are no permanent connections. Rhizome is a scary space to explore: "If everything is connected, at once and without a fixed center, how do you choose and order the parts? Nothing is as terrifying as a labyrinth without a center."[30] The rhizome must be described by "a map, not a tracing," in other words, a projection that is as multi-directional, rhizomatous, as that which it describes, and not an attempt to find and present a single narrative path. It is no longer spectacularly revealing to say the Internet may be considered such a map – a working model that itself can be only described by a different map. It may also be fair to argue the rhizome is as much a model of the Internet as the latter is the model of the rhizome. Hence, the Deleuze and Guattari paradigm has been distinctively

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[27] Castells.

[28] Ibid. [Italics added.]

[29] Ibid.

[30] Jorge Luis Borges, „Citizen Kane," in *Borges a Reader: A Selection from the Writings of Jorge Luis Borges,* eds. Emir Rodriguez Monegal and Alastair Reid (New York: Dutton, 1981), p. 139.

often incorporated in describing cyberspace and virtual spaces,[31] them being considered maps of the real spaces, as well.

As the rhizome paradigm attempts at describing the indescribable it is for sure useful – still there exists a considerable limitation. A journey started from any "plateau" of the rhizome, in any direction has only one possible conclusion – an epiphany that communicates the indescribable complexity of the rhizome – the nearly panoptical vision of the "works of the world." Such self-fulfilling prophecy (you know of the rhizome because there is only rhizome) presupposes that this stage is again the Hegelian "end of history" – every inquiry must end with a "rhizome illumination," not a new thesis. Rhizome may only expand and boil – it may not be a hotbed of a quality change. The real everyday, permanent quality change, the "communication socio-technological revolution," must deny this model.

Netizens, Hive-minds, the Profiled

This *communication revolution* we have already been witnessing for years has introduced unprecedented new qualities to *everyday life*, such as the ability to communicate freely and cheaply over the Internet with individuals otherwise reachable only at a considerable expense of time and/or money.[32] This revolution introduces new modes of spreading information, of entertainment and, importantly, new modes of scholarship, already christened "cyberscholarship." Lately, however, the focus on the 'Net's use has shifted to conducting business, e-commerce specifically being the flagship of the revolution in progress. Wall Street had had for quite a time Dot-Com companies established as the hottest and most "fashionable" stock,[33] the most striking manifest of this being the creation of the "new economy" index NASDAQ.

"If commerce rests on any single concept, it must be identity. There can be no business without ownership, and no ownership without an 'I' to do the

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[31] For a collection of links to Deleuze/Guatarri oriented cyber-studies researches check: http://lists.village.virginia.edu/~spoons/d-g_html/d-g.html

[32] To defend from an obvious assault – I am aware of the debate on how much this revolution really affects everybody's *everyday life* or, in other words, of the discussion on global tyrannies of information markets over those "not wired," living in the "fourth world" "black holes" – "areas of social exclusion that can be marginalized and the system doesn't suffer at all." (Castells) "They're not valuable as producers, consumers – in fact, if they would disappear, the logic of the overall system would improve. If you are outside the network, in other words, you don't even exist." (Ibid.)

[33] In yet another instance of the unpredictable constant change the dot-com stock took a $2.8 trillion worth dive in the beginning of April, 2000.

owning. To regulate that commerce, there must be a legal system with account-ability – and there can be no such accountability without very precisely iden-tified individuals."[34] Hence, to spell out what it means to be someone in cyberspace has lately become the ambition not only of humanists but much more effectively (especially in the US) of legislators and businessmen, who call for and expect working market standards. Putting legal disputes aside, it is already obvious that spontaneously the revolution era has created several new identity types, a few of them counter-cultural,[35] while some prowling towards the mainstream – to dread of some and enthusiasm of others.

The risks of the Internet's depriving individuals of their privacy have become worldwide nightmare scenarios and have been put in the center of numerous researches. "Soon, a combination of passwords, filters, cookies, pay-as-you-view downloadable books and digital IDs tying users' identities to their machines could transform the Internet into a dark place, where important el-ements of privacy and freedom are erased by an emerging architecture of the all-seeing eye."[36] Of course, the vision of a "transparent society," whose ex-istence is anchored in constant surveillance and where all information is under control is not a new one,[37] still it is rather a matter of the Present/Future, though, than any vaguely defined "soon."

In *Database Nation*[38] Simson Garfinkle details insidious threats to privacy that arise from the Internet, from public and private surveillance cameras, from biometric devices and medical technology, from spy satellites and computer chips, and above all from the unrestrained gathering and unauthorized sharing of personal information through computer databases. He speaks of the near future.

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[34] John Browning, "I Encrypt, Therefore I Am" (*Wired Magazine*, 5.11, Nov. 1997. www.wired.com/wired/archive/5.11/netizen_pr.html).

[35] Of course two of most widely known types are "the hacker," and "the cyberpunk," both featuring elements of ideology, and both equally ill-defined by the mainstream media.

[36] Carl S. Kaplan, "Software Code Has Power of Law on the Internet, Author Says" (*New York Times*, Dec. 3, 1999).

[37] Cf. David Brin, "The Transparent Society" (*Wired Magazine*, 4.12, Dec. 1996. www.wired.com/wired/archive/4.12/fftransparent_pr.html). Brin muses on pros and cons of surveillance systems potentially used in future to protect citizens against crime and concludes his essay with presenting an uneasy dilemma: "One of the basic decisions we all face in times ahead will be this: Can we stand living our lives exposed to scrutiny ... our secrets laid out in the open [...] if in return we get flashlights of our own, that we can shine on the arrogant and strong? Or is *privacy's illusion* so precious that it is worth any price, including surren-dering our own right to pierce the schemes of the powerful? There are no easy answers, but asking questions can be a good first step." (Italics added.) See also David Brin, *The Trans-parent Society. Will Technology Force Us to Choose Between Privacy and Freedom* (Read-ing, MA: Perseus Books, 1998).

[38] Simson Garfinkle, *Database Nation: The Death of Privacy in the 21st Century* (New York: O'Reilly and Associates, 2000).

Earlier, though, Garfinkle described how the very much contemporary credit report company Equifax archives credit history records of more than half of American society.[39]

Another company, Abacus Direct, purchased lately by the Net targeted advertising giant DoubleClick, runs databases that store records of buying habits of more than 80 million American households.

Double Click just lately has withdrawn from the projects to combine Abacus Direct database with information they gather through cookies.[40]

Cookies are small files that serve as unique identifiers for tracking user movements across the Web and are markers indicating where a user last visited or, if the site provides shopping, what a user last put in an electronic shopping basket. Cookies can also be used to track users between distinct sites. By stealthily tracking user movements between sites run by their respective clients on their advertising networks, DoubleClick is able to serve up in real time a unique ad for each user, depending upon a user's interests as expressed via their Web surfing. DoubleClick's reach is extensive. There is a very small chance that you ever visited DoubleClick's website but it if you check your cookies file a DoubleClick log would be there.

The individual, much before one is directly *wired* as a cyborg would, becomes a profile, a map of interrelated bytes of data – *a symbolic system as complex as a society or natural or computer languages, a network of meanings*. Personal, intimate sensual and intellectual experience is exactly as important in this network as any other nods of what may be called a *memome*.

> Memome   is the set of all memes[41] that define the physical reality of a carbon based RIST. Memes can be divided into [...] genetic (DNA) [...] propagated through normal biological reproduction [and] semantic [...] propa-

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[39] Simson Garfinkle. "Separating Equifax from Fiction" (*Wired Magazine*, 3.09. Sept. 1996, www.wired.com/wired/archive/3/09/equifqaxpr.html).

[40] The DoubleClick scandal had a massive coverage in American media. You may use www.worldnews.com for browsing the archives of all major online news sites. DoubleClick set off a firestorm over privacy on the Internet when it announced plans to merge the vast Abacus Direct database containing names, addresses and offline buying habits of millions of consumers with information it anonymously gathers about Internet users as they visit websites. The company's merger plan resulted in a probe by the U.S. Federal Trade Commission and Michigan's consideration of a lawsuit. The controversy ended with DoubleClick withdrawing from the plans to use Abacus Direct database till the legislation regulates the privacy issues. Meanwhile, during the Congressional Privacy Caucus in March 2000 Republican Governor of Texas Joe Barton predicted that "every major piece of legislation considered this year (2000) will have a privacy component." (Declan McCullagh. "Privacy Pervasive in Politics" (*Wired News*, Mar. 24, 2000 www.wired.com/news/0,1283,35152,00_pr.html).

[41] A handful of definitions of a meme can be found on the alt.memetics www site: www.lucifer.com\virus\alt.memetics\what.is.html. Alt.memetics is a usenet discussion group focusing on the future of memetics.

gated by communications. [...] RIST, stands for Relatively Independent Sub-Totality. It can be used to refer to any entity that [...] seems to posses a clear boundary separating it from the world (as do cells in a body) but that [...] is inextricably linked with a larger totality (as do cells in a body). [...] RISTs [...] can attain higher levels of functioning insofar as they are embedded in a larger society, the most logical evolutionary end-point of which is a h i v e m i n d.

A hive mind is a social organization of RISTs that are capable of processing semantic memes ("thinking"). These could be either carbon based or silicon based. RISTs who enter a hive mind surrender their independent identities (which are mere illusions anyway).[42]

Though a work of fiction, *Cryptonomicon* depicts with flashing accuracy what memetics tries to present in a more rigorous field: that it may well be it is not humans who control and spread ideas, but it is ideas that use humans as media, or more precisely, internally unimaginably complex (by communication and telecommunication) "wetware" based computer used for propagating information throughout the system.[43]

In his earlier novel Stephenson portrayed yet another means of communication/calculation. John Hackworth, a brilliant nanotechnology engineer just spent ten years as an involuntary member of the mysterious community of Drummers. Briefed by the NeoVictorian secret service's Major Napier, he finds out about certain nanosites (nanometric parasitic devices) planted in his brain:

"We [...] found several million nanosites in [...] [the] brain [...] Very small ones [...] They are introduced through the blood, of course – the haemocules circulate through the bloodstream until they find themselves passing through capillaries in the brain, at which point they cut through the blood/brain barrier and fasten themselves to a nearby axon. They can monitor activity in the axon or trigger it. These 'sites all talk to each other with visible light.'"
"So when I was on my own, my 'sites just talked to themselves,'" Hackworth said, "but when I came into close proximity with other people who had these things in their brains –"

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[42] Stephenson, *Cryptonomicon*, pp. 356–357.

[43] The main argument over memetics seems to focus on whether memes are, as evolutionary biologist Richard Dawkins coined them in 1976, self-replicating ideas that evolve like living organisms by natural selection, or, as some of their critics have suggested, "hack social science" that implies humans are "simply passive objects of impersonal forces outside of our control." Significantly, memetics is being assaulted most often on ideological grounds, and accused, e.g, .of being "just another attack on the human subjectivity," "bad science," the so-called "positivist mysticism," and of presenting neo-liberal version of biological reductionism, akin to "Social Darwinism and Nazi race science." (Richard Barbrook, "Nevermind the Cyberbollocks" (www.ma.hrc.wmin.ac.uk/kids/ma.theory.2.1.db)).

"It didn't matter which brain a site was in. They *all* talked to one another indiscriminately, forming a network."[44]

Lingering more explicitly over sexual metaphor of communication Napier goes on:

> These particles had two functions: spread through exchange of bodily fluids, and interact with each other [...] Each one is a container for some rod logic and some memory [...] When one particle encounters another either *in vivo* or *in vitro*, they dock and seem to exchange data for a few moments. Most of the times they disengage and drift apart. Sometimes they stay docked for a while, and computation of some sort takes place [...] Then they disconnect. Sometimes both particles go separate ways, sometimes one of them goes dead. But one of them always keeps going.[45]

Later Hackworth finds he was a (rather important) part of a "collective mind"[46] working unison on an equally revolutionary and mystical energy-source.

This apparently[47] distant model is in a way mirrored by thinkers who ponder over redefining subjectivism. Pierre Lévy, calling for creating peaceful communities of *independent* selves, declares – in a somewhat McLuhanesque style – that "we will gradually create the technologies, sign systems, forms of social organization and regulation that enable us to think as a group, concentrate our intellectual and spiritual forces, and negotiate practical real-time solutions to the complex problems we must inevitably confront."[48]

Although he never mentions jacking-in, becoming a part of the network literally, as a cyborg, in a more recent article outlining his argument Lévy writes:

> The human race becomes a superorganism building its unity through cyberspace. And because this superorganism is becoming the principal agent of transformation and maintenance of the biosphere, cyberspace grows, by extension, as the biosphere's nervous system. If we can witness the evolution – organic, sensitive and linguistic – as a sole movement, if we under-

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[44] Neal Stephenson, *The Diamond Age* (London: Penguin, 1995), p. 337.

[45] Ibid., p. 339.

[46] Ibid., p. 455.

[47] If you consider nanotechnology, for example, purely science fiction, please read Bill Joy's, co-founder of Sun Microsystems, and co-creator of Java language, famous article on how, as he guesses, in something like 50 years, thanks to the developments in nanotechnology, robotics and genetic engineering, thinking machines will be a real threat to human existence on Earth. (Bill Joy. "Why the Future Doesn't Need Us" (*Wired Magazine*, 8.04, Apr. 2000 www.wired.com/wired/archive/8.04/joy_pr.html).

[48] Pierre Lévy, *Collective Intelligence: Mankind's Emerging World in Cyberspace*, trans. Robert Bononno (New York: Plenum Trade, 1997), p. xxvii.

stand the profound unity of the cultural and biological evolution and their interdependence, therefore we can discover that cyberspace is at the peak of this unified evolution.[49]

Thus, cyberspace, the agent and medium for the "collective intelligence" – "a form of universally distributed intelligence, constantly enhanced, coordinated in real time, and resulting in the effective mobilization of skills,"[50] is perceived very much in terms of the superstructure, mainframe of a huge symbolic system – a global hive mind – an agent that uses meaningful symbols to represent the world around them so as to communicate and generally act in the world. Earlier, optimistically, Lévy adds a positive meaning to "connecting," understood rather naively not as "wiring" but in concordance with the "etymological sense of joining together (*inter legere*), as uniting not only ideas but people, 'constructing society'."[51] Castells, seemingly seeing the emerging collective intelligence as a threat to marginalized, not wired communities suggests that the only source of resistance to „global instrumental networks" is the attempt to develop "autonomously defined cultural identities."[52]

The IETF (Internet Engineering Task Force), a group of professionals responsible for scheming and agreeing upon various working protocols used in the Internet, appears to be a working hive-mind, working effectively in a very much anarchistic (micro)society.[53] The Apache project was set off by a group of professionals that might easily be called a hive mind.[54] Linux and other open source projects are being developed by working and effective hive minds. Individuals working on those projects rarely meet in person still the work they offer is effective, probably more effective than work performed in vertically structured organizations.

Implications of this new effective social organization, either eventually wired or not, are huge, impossible to grasp, perhaps. To note just one example – if

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[49] Pierre Lévy, "Meta Evolution" (http://www.otal.umd.edu/~rccs/books/Lévy/metaevolve.html).

[50] Lévy, *Collective Intelligence*, p. 13.

[51] Ibid., p.10.

[52] John Armitage, ed. "Machinic Modulations: New Cultural Theory & Technopolitics," Special Issue of Angelaki: *Journal of the Theoretical Humanities* (4:2). London: Taylor and Francis, September 1999. p. 36. Here after: http://www.otal.umd.edu/~rccs/books/Lévy/armitage.html

[53] For a convincing description of how IETF functions see: Paulina Borsook, "How Anarchy Works," (*Wired Magazine*, Oct. 95, www.wired.com/wired/archive/3.10/ ietf_pr.html)

[54] "Apache" is an open source freeware Web server application that is installed on over half of all publicly accessible Web servers. It was created by eight programmers – the Apache Group – who contacted each other over the Net and took their name "out of respect for the Native American tribe," whose societal structuring resembled that of the project's developers. You may find more on the Apache project story on the Net, starting with the Wired News coverage (www.wired.com/news/linux/0,1411,34302,00.html).

the individual identity is surrendered, matters as copyrights, intellectual value, plagiarism, and plenty of others need a similarly drastic redefinition.

How does one go about surrendering one's identity, especially bearing in mind that the digital world is all about personalization? "Personalization provides comfort, security, and self-esteem. It is the means by which humans are understood and expressed as individuals. The benefits of being unique can be as mundane as getting greeted by name or as magical as ordering a full meal with nothing more than a nod."[55] The new age of individualization brings with it all kinds of personalized belongings – much more than vanity license plates and shirts with your own created logo instead of Nike's.

Still, the greatest paradox of the rise of the electronic markets promoting a wide use of cryptography, is that it introduces *two* unprecedented qualities in identification. "Public key encryption – a method for making virtually unbreakable codes – has two crucial but sometimes contradictory capabilities: securing privacy and anonymity (surrendering the identity) and establishing a perfect undisputed electronic identity."[56]

A wide use of electronic signature may already ensure such identity. A gibberish of a PGP[57] signature block is enough to tell without any doubts whether the person at the other end of the line is the one s/he tells us to be. Unlike the physical world, where "the rituals of recognition are both subtle and complex,"[58] cyberspace needs something much less sophisticated – a mathematical sequence that without subtle theatrics of offline communication tells beyond doubt: "I am what I tell I am," which of course, on the other hand, sophisticates "the rituals" of identification, as the once filled spaces suddenly become empty, and once meaningful symbolic gestures become automated sentimental meaningless folklore.

On the other hand however, the use of cryptographic protocols enables assuming a totally new anonymous identity. A popular conspirational paradigm has it that anonymous, private communication, where all information is encrypt-

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[55] Nicholas Negroponte "Being Anonymous" (*Wired Magazine*, 6.10, Oct. 1998, www.wired.com/wired/archive/6.10/negroponte_pr.html).

[56] Browning.

[57] The program PGP (pretty good privacy), has reportedly been broken to date only twice, after implementing a tremendous calculation power. The "dogma" of modern cryptography states that it would *always* require hugely bigger financial and time effort to break any cryptosystem than to develop a more reliable one. This means that practically no-one is able to break the privacy of the communication, all state's secret services included – hence all the attacks from the government against the program itself, and its creator, Phil Zimmerman. For more information on cryptography and privacy policy see: EPIC (Electronic Privacy Information Center) archives on cryptography policy (http://www.epic.org/crypto), EFF (Electronic Frontier Foundation) Archives (http://www.eff.org/pub/Crypto/) and the PGP co. web-site (www.pgp.com).

[58] Negroponte.

ed, business dealings counted, excludes the possibility of taxation and thus brings closer the dawn of crypto anarchy. "Crypto anarchy will allow national secrets to be trade freely and will allow illicit and stolen materials to be traded. An anonymous computerized market will even make possible abhorrent markets for assassinations and extortion. [...] This will not halt the spread of crypto anarchy."[59]

Contradictory conclusions

The so-called first law of cybernetics states that communication is only possible between entities that are equal. The rise of new technologies may enable such genuine communication – it may be the biggest revolution of the times. Equal individuals who embark on a futile, to date, task of communication have to share the condition of being private. Paradoxically, at the same time any rights and liberties that are commonly regarded as the foundations of any political system that is considered fair, may no longer be valid in a crypto-anarchist networked transparent society, though may be all virtually shared by one "superorganism," consisting of replaceable subsystems assimilated and wired by the global neural network

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Kranzberg's law says "Technology is neither good, nor bad, nor neutral." The somewhat political declaration from one of the grandparents of the Internet goes: "We reject: kings, presidents, and voting. We believe in: rough consensus and running code."[60] Cyberpunks say: "information wants to be free," and thus crypto anarchists make appeals: "Arise, you have nothing to lose but your barbed wire fences around intellectual property!"

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This essay tried to outline the visions that I think present in total only a confusion verging on pain. With most accounts canceling the others it would be rude and inaccurate to present still another model – thus I chose a chaotic and relatively unchained report from the Present/Future, not following a specific method. Yet the search for the method must nonetheless remain ultimately important. The scenarios for the future are sliding dramatically out of reach

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[59] Timothy C. May, "Cryptoanarchist Manifesto" (www. www.austinlinks.com/Crypto/crypto-anarchist.html).

[60] Borsook.

– even for the trained techno-professionals. One of the most important questions for contemporary humanities seems to be "How can [humanities] [...] keep up with the digitally enhanced acceleration of the technoculture?"[61]

With copyrights and intellectual value taken off balance, the selfhood redefined and other critical societal changes at hand, introduced from within the purely economic interactions, the readiness for discourse is of highest importance. The issue even more relevant in societies that may likely be marginalized in the outskirts of the "fourth world":

*   *   *

"To plan the nonplan, that is to equip yourself?"

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Consider the final remark: for reasons that are described as collectors' drive, paranoia, or preparatory, the professional group that has lately been intriguingly active on the firing weapons market are the Silicon Valley tekkies.

Choose the weapon?

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[61] Andrejevic.