Cyberculture: Impacts on Netizen

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Abstract
Macek (2004) highlighted a typology of current concepts of cyberculture. Four different concepts were identified, which are spans utopian, information, anthropological and epistemological concepts of cyberculture. Macek (2004) also highlighted four different periods of the cyberculture and its impacts on netizen. The very first foundations of cyberculture originate at the Massachusetts Institute of Technology (M.I.T.) at the turn of the 1950s and the 1960s. Early cyberculture reached its peak in the late 1970s and in the 1980s. Early cyberculture originates in the American hackers’ subcultures. The second period of cyberculture can be broadly set to the 1970s and the beginning of the 1980s. The beginning of the third period was characterised by a significant transformation at all the levels of early cyberculture, a shift that was related to the accelerated spread of microcomputers and to the development of public computer networks. This fourth period begins at the end of the 1980s and ends in about the middle of the 1990s.

Keywords: Cyberculture, Netizen

1. Introduction
Cyberculture is a collection of cultures and cultural products that exist on and/or are made possible by the Internet, along with the stories told about these cultures and cultural products (Silver, 2008). The period of cyberculture can be divided into before the Web (past), and after the Web was invented (present). There are strong traceable connections between past and present of cyberculture development (Golubev, n.d) (Table 1).

The introduction of networked computer communications into society has led to the contention that entirely new forms of society are now possible which are better placed to survive in the rapidly changing information economy. This group of people call themselves a network citizen or netizen created online or cyberspace culture or cyberculture. The main objective of this study is to review netizen behaviour and concept of cyberculture. This study also tries to focus on impacts of cyberculture on netizen.

2. Netizen
Netizens use of the Internet around the world has been has been marked by (Wikipedia, n.da):

- Email: Delivery of letters by means of the Internet, as a replacement to the traditional based paper correspondence letters.
- Online chat: Establishing of one-on-one or group conversations by means of the Internet.
- Instant messaging: Software which enables real time conversations without the need of using a website (in contrast to online chats).
- Internet forums: Web Sites which serve to hold discussions in defined subjects.
- Online games: Multiplayer Computer games which are played through the Internet.
- Blog: A personal diary, which its owners writes in it in every possible subject in which he desires to talk discuss, and its content is available to all.
- Feedback comment system: A Mechanism used in web sites to post responses from the internet users, which is mostly used in the news web sites, in blogs and in the other additional sites.
- File sharing: A technology which enables the internet users to share files from their computers with other internet users, and in return the same internet user is capable of downloading files from the computer of other internet users. This enables the fast distribution, not always legal, of software, music, etc.
Gopher: A distributed document search and retrieval network protocol designed for the Internet. Its goal is to function as an improved form of Anonymous FTP, enhanced with hyperlinking features similar to that of the World Wide Web.

Wiki: A collection of web pages designed to enable anyone who accesses it to contribute or modify content, using a simplified markup language.

3. Cyberculture

Cyberculture is the culture that has emerged, or is emerging, from the use of computer networks for communication, entertainment and business (Wikimedia, n.db). In the same sense that cyberspace came into existence through computer technology, cyberculture may best be conceived as a culture which is mediated in some significant way by computer technology. Reflexively, cyberculture may also be conceived as a representation of culture within that cyberspace. As human/computer interfaces become increasingly immersive, the two definitions of cyberculture intermingle, sometimes indistinguishably. Anthropologists find themselves compounding metaphors and talking about representations of representations of representations. In that confusion between the natural and the artificial lies the power of cyberculture to create and to be created by artificial realities and artificial worlds. At one level, cyberculture is what can be produced through the material culture of computer technology. It is embedded in the cognitive space shared between humans and machines. At another level, cyberculture resides in the behavioral interaction between those machines and their makers. Today, cyberculture is poised to provide new philosophy, new theory, new methods, new tools, and new subject matter for serious anthropological investigations. Cyberculture is driven by the seemingly limitless technology of the information age that constantly redefines cyberspace. The power of computing technology seems to increase unendingly with innovations appearing as frequently as limitations are set. Single processing units are replaced by high performance, massively parallel computers and massively parallel computation is created in cyberspace through the massive connection of single and massively parallel processors. Even the silicon confines of computer chips are being challenged by successful computation in molecular and organic media (Read and Gessler, 1996).

Manifestations of Cyberculture include various human interactions mediated by computer networks. They can be activities, pursuits, games, places and metaphors, and include a diverse base of applications. Some are supported by specialised software and others work on commonly accepted web protocols, examples include blogs, social networks, games, chat, USENET, bulletin board systems, E-Commerce, peer-to-peer networks, and virtual worlds. There are several qualities that cyberculture share that makes them warrant the prefix “cyber-“. Some of those qualities are that cyberculture (Wikimedia, n.d):

- Is a community mediated by ICTs.
- Is culture mediated by computer screens.
- RELIES HEAVILY ON THE NOTION OF INFORMATION AND KNOWLEDGE EXCHANGE.
- Depends on the ability to manipulate tools to a degree not present in other forms of culture, even artisan culture, example a glass-blowing culture.
- Allows vastly expanded weak ties and has been criticised for overly emphasising the same.
- Multiplies the number of eyeballs on a given problem, beyond that which would be possible using traditional means, given physical, geographic, and temporal constraints.
- Is a cognitive and social culture, not a geographic one.
- Is the product of like-minded people finding a common place to interact.
- Is inherently more fragile than traditional forms of community and culture.

Macek (2004) highlighted a typology of current concepts of cyberculture. Four different concepts were identified, which are spans utopian, information, anthropological and epistemological concepts of cyberculture (Table 2).

Macek (2004) also highlighted four different periods of the cyberculture and its impacts on netizen.

- The First Period: Early cyberculture originates in the American hackers’ subcultures. At the beginning, until at least the 1970s, it involved only young students, mainframes programmers, researchers and academics from the fields of cybernetics, computer science and informatics. The beginning of this period of cyberculture is marked by a set of crucial events in the field of computing, among others they include the formation of the first community of hackers at M.I.T. in 1959, M. E. Clynes’ and S. Kline’s concept of cybernetic organism (cyborg) in 1960, T. H. Nelson’s concept of hypertext at the beginning of the 1960s and the Arpanet project, ancestor of all subsequent computer networks, launched in 1963 and terminated in 1968.
- The Second Period: The second period of cyberculture can be broadly set to the 1970s and the beginning of the 1980s, when cyberculture moved beyond the realm of institutes and universities. The most crucial features of this era
were the increasing accessibility of technology, the invention of microcomputers and their massive development, which
spawned an entire new industry. In addition to “classic” academic hackers, cyberculture also comprised the so called
phone phreaks (hacking the phone systems), computer clubs hackers (interested in developing and programming the
first homemade as well as mass-produced computers) and later the first de facto regular computer users.

- The Third Period: The beginning of the third period was characterised by a significant transformation at all the
levels of early cyberculture (i.e. at the level of groups, discourse and practices and narratives), a shift that was related to
the accelerated spread of microcomputers (in North America and Western Europe gradually becoming an office tool and
a resource of home-entertainment) and to the development of public computer networks. This period witnessed the
formation of the cyberpunk literary movement which became the first powerful loudspeaker of early cyberculture
leading to its increasing popularity.

- The Fourth Period: This is the period of definitive fading of cyberculture into the majority society. It is the period
when cyberculture is subjected to normalisation, is tamed by the language of social sciences and politised and its
culturally provocative edges are taken off. This period begins at the end of the 1980s and ends in about the middle of
the 1990s. However, there is no point in defining the exact “end” of this period, because it could be defined by any of
the key events or processes that signalised the massive and final shift of cyberculture to the social and cultural
mainstream.

There is a wide variety of bases whereby communities can come into being and sustain themselves. These include
(Clarke, 1997):

- Existing geographical communities based on physical proximity.
- Communities of interest.
- Communities based on religion, philosophy or political outlook.
- Communities driven by particular social or economic issues.
- Conventional formal organisations, particularly companies and partnerships, which is supported by Intranets.
- Clusters of companies operating within strategic relationships (supported by Extranets).

The early history, which is from its foundation in July 1994 until early 1996 have been chronicled, the community’s
population numbers 5-10,000 worldwide. The two primary media for participation are an e-list for announcements,
which has 3-5,000 subscribers, and a set of some 200 community-service web-pages established and maintained by
some 100 volunteers. The community is driven by a leader/visionary, but the contributions are highly dispersed among
the volunteers. The majority of the service-value has been provided by perhaps 2% of the overall community, but
hundreds more have at least posted to the e-list, and many hundreds have accessed and in many cases bookmarked the
web-pages. There are well over 1,000 hotlinks to ISWorld Net web-pages from other pages around the world. The
volunteer force is very heavily english-speaking, and virtually all of the content is in English. The heavy majority of
volunteers are in North America, with modest numbers in Australia, the United Kingdom, New Zealand, and a scatter of
Continental European and advanced Asian countries. Strenuous attempts have been made to ensure that the community
services do not contain undue cultural biases. Given the strongly internationalist, but particularly Anglo-Saxon-American, style of the world’s I.S. discipline, the attempt has achieved some success. There is, however,
only limited and slow penetration in Continental Europe and advanced Asian nations, due to cultural concerns and in
less developed countries, due to slow emergence of the discipline there, mismatch between services and needs, cultural
differences and infrastructure (Clarke, 1997).

4. Conclusion

From early period until today, cybercultures are as communications networks, as games, as simulations and as research
platforms. Cyberculture links with technologies to a number of fundamental themes within which technologies are
attributed characteristics that shape cybercultural narratives, examples technology as agent of change, the relation of
technology and freedom, power and empowerment, formation of the new frontier, and authenticity.

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Table 1. Cyberculture

| Past                  | Present              |
|-----------------------|----------------------|
| Cyberspace            | Internet             |
| Cyberpunk             | Netizens             |
| Cyberstuff            | Virtuality           |

Table 2. Concepts of Cyberculture

| Utopian concepts of Cyberculture | Information concepts of Cyberculture | Anthropological concepts of Cyberculture | Epistemological concepts of Cyberculture |
|----------------------------------|-------------------------------------|----------------------------------------|------------------------------------------|
| Cyberculture as a form of utopian society changed through ICT | Cyberculture as cultural (symbolical) codes of the information society | Cyberculture as cultural practices and life styles related to ICT | Cyberculture as term for social and anthropological reflection of new media |
| Anticipating (futurologism)      | Analytical, partly anticipating     | Analytical, oriented to the present state and to history |                                           |

| Brief character of the concept | Examples of authors and books |
|--------------------------------|------------------------------|
| Cultural as a form of utopian society changed through ICT | Andy Hawk – Future Culture Manifesto (1993) |
| Anticipating (futurologism)   | Pierre Lévy – Kyberkultura (1997, česky 2000) |
| Information as cultural (symbolical) codes of the information society | Margaret Morse – Virtualities: Television, Media Art and Cyberculture (1998) |
| Analytical, partly anticipating | Lev Manovich – The Language of a New Media (2001) |
| Cultural as cultural practices and life styles related to ICT | Arturo Escobar – Welcome to Cyberia: Notes on the Anthropology of Cyberculture (1994, zde 1996) |
| Analytical, oriented to the present state and to history | David Hakken – Cyborgs@Cyberspace (1999) |
| Cyberculture as term for social and anthropological reflection of new media | Lev Manovich – New Media from Borges to HTML (2003) |
|                                           | Lister at. al. – New Media: A Critical Introduction (2003) |