

NEWSPAPERBOX

Online news space

by
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NEWSPAPERBOX / GAZETE KUTUSU
Online News Space

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ABSTRACT

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This paper is a research on the theoretical and practical background for online newspaper project *NewspaperBox*, which presents a possible visual model for representing the collective use of a website in its form. Internet and cyberspace has been mainly defined through its utopian futures, and revolutionary anticipations. Under these views lies, our misconception of technological tools and deference to already dominant structures. States, mass media and corporations have come to define how we experience and use Internet in the control societies we live in. Databases and codes regulate user relations with and among this space and define the internal limitations of Internet as a recording medium. Through articulating a space-time for computer mediated communication to occur, this paper proposes an experience of cyberspace as a reconstructive process among users.

Keywords: database, memory, interactivity, news, information.

CD includes: newspaperbox.exe

ÖZET

NEWSPAPERBOX / GAZETE KUTUSU

Çevirimiçi Haber Alanı

Cem Öcalan

M.A.,Görsel Sanatlar ve Görsel İletişim Tasarımı

Tez Danışmanı: Hüseyin Selçuk Artut

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Bu makale, bir websitesinin kolektif kullanımının biçimiyle de temsil edilebilmesi için görsel bir model öneren, çevirimiçi gazete projesi *NewspaparBox*'in, oluşumunu etkileyen kuramsal ve pratik koşulları inceler. İnternet ve sanal ortamlar genel olarak, olası gelecek ütopyaları ve devrimsel beklentilerle tanımlanmıştır. Bu görüşlerin altında teknolojik aletleri kavrayış biçimlerimiz ve etkin baskı yapılarına uyum yatar. Devletler, medya ve şirketler, içinde yaşadığımız denetim toplumlarında, interneti kullanma ve deneyimleme biçimlerimizi tanımlamıştır. Veritabanları ve kodlar, kullanıcıların mekânla ve diğer kullanıcılarla arasındaki ilişkileri denetler ve İnternet'in kayıt aracı olarak içkin sınırlarını belirler. Bu makale, bilgisayar aracılığı ile iletişimin oluşması için gerekli zaman-mekânı tanımlayarak, sanal ortam deneyimi kullanıcılar arası yeniden yapılandırma süreci olarak tanımlamayı önerir.

Anahtar Kelimeler: Veritabanı, Hafıza, Etkileşim, Haber, Enformasyon

CD içeriği: newspaperbox.exe

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INTRODUCTION

“A house is not a form but a process”¹

This thesis is an accompanying text for the website *NewspaperBox: Online news space* done as the part of my master thesis work. It establishes a contextualized background on the social understanding of the digital communication networks as an ongoing discussion in social sciences and reports over the implementation of the project.

In the early stages of Internet, websites were designed in a closed system of non-changeable content which was organized in a semi-hierarchical order of hyperlinks. For some, this sense of fixed content –or database- emitting from the screen that the viewer could not change or regulate, brought up a distance that alienated the space of Internet and turned the experience into a float in non-space. Certain utopian views in social sciences, characterized this era as an outer body experience and an integral part of the evolution of mankind. First chapter focuses on this era by questioning how technology is perceived as an evolutionary tool by utopian and dystopian perspective over the cyberspace and how ‘user’ is deprived of his/her communicative actions by being confined into a passive observer or, on the contrary, as an active controller.

Second chapter focuses on the internal limitations of computer mediated communication to define a space-time for the communication to occur. Technical structures of computer mediated technology; database and code are defined in terms of their relation to public memory and their recording abilities, which also underlines their capacity to change in terms of their ‘present’ use. In the second part of this chapter, space of the cyberspace is defined in terms of the concept of ‘heterotopia’ in which multiple spaces can coexist without necessary constituting a whole, so an active and temporal privatization of space can occur in the action of communication. Final part of this chapter redefines interactivity in cyberspace as an intersubjective experience rather than a limited interaction between computer and user.

¹ Lans, Kalle. 2006. *Design Anarchy* Vancouver, B.C.: Adbusters Media Foundation.

In chapter three, information is analyzed in terms of its use in news and mass media, by designating three characteristics of news articles; designation of public interest as means of control, mediated communication and its role in legitimizing power, and information management as the current form of capitalism and its means of information production.

Fourth chapter by giving a general view over the current condition of news and information circulation over the Internet contextualizes the position taken by *NewspaperBox* project, as an interactive model for visualizing the social aspects of a website. Furthermore the usage and alternative interaction techniques equipped by the website is discussed in terms of their additive values to the social database.

CHAPTER 1

Non-Space Situation

1.1 Cyberspace and Technology

Idea of building a database that allowed multiple and simultaneous user access was declared firstly by an US Army scientist Vannevar Bush in 1945, its actualization and global use corresponds to 1990s. As Briton Tim Berners-Lee proposed HTML (HyperText Markup Language)² protocol for World Wide Web multimedia document sharing, usage of ‘Internet’ as we know now was made public (Greene 2004: 18-19). But an early understanding of a digitized global communication network was shaped by the term ‘Cyberspace’ that was invented and popularized by a science fiction writer William Gibson in his novel *Neuromancer* (Downes 2005: 3) In which he describes ‘cyberspace’ as;

“A consensual hallucination experienced daily by billions of legitimate operators in every nation.... A graphic representation of data abstracted from the banks of every computer in the human system. Unthinkable complexity. Lines of light ranged in the non-space of the mind, clusters and constellations of data.”³

The image of cyberspace that Gibson portrays has two important characteristics. Firstly, as a ‘consensual hallucination’ the experience of cyberspace is marked as a social phenomenon. Also as a ‘graphic representation’, it refers to a visual experience rather than the data structure itself, which Gibson names as ‘Matrix’, a fictional equivalent of Internet (Downes 2005: 3).

Similarly, in his book *Interactive Realism*, Daniel Downes defines Cyberspace and Internet as separate terms to distinguish the technological apparatus from its social use and outcome. In his view ‘Internet’ is merely a “communication system” that allows

² Hypertext is a “term coined by Ted Nelson around 1965 for a collection of documents (or "nodes") containing cross-references or "links" which... allow the reader to move easily from one document to another.” (hypertext, n.d.) This interconnectivity, establishes an early base for Internet’s conception as whole and encompassing communication system.

³ Quoted in Bingham 1999: 245

digitized messages to be “created, sent, received, and stored by means of computers” (2005: 6) whereas, ‘cyberspace’ stands for “a psychological space that develops through our use of technology to mediate our communications and interactions (2005: 140).” This distinction allows us to reconsider digital communication technologies and their ‘use’ in society as separate but relative objects.

Michel de Certeau in analyzing the social behavior of an individual or a group under an orderly “system of production”, points out to this rather inconspicuous difference between a products’ foreseeable applications and its daily usage by masses;

“To a rationalized, expansionist and at the same time centralized, clamorous, and spectacular production corresponds another production, called “consumption.” The latter is devious, it is dispersed, but it insinuates itself everywhere, silently and almost invisibly, because it does not manifest itself through its own products, but rather through its ways of using the products imposed by a dominant economic order.”(1984: xii-xiii)

Technological inventions, systems or products could not be assumed as self-contained entities. Technology (as a product), through its socialization imposes its users a certain kind of subjectivity and a way of being. This implied subjectivity is responded and altered dynamically through social and individual ‘use’ in “an ongoing process” (Crang and others, 1999: 2). By and through this reciprocal relationship we “construct ourselves” and the social reality we inhabit (Downes 2005: 14).⁴

We are surrounded by this phenomenon in the daily use of computer technologies and digital communication. For example, user-feedback was a major advantage of open-source programming communities since it allowed for a more dynamic ‘consumer’ relations. Its incorporation into the program architecture as ‘error-reporting’ is an outcome we now perceive frequently. Another example could be the whole digital culture surrounding customization with themes, skins, icons, etc. In a way, the individual user is the key aspect of the digital communication system we are

⁴ A similar viewpoint is established by Pierre Levy in *Becoming Virtual: Reality in the Digital Age* where he -driven from a Deleuzian perspective- alters the classical ‘real’ and ‘virtual’ dichotomy into a relationship between real, possible, actual and virtual as “modes of existence” (1998: 16). In this form of understanding, actualization is “the creation, the invention of a form on the basis of a dynamic configuration of forces and finalities...It implies the production of new qualities, a transformation of ideas, a true becoming that feeds the virtual in turn...”, if running a computer program, a purely logical entity, implies a relationship between the possible and the real, then the interaction between humans and computer systems implies a dialectic between the virtual and the actual.” (1998:25)

experiencing today. But I would like to take this approach further by examining ‘the user’ in terms of his/her computer mediated communication with ‘others’.

1.2 Utopian and Dystopian perspectives on cyberspace

After commenting on the fundamental shift in subjectivity brought by globalizing communication networks, Paul Virilio points out “the specific negativity of these information superhighways” as “this loss of orientation regarding alterity (the other), this disturbance in the relationship with the other and with the world.”(Virilio 2001: 24) This reflection on the ‘loss of orientation’ of the subject has been a reoccurring theme in social studies and earlier studies of electronic media. By making an archeology of ‘the user’ through utopian and dystopian images of digital culture, a more precise understanding of cyberspace and its limits could be developed.

In late 80s and early 90s, cultural imagery of cyberspace was substantially influenced by utopian and dystopian narratives. A proliferation in idealistic visions of future was spreading in popular culture through articles, books, journals and websites (Markey 2001: 297). Cyberspace was considered as a ‘revolution’ in itself, cutting through all the problems of the “past”, building a new global society from ground up. John Perry Barlow expressed this vision in his article *A Declaration of Independence of Cyberspace* that addresses the national states of the world from “the new home of the Mind”;

“...you weary giants of flesh and steel,...On behalf of the future, I ask you of the past to leave us alone...We are creating a world that all may enter without privilege or prejudice accorded by race, economic power, military force, or station of birth...Your legal concepts of property, expression, identity, movement, and context do not apply to us. They are all based on matter, and there is no matter here. Our identities have no bodies, so, unlike you, we cannot obtain order by physical coercion.” (Barlow 1996)

Since then, legal adjustment throughout the world enabled a certain degree of state control over the Internet. Legal cases such as, access restrictions over blogs hosted by Wordpress.com or banning of Youtube.com by Turkish courts have shown us the degree in which states can interfere and regulate the information circulation over world wide web. Also laws concerning intellectual property rights have transformed digital

media into a property for global marketing by corporate businesses once again (Downes 2005: xii).

Barlow's idealistic dreams from "the home of the Mind" may have underestimated state power and global capitalism but reflects much more about a certain characteristic of utopian discourse over cyberspace. While he addresses the 'fleshy giant' states, he also defines the identities of cyberspace as immaterial and bodiless, floating in a higher "civilization of the Mind." A dualism of flesh and mind that is typical of the utopian constructs. Hakim Bey refers to this "distrust or even outright hostility to the body and the 'created' world" in the discourse of "information economy" (2001: 113) as a continuation to religious upholding of 'spirit' over the body (2001: 117). He also adds that, "demonization of 'information'" in the dystopian discourse, reasons to "nothing more than the mirror image of information-as-salvation", as "both of them believe in the mystic power of information (2001: 113-119)."

Similarly, Downes refers to both utopian and dystopian perspectives as "the transformative view of media ecology" wherein both view technology as an entity "that transforms the psyche and the social."(2005: xv) In claiming so;

"The transformative turn also reinforces a perception of technology as "other," based on the argument that technology is ideological. This perception of technology as veil pulled over the eye is linked to a deeper suspicion of the body as the medium by which we experience the world." (2005: 36)

Thus we turn back to Virilio's subject that lost his orientation "with the other and the world", the floating mind of Barlow, the bodiless anonymous 'surfer'. This reoccurring form of subjectivity is mostly discussed in terms of another character in the history of modernity, Baudelaire's *flâneur*.

1.2.1 *Flâneur*

“The crowd is his element, as the air is that of birds and water of fishes. His passion and his profession are to become one flesh with the crowd. For the perfect flâneur, for the passionate spectator, it is an immense joy to set up house in the heart of the multitude, amid the ebb and flow of movement, in the midst of the fugitive and the infinite. To be away from home and yet to feel oneself everywhere at home; to see the world, to be at the centre of the world, and yet to remain hidden from the world—such are a few of the slightest pleasures of those independent, passionate, impartial natures which the tongue can but clumsily define. The spectator is a prince who everywhere rejoices in his incognito.” (Baudelaire 1964: 9)

Lev Manovich describes the “net surfer” as the twenty first century “reincarnation” of Baudelaire’s flâneur. He argues that this 19th century figure “embodied strongly the desire to combine perception with motion through space.” So his “mobilized gaze”, can explain the continuous movement of the net user (“the subject of information society”) who “finds peace in the knowledge that she can slide over endless fields of data, locating morsel of information with the click of a button, zooming through file systems and networks (2001: 274).” The ‘passionate spectator’ that “is an ‘I’ with an insatiable appetite for the ‘non-I’ (Baudelaire 1964: 10).”

‘Virtual flâneur’ (like the ‘real’ one) assumes that he/she is a passive observer, merely a spectator that can pass over endless data without a trace, a God’s eye view that sees all but no seen by any. Whereas;

“‘Passing’ in cyberspace does not adequately protect viewers from becoming spectacles, from being in public. Rather, in order to maintain the fiction of the all-powerful user who *uses*, rather than *is used by* the system, narratives on and about cyberspace focus the user’s gaze away from his or her own vulnerability and towards the spectacle of the other.” (Chun 2002: 246)

Psychologically, this idea is supported through the daily use of computer technology as a tool that is accustomed to private spaces; as objects that stand in homes (PC is an abbreviation for ‘personal computer’) or privately owned notebooks that could be carried around. Computers as technological artifacts that we came to be so closely connected, act as if extensions to the body and at the same time through its screen, metaphorically a window -an opening towards the world-⁵, an amalgamation of private

⁵ Elaine Scarry meditates on the metaphorical double identity of the ‘room’; “both in the details of its outer structure and in its furniture... the room accommodates and thereby eliminates from human

and public spaces. This inconsistency in its placement brings an illusive safety and assurance to the user in the contemporary use of computer as a part of daily life.

Technological innovations in broadband Internet access, responsiveness of graphical user interfaces and web browsing programs conceal the active transmission between a ‘server’ and ‘client’. Increasing fusion of the work space (our desktops) with communication network liquefies the perception of separate spaces⁶. Simple tasks once done by personal computers could now be done over Internet with online tools (such as image editing, file conversion, video editing, etc.)⁷ Whereas technically, every connection leaves its trace; every spectator becomes a spectacle in the databases of cyberspace. As we access information through websites or communicate with e-mail, either involuntarily or compliantly certain set of information is added to the databases of communication networks.

The idea of an all powerful observer is still evident in contemporary digital culture. For example; Twitter.com, a site that offers its user an option of publishing ‘what they are doing’ to their friends, advertises its usage as;

“With Twitter, you can stay hyper-connected to your friends and always know what they’re doing. Or, you can stop following them any time. You can even set quiet times on Twitter so you’re not interrupted. Twitter puts you in control and becomes a modern antidote to information overload.”⁸

Even though the information is voluntarily given by others, the appeal of the site still resides in the image of the ‘virtual flâneur’, a subject that gazes upon all. We need to rethink this image by his ongoing activity with others in the cyberspace. Rather than “what she/he does?”, we need to re-ask the question as; how does she/he communicate, or to be more precise; how and in which way does the user access and participate to the databases and culture.

Actually the idea also resides in the original text of Baudelaire. ‘Monsieur G.’, the *flâneur* that Baudelaire builds the concept from, is a newspaper illustrator (1964: 6).

attention the human body” therefore, acts as “a magnification of the body” and “simultaneously a miniaturization of the world, of civilization (1985: 38-39).” In this respect the computer screen acts as both a private space and an opening towards civilization.

⁶ See (Levy 1998: 26) for an analysis on the virtualization of corporate work space.

⁷ See Splashup.com (for online dektop image editing) , Jumpcut.com (video sharing and editing) and Media-convert.com (online media-converter).

⁸ Twitter motto. Twitter.com. *Twitter: What are you doing?* <http://twitter.com/help/how> (accessed: January 2, 2008).

After his day of ‘passive’ observation he resides to his workshop to work on his illustration. Baudelaire describes this activity as;

“All the raw materials with which the memory has loaded itself are put in order, ranged and harmonized, and undergo that forced idealization which is the result of a childlike perceptiveness —that is to say, a perceptiveness acute and magical by reason of its innocence” (1964: 12)

By this way *flâneur* also reacts to the images he has seen and kept in his memory. Altering them and redistributing to the cultural memory through the newspaper space that is open to his access. In this regard ‘user’ as a mere collector of information is quite problematic in seeing the internal limitation of cyberspace and how digital culture has been increasingly transforming the form of our daily communication to a field of media production (Downes 2005: 19).

Once we are aware of the impossibility of a anonymous user that is in controller or -just the opposite- as a mere passive observer, we can concentrate on the communicative actions or processes mediated through computer systems and discuss how internet allow or restricts this very process, by being a mediatory space.

CHAPTER 2

‘Place’ of Cyberspace

2.1 Memory and Database

Database is a particular form of data structure that is recorded and used by computer technologies. It is the medium on which computers access and organize information. In a more general sense; it is how computers restructure time and memory and contests our understanding of these concepts. As the invention of writing brought up the linearization of time as a developing succession – “‘history’ and ‘historical conciseness’ (Flusser 2000: 10)”-, databases also manifest their particular conception of time, as non-linear and dispersed fragments of durations. It is by this conception of time that we can resemble databases to an externalized memory,⁹ as a time that is “the coexistence of all levels of duration” (Deleuze 1995: 47). In relation to these metaphors and technical capacities the aim of this chapter is to sketch out the internal limitations and possibilities of the ‘database structure’ and ‘code’ as a regulatory medium, which in their combination is the fundamental base of the computers ability to mediate communication through Internet.

As database bear resemblance to the earlier recording technologies and mediums such as; celluloid surface of film or the paper in writing, it also has its particular differences in recording and accessing the objects (sets of information) it holds within. It is mostly referred to as a composite of earlier mediums since databases are capable of storing text, images and video once they are digitized (Downes 2005: 19). Whereas digitization process merely seen as further abstraction of printed or material mediums is limiting while defining new media artifacts and mediated communication process through these objects. Downes points out to this problematic;

⁹ Lev Manovich has gone further in this trajectory to define database as a cultural form to represents a world through and puts database structure in opposition to the narrative structure of earlier mediums. (2001: 219) This viewpoint stands quite reductive once the constructed nature of databases and regulatory mechanisms are brought into consideration, which I would like to stress out through this chapter.

“If it were true that digitization dematerializes writing and thought, then it might make sense to talk about digitization as the ultimate victory of spirit or mind over the flesh. Instead, digitization signifies a new materialization of communication. This new materialization is neither universalizing nor abstract. It recalibrates, rather than replace, the human body in relation to communication.” (2005: 123)

In this respect database can be depicted as a meta-structure that stores these items in a common ground of digital information or data, and communication process in Internet is sustained through the exchange of these composite and eclectic objects.

In computer science, different models exist for organizing information in databases; hierarchical, networked, object-oriented and relational. These models imply different relations among data stored within them (Manovich 2001:218). For example; hierarchical database structures data in a treelike grid where each item is stored under parent nodes connecting them upwards till a root node is reached. Whereas in relational model (which is currently widely used by website databases) data is structured in tables with rows and columns, in which a single row stands for one item and particular attributes of the items are given in columns.¹⁰ Even though databases are programmed as non-linear systems, a certain model already implies a logical and categorical division among objects which later define the limitations on how data could be put to use in various contexts. In this field new implementations have occurred through the history of the web. Already popular phenomena of ‘tagging’ or self-referential concept of ‘meta-data’ are the ongoing examples of categorizing objects in databases.¹¹

Memory is a substantial metaphor for defining how we perceive and interact with databases and information in general. Gilles Deleuze, in his book *Cinema 2: The Time Image* where he makes a classification of the cinematic images, extensively comments on Henri Bergson’s conception of time in relation to memory, matter and movement. In his “point of view the present itself exists only as an infinitely contracted past which is constituted at the extreme point of the already-there.” (2005: 96) So in other words, memory coexists with the actual object and is a “non-chronological time” that is “the interiority in which we are, in which we move, live and change” (2005: 80) and through

¹⁰ Wikipedia contributors, "Database," *Wikipedia, The Free Encyclopedia*, <http://en.wikipedia.org/w/index.php?title=Database&oldid=192844380> (accessed January 18, 2008).

¹¹ Ongoing research on this taxonomical problem is done under the vision of ‘Semantic Web’. Normally the information kept in a database is not understandable by the computer. This vision of web tries to unify computer language with the language we use so that textual information is ‘readable’ by computers (Berners-Lee, Tim, and others 2001). This process involves a further codification of the text, so a more logically structured set of relationships between objects and a general set of rules in categorizing.

the process of recollecting images we are “actualizing it [memory] in us.” This definition of time truly utilizes how we interact with images surrounding us, and how memory is inevitable connected with an image we come to perceive. Furthermore, how we reconstruct ourselves by a ‘non-chronological’ past in the present.¹²

Interactivity in cyberspace materializes this process of recollection in another textual structure called ‘code’; which acts upon databases and regulate the limits of interaction. Our browsing by clicking hypertext links, passing along web pages or searching with text queries creates a unique trajectory. If we pertain to the subjective experience, our trajectories in cyberspace retrieve images from the database that form up the Internet and externalize the mental process of recollecting memory images. Code is the main agent in this search and recollection and serves as a mediator for visualizing data or information.¹³ This mediation process sets out certain set of rules over how information is circulated so images, text our data can be interpreted similarly by various web browsers. HTML (Hypertext Markup Language) is actually a set of commonly agreed rules of regulating information and their have been various other scripting languages that utilized additional properties of data and came up with different set of rules accordingly.¹⁴

Memories are not discrete elements that we merely recollect from a reservoir of past. Once they are actualized as ‘recollection images’, just as actual objects we perceive, we reinterpret and use them “so as to enrich and manipulate the present” (Downes 2005: 127). In this reciprocal relationship, memories which we recollect are recast into the past once “time splits itself into present and past, present that passes and past which is preserved” (Deleuze 2005: 80), in other words recorded. New media artifacts as recording mediums, act distinctively from earlier recording mediums in there temporal relationship with the present –or more precisely within their viewing process.

There has always been a tendency to comprehend databases as static and unchanging entities. Earlier web interfaces supported this understanding, as the active role of the user was not visualized through the information contained in websites. Even

¹² Deleuze articulates this as “Being-memory” (2005:95) to imply the dynamic ongoing movement.

¹³ Technically two kinds of coding process exists; ‘client-side scripting’, which is run by the users computer and defines how the visual interfaces interacts, and ‘server-side scripting’ which is run by the server as to search and retrieve content from databases. Even though server-side scripts generate dynamic content and has integrated connection with databases, together these two coding process defines how user interact with the database. So I use ‘code’ as a reference to both scripting techniques and as a part of interactivity building process in web design.

¹⁴ Some commonly used scripting languages are; PHP, AJAX, Javascript. All built to provide additional interactivity to web browser and are equip certain data management solutions.

though data –or statistics- provided by and through the user activities were available to servers and website builders, its visualization corresponds to the emergence of ‘user-content driven’ sites in recent years¹⁵. Our trajectories through web space and interactions with information and interface inevitably generate additional data (Manovich 2001: 224). As it has been pointed out earlier; code defines and regulates interactivity with the database so this rescription process is also run through the code and is selective in its construction. Even under these constructed and controlled structures, this process of interaction alters the database itself, and information or objects contained within are reappropriated by the ‘present’ and presence of our ongoing interactivity.

Of the controlling and regulatory aspects of the code; Deleuze already foresaw a change in the “disciplinary societies” of the eighteenth and nineteenth centuries “towards control societies that no longer operated by confining people but through continuous control and instant communication” (1995: 174). Where ‘code’ defines the limit of individual’s access and “control is short-term, rapidly shifting, but at the same time continuous and unbounded” (1995: 181). It would be inappropriate if we bend towards a technological deterministic view and claim that the technological inventions – particularly computers and information technologies- have constructed this form of society but “they express the social forms capable of producing them and making use of them” (1995: 180). These technologies inevitably form an expression of how the social is constructed in this era we live in. Deleuze does not merely articulate these analyses but asks a vital question on how “future forms of resistance” could be expressed against the dominance of an emerging control society (1995: 182).

Lawrence Lessig deals with similar set of questions, from a perspective of digital culture, in his book *Code: Version 2.0* where he articulates the regulatory nature of cyberspace with a simple aphorism; “code is law” (2006: 5). Even though his aphorism seems like it refers to a certain all standardized code, he also points out to the heterogenic nature of the architecture of code as;

“There is regulation of behavior on the Internet and in cyberspace, but that regulation is imposed primarily through code. The differences in the regulations effected through code distinguish different parts of the Internet and cyberspace. In some places, life is fairly free; in other places, it is more controlled. And the

¹⁵ Also referred with the trendy term ‘Web 2.0’, which is actually a commercial appropriation rather than advancement in communication technology.

difference between these spaces is simply a difference in the architectures of control—that is, a difference in code.” (2006: 24)

Control in cyberspace is continuous and unavoidable and largely dominated by mass media, states, and corporations but the heterogeneous landscape of code allows divergence and alterations in its methods of use. In a certain sense, it is still possible to articulate a form of resistance through the “miniscule ways of operating” that was applicable in disciplinary societies. Michel de Certeau describes this devious tactics as “the innumerable practices by means of which users reappropriate the space organized by techniques of sociocultural production” and in their operation, they are “dispersed, tactical, and make-shift creativity of groups or individuals already caught in the nets of discipline” (1984: xiv).

To reappropriate a space on the mediated environment of Internet; user’s access to the databases, so his/her involvement in the creation of a public memory, has to be contested by experimental alteration to the dominant code that this control society works with on and off cyberspace.¹⁶ It would be rather utopian to seek alterations only through the online domain. So it must not be forgotten that, ‘copyright regulations’ as an extension to ‘private property’, or the already dominating methods of information production (mass media) and security legislations imposed by states, are still the structuring mechanisms once an alteration is attempted within the digital medium.

Altering the code on which this mediated environments works gives us opportunities to open a temporal space for cultural and social construction, as it also changes the way in which users interact with each other. So as ‘time’ has been articulated within the cyberspace, how could the heterogenic spatial dimensions of cyberspace be traced which also includes the infinitely dispersed trajectories of user interactions? Next part deals with the temporal spaces of interaction in cyberspace, by employing the analysis of “heterotopic spaces” as conceptualized by Michel Foucault for analyzing a distinctive kind of space constructed within every culture.

¹⁶ It would be rather utopian to seek alterations only in the online domain. So, ‘copyright regulations’ as an extension to ‘private property’, or the already dominating methods of information production (mass media) are still the structuring mechanisms once an alteration is attempted within the digital medium.

2.2 'Space' as Sites

“ I am interested in certain ones [sites] that have the curious property of being in relation with all the other sites, but in such a way as to suspect, neutralize, or invert the set of relations that they happen to designate, mirror, or reflect. These spaces,...which are linked with all the others, which however contradict all the other sites.” (Foucault 2002: 239)

Foucault designates two types of sites that employ this characteristics; utopia and heterotopia. Utopias are non-spaces of the future “perfected” societies that metaphorically relates to the present form of society and are “fundamentally unreal spaces” (2002: 239). In contrast, heterotopias are effective symbolic sites where all the dispersed spaces and discourses within a culture “are merely juxtaposed, without an attempt to reduce them to a common order (Downes: 129).” Most prominent examples of this kind of sites in daily life are; hotel rooms, libraries, hammams, theater stages and boats –which Foucault designates as “a place without a place” so, “the heterotopia *par excellence*” (2002: 246).

Heterotopias are performative play spaces which seek rituals and are temporal in character. They “create safety zones that are set apart from the normal constraints of societal interactions”. Through these ‘scripted’ interactions and “ongoing activities” of participants they construct a private space of communication in public space (Downes 2005: 140). In other words, they are not incarnated with a traditional sense of belonging. Users/participants, metaphorically and literally, does not belong to these sites – a fact that immersive and realistic technologies of representation in computers try to conceal by mimicry- but inhabit temporarily and reappropriate the space by their use.

What heterotrophic spaces teaches us is; in every culture these ‘other places’ can be constructed as experimental spaces, symbolically referring to all the spaces but are located outside of them. An example of these kinds of spaces in cyberspace is online communities and internet forums. While most of them are based in the same mechanism of interaction (same code) their contents are infinitely diverse. They do not attempt to trace and encompass the whole ‘real’ spaces but are snippets of durations added by users to a database.

2.3 Interaction

Interactivity is commonly defined by the responsiveness of computer technologies to user actions. So a traditional definition of interaction merely assumes a relation between human and his/her “inhumane partner”; computer and technology as “the other *qua* subject” (Zizek 2001: 20). As it has been expressed earlier, database and code is a regulated and constructed territory and is predominantly not a ‘place’ that belongs to the end-user, also to the masses that come to use it as an informative media.

This preliminary definition, as it conveys the most basic interaction, is limited to a relationship between a technological tool and its user. In doing so it also foreshadows the recording capabilities of the computer technology in general. New Media’s distinction in recording does not lie in its ability to depict ‘reality’ accurately, as sets of information, but its ongoing ability to restructure its database by reinterpretation. So interactivity could not be presumed only by a visual responsiveness but a structural change or addition.

Also when computers act as a communicative tool, the ways that the user can participate into the public databases draws the limits of his interaction with the others. Daniel Downes points to this potential of cyberspace;

“Cyberspace provides a social and psychological play space, since it allows for experimentation with very processes of social construction we engage in all the time. Reality (virtual and otherwise) is interactive, and, like the physicist whose presence changes the results of an experiment, our presence and our actions, and the ways in which these actions are expressed, change the world to some degree.(2005: 10)”

Through out this text the concept of interactivity has been implied in a different sense; as the intersubjective experience between users in construction of a social memory that is mediated and regulated by the communication technologies. This definition gives use the possibility to analyze “new media objects”, akin to actual objects that are passed along the users to communicate while underlying ‘control’ structure is also kept in consideration in its complexity.

CHAPTER 3

Information from Printed Situation to Internet

Information is always only information about some thing.

(Bey 2001: 118)

Print media and news, as it was effective in the expansion of European Renaissance, Reform and the development of modern sciences (Ong 2002: 115), was also closely related to the advent and propagation of the early market economics and modern capitalism. As commodities attained mobility, newsletters about prices and events accompanied them (Calhoun 1992: 8). Now, by the advent of new media, news and information attained commodity status and an immediacy by accompanying copyright regulations. Information as news can be characterized by there three transforming properties; content as control, medium as power, and source as management.

3.1 Mass Media and Public Interest

An analysis of the news as “public opinion” and a space for public communication was formulated by Jurgen Habermas as he conceptualized his idea of bourgeois “public sphere”. According to him, public sphere is “a domain of our social life in which a thing as public opinion can be formed”. Ideal public sphere, as articulated by Habermas, is the social space where private citizens engage in a rational-critical discussion about “matters of general interest” which culminates in the form of “public opinion”. Media -as an extension of public sphere- was the means for delivering public opinion to state authority and expanding the public sphere as a communicative environment (2000: 92-93).

In constitution of the rational and critical bases of public sphere, it was assumed that ‘private’ persons will leave aside their “particular interests” as to participate in a discussion about an “objective order” (Calhoun 1992: 9). Whereas, public sphere -in principle- was an open space for all private citizens (Habermas 2000: 92), so it had to

continually expand from its earlier form, which mainly consisted of elite bourgeois men, until it encompasses the society as a whole (Calhoun 1992: 3). As public sphere expanded class divisions among society became visible. So the bases for designating “a general interest” was undermined and shifted towards particular interest of groups.

“the notion of an objective general interest was replaced, even ideally, with one of a fairly negotiated compromise among interests. The functioning of the public sphere thus shifted from rational-critical debate to negotiation.” (1992: 22)

As private corporations increasingly gained public power and infused into the public space. “The public sphere has become more and arena for advertising” of special interest “than a setting for rational-critical debate” (1992: 26). Corporations and state by increased publicity of their own position “seek to instill in social actors motivations that conformed to the needs of the overall system of dominated by those states and corporate actors” (1992: 26). Thus public sphere became the active space for the legitimization of corporate and state power.

Significance of this historical transformation in public sphere is the mutation of the “public interest” from a means to generate a generally agreed upon ‘objective truth’ to a ground of antagonistic dispute, which later subjugated to a means to legitimize power and generate control.

3.2 Information in Mediated Communication

Walter Ong while comparing ‘mediated communication’ and human communication states that; human communicative action, as an intersubjective activity, is never conceivable apart from its “anticipated response”. The very act and form of an oral utterance is shaped in terms of its relation to the others mind. So a ‘sender’ of a message, is already an expecting receiver in the oral tradition of the speech act (2002: 173).

Mass media, by dismantling this reciprocal relationship, sets up a hierarchy of speech which in most cases are built over a “speech without response”, an enacted communication. It is Baudrillard who underlines the power relationship inherent in this system of “noncommunication”;

“Power belongs to him who gives and to whom no return can be made. To give, and to do it in such a way that no return can be made, is to break exchange to one’s own profit and institute a monopoly” (2000: 99).

Through this power relationship information constitutes its factual status but also its uncertainty. Mass media is mostly criticized by its alienating effect; as it “excessively mediates” information from far beyond the reach of bodily experience (Bey 2001: 116). “Dehistoricized and dehistoricizing” since it delivers fragments of events deprived from their historical and political context (Bourdieu 1998: 7).

3.3 Information Management

We might initially think, Internet and computer mediated communication in general is changing the monopoly of “speech without response” in the mass media. Especially as it seems like a general consensus to add ‘comments’ section and witness accounts to the news articles published in large news network sites; like BBC News, Guardian, etc. Pablo Boczkowski gives an account of this change in the editorial work of news circulation in online newspapers as;

“The shift from traditional gatekeeping to newsroom routines centered on the facilitation and circulation of knowledge produced by a vast and heterogeneous network of users-turned-producers” (2005: 158)

This concept of “user-turned-producers” and the editorial work, as control of information circulation, echoes what has been a change in the form of capitalist system of production in ‘control societies’. According to Deleuze “nineteenth century capitalism was directed towards production” so it built work spaces as “sites of confinement” (1995: 180). Traditional newsroom as regulated by the “gatekeeper” acts analogous to the earlier form of disciplinary spaces in the production of news. But what is more related to the current situation of mass media is that, by adapting the current model of capitalism, it “is no longer directed towards production”. As production is transferred to outer resources, what mass media corporations “sell is services and what it seeks to buy [is] activities” (1995: 181).

This activity of information and news accumulation acts from two resources. First one being, as it has been mentioned by Boczkowski, the user that is turned into an

active resource for additional news gathering -generally limited towards witness accounts- and opinion production. This free labor of user is controlled by two subtle mechanisms, already technically controlled access to databases, and the designation of “public interest” as the content of the article, which together control the opinion published through the website. Second resources for new gathering are, the already predominant resources in traditional media, international news agencies that are still the primary resource of “international news flow” (Wu 2007: 549). Denis Wu’s research on the content delivered by major news websites suggests that these sites deliver considerably similar content with the traditional newspapers (2007: 550).

CHAPTER 4

Project and implementation

4.1 Project description

Mainly text driven imagery of internet news sites enable an active participation of its users in additional content and critique but this usage is not visible through the visual medium and general form of the website. *NewspaperBox* is a visual and systematic approach to online news media. Proposing an alternative means to visualize and interact with news content as a symbolic social site (heterotopia) over the Internet; so consequently, a research on the possibility of representing the active use of a website in its form.

4.2 Process

Process for the project involved four major parts; firstly a survey on the news and information circulation over the Internet was made. Then database systems over the internet servers and their capabilities like server-side scripting, MySQL¹⁷ database management systems were researched. As a third phase; data visualization by Treemap algorithm, which will be explained in detail later, was researched and implemented on ActionScript 3.0¹⁸ language as part of the base coding for the website. Lastly the visual and interface designs were made.

4.2.1 RSS and Information Circulation in Internet

Main news content distributors over the Internet, like Reuters.com, news.bbc.co.uk, have adapted a system called RSS feed¹⁹ that distributes snippets of headlines and short description of the related article directly to the end user. Users can

¹⁷ SQL (Structured Query Language) is a standard programming language for database management and modification, generally used by server over Internet.

¹⁸ Scripting language of interactive design program Adobe Flash CS3

¹⁹ RSS stands for Really Simple Syndication.

read this data with the kind of software know as “aggregator” without accessing the related cite.²⁰ Also developers can access this information and add its content to their applications or websites. In first glance this system of information circulation seems like the utopian dream of immersed activity in the free flowing of information through communication networks, but in actual case the information delivered through this channel is limited to few sentences and a link to the related article hosted in the news distributor’s website. Headlines and news is used as the promotion of the related website that has copyright over the related article that limits its usages in digital medium. Internet has increasingly become a “New Media Economy” that is regulated by the transformation of information into property (Downes 2005: 142).

In these circumstances, the accessibility of the user to information is defined by the distributors of news. Generally these sites offer limited participation to the user. For example BBCNews in addition to RSS feed offers easy social bookmarking icons, an e-mailing option and an additional table for representing the “most read” articles of the day.(Figure 1)

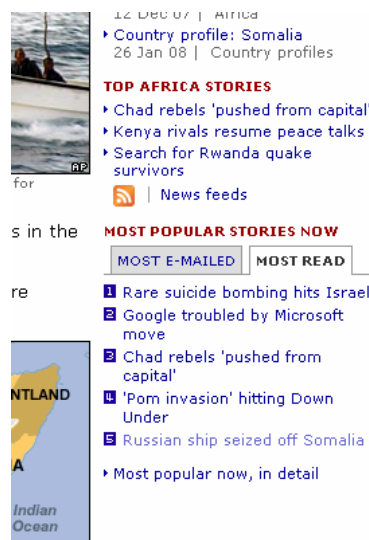


Figure 1. Detail from BBCNews.com

Similar websites like NTVMSNBC.com, in addition to the earlier options, provides the user a comments section for every article and a voting system that has a

²⁰ Wikipedia contributors, "RSS," *Wikipedia, The Free Encyclopedia*, <http://en.wikipedia.org/w/index.php?title=RSS&oldid=188733838> (accessed January 10, 2008).

corresponding table in the main entry page. A voting system seems problematic since the reasons for a user to vote on an article may be quite arbitrary and not open to an analysis. Whereas commenting, as it has been expressed earlier, is the active change of user into a means of free information producer that is submitted to the mechanism of control society .

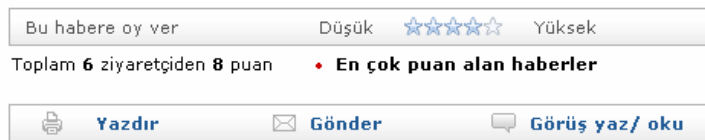


Figure 2. Detail from Ntvmsnbc.com

Newsmap is a site built by Marcos Weskamp as a visual representation of the data collected from *Google News* (news.google.com). A Treemap algorithm, similar to the base code used for the *NewspaperBox* project, is used in order to organizing headlines collected from a wide array of sites. Size and position of an article represents its publishing rate specific to the country chosen. So *Newsmap* conveys the online circulation of news content delivered by mass media and in parts allows critical judgment over the dominating topics of each countries online media space.

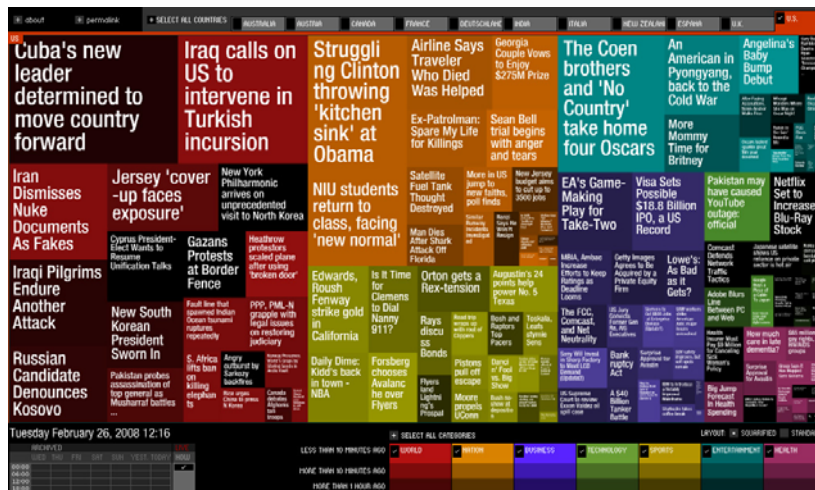


Figure 3. Screenshot form *Newsmap*²¹

²¹ Weskamp, Marcos. n.d. *Newsmap*. <http://marumushi.com/apps/newsmap/newsmap.cfm> (accessed February 26, 2008)

Newsvine.com could be categorized as ‘social news network’. Since it is an accumulation of the news network articles seeded by the users and commented on regularly. Different from other news related sites Newsvine has a user database and private pages for every user where he/she can seed articles and write their own article to be published via website. Site also has a forum like groups were certain topics –such as ‘political analyses’ or ‘alternative energy’- are discussed by user.



Figure 4. Detail from Newsvine.com

4.2.2 Coding and Treemap Algorithm

Treemap algorithm, rather than being a fixed mathematical formula, is an alternative approach for visualizing hierarchical tree structured databases in limited two dimensional spaces. It was firstly developed by Ben Shneiderman in 1992, as a solution for representing files of a computer hard-disk in a constrained area -that being the limited computer screen (Shneiderman 1998). In the traditional representation of tree structure a root node placed on top is connected to second set of nodes by horizontal lines, which are then connected to other sub-nodes in a similar manner until the structure reaches its end by a data (or document). File browsers generally use this form of representation (see Figure 5)

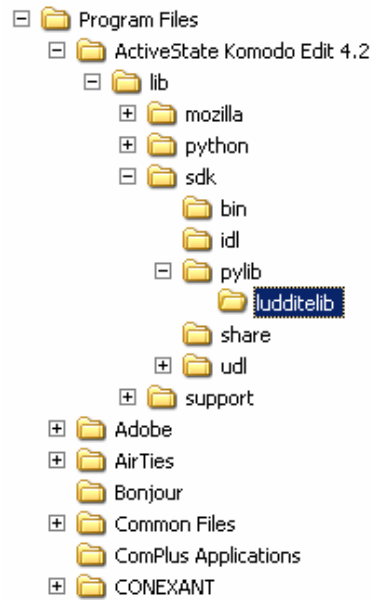


Figure 5. Screenshot from Windows Explorer

While representing large clusters of data, traditional representations of tree structures are generally space consuming as most of the space is used as background. In a populated hierarchical system, number of visible nodes is limited to the height of the screen, so a simultaneous viewing of the whole system is problematic and demands additional interaction tools for browsing, like ‘scrollbars’. Also, when confronted by an unfamiliar user, these structures are confusing because they tend to conceal the final data under sets of nodes that are not visible to user initially (Bruls and others 2000: 2). Another deficiency in tree diagrams is their ineffectiveness in representing additional data about the documents they represent. For example; file size, frequent usage, etc.

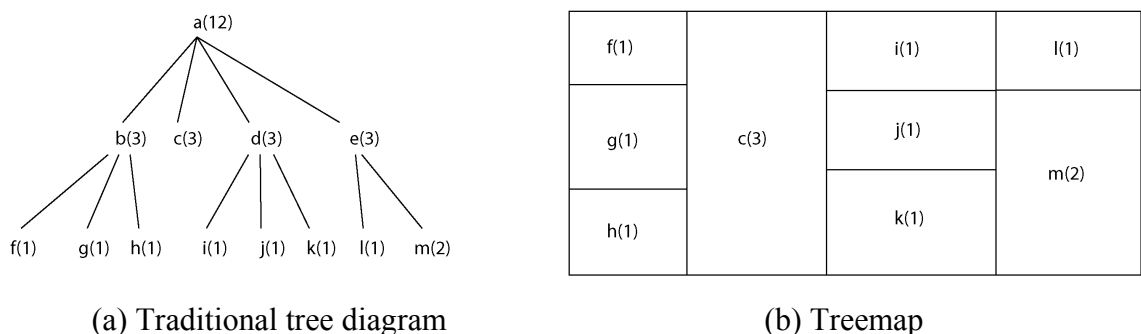


Figure 6. Tree structures

In Treemap algorithm, contrary to tree diagram, a given space is used completely by subdivisions into rectangles according to a given data query and the whole structure

is visible in an instance. Figure 6 depicts two different approaches on the same hierarchical structure; we will presume they represent a computer file system. In diagram (a) letters represent folders and files (discontinued folders being files), and numbers represent the file size or the sum of files contained in a folder. Treemap algorithm in converting this file system into rectangular areas, takes the whole area as the total file size and subdivides (according to their given sizes) through each branch iteratively until it reaches a discontinued node. So the corresponding areas of the final nodes represent the percentage of space occupied by the file according to the total size (2000: 1-2). This approach gives the user the ability to see the whole system and visually compare information according to a chosen 'variable' (which has been taken as 'file size' in the example). This aspect of treemap allows it to be widely adaptable into different contexts and gives accessibility to the user in redefining the parameters of representation.

After its publication treemap algorithm was rewritten in many approaches in order to deal with its visual and technical issues (Shneiderman 1998). Most commonly used layout that visually enhanced the basic algorithm is "Squarified Treemap" written by Mark Bruls, Kees Huizing, and Jarke J. vanWijk. In this certain method rectangles in a single node is subdivided and placed according to their closeness to the aspect ratio²² of a square, which is one. By setting this second parameter as a controller, the visual layout of the treemap appears more orderly and readable because thin long rectangles with high aspect ratios are avoided but the sequence of original data is altered. Since objects are sorted in a decreasing order in terms of their 'variable', placements of rectangles change dramatically in every data manipulation (Bruls and others 2000: 4).

4.2.3 Usage and representing collective usage in database

Every act of rewriting a code involves putting certain restrictions and parameters, in terms of the context and use, which alter the initial algorithm. "Squarified Treemap" (Bruls and others 2000) was taken as a reference in writing of the *NewspaperBox*'s code because it enabled the necessary space for textual information but its inner working has

²² Aspect ratio equals to width of a rectangle divided by its height.

been changed. Since *NewspaperBox* involves an interactive relationship, constant radical replacement of the content would end up in loss of orientation for the user.

In writing of the Treemap code for *NewspaperBox* project, an abstract variable – namely ‘weight’- was taken as the base for the subdivisions of news headers. This abstract variable is equal to “1” for all headlines as the site is initially started, giving equal areas for the headlines of each article. Through the dynamic interaction of the users, data regarding their amount of reading and interaction with the article is collected by the server. Reading as the basic interaction of user in text based media is a challenging data to acquire via technical means because of its subjective quality. Simple query of mouse clicking or rating systems used widely by sites are too abstract for a logical analysis, since user might have merely passed over the information while spending considerable amount of time in others. These two situations are considered as a single click in most cases. In *NewspaperBox* users’ subjective interaction of reading a text is transformed into a visual challenge in order to collect more sufficient data regarding the reading activity. Once the user enters the site he/she is confronted with the whole set of information available for his/her choosing. In order to start reading an article, a box containing the news has to be dragged and dropped via mouse to a set of available point placed at the sides of the main block. Then article is placed in a half open box which can be opened by an icon placed below its bottom point. User has to enlarge the article’s box that reveals the hidden content. By these simple sets of interactive activities of stretching and placing, we are able to collect data on how much of the content was opened (so presumably read) by the user. Then the amount of reading and time spent with the article is calculated by the program. On this calculation the amount of reading is compared with the available content and the ‘weight’ of the article is changed accordingly.

Once the user closes the article, site updates the areas of news headlines according to the new value of ‘weight’, changing the initial design into a used space that passes on to the next user. By maintaining this ongoing relationship website acts as a shared social object that is altered by every users reading activity.

Website is also updated daily -as newspaper are- and the design is restructured into its initial form, while earlier days are stored in a database that is accessible and subjected to the same process of altering.

Also in mouse interaction, dynamically sliding camera like interface is chosen instead of the conventional ‘scrollbar’. Conventional scrollbars are used by many

websites since they allow an endless space for the content but in the activity of scrolling user is not informed visually by the size of the whole content, so in a given instance user is not aware of his position in terms of the whole page. In the dynamic sliding model that is used by *NewspaperBox* place of the mouse cursor over the screen is taken as the place of the whole screen frame over the content, the limits of the screen then corresponds to the limits of the whole content. So the relationship is much more like a three dimensional model of a two dimensional map which enhances the orientation of the user to object like structure of the website.

Even though the project proposes a well equipped base for visual interaction and dynamic form changing over collective databases, further development is possible in terms of its application. A dynamic user interface that allows changing of the content by the users would enhance the collective characteristics of the project. Also further field research and experiments have to be done over its efficiency in collecting reading data, testing the initial assumptions made in terms of the reading activity.

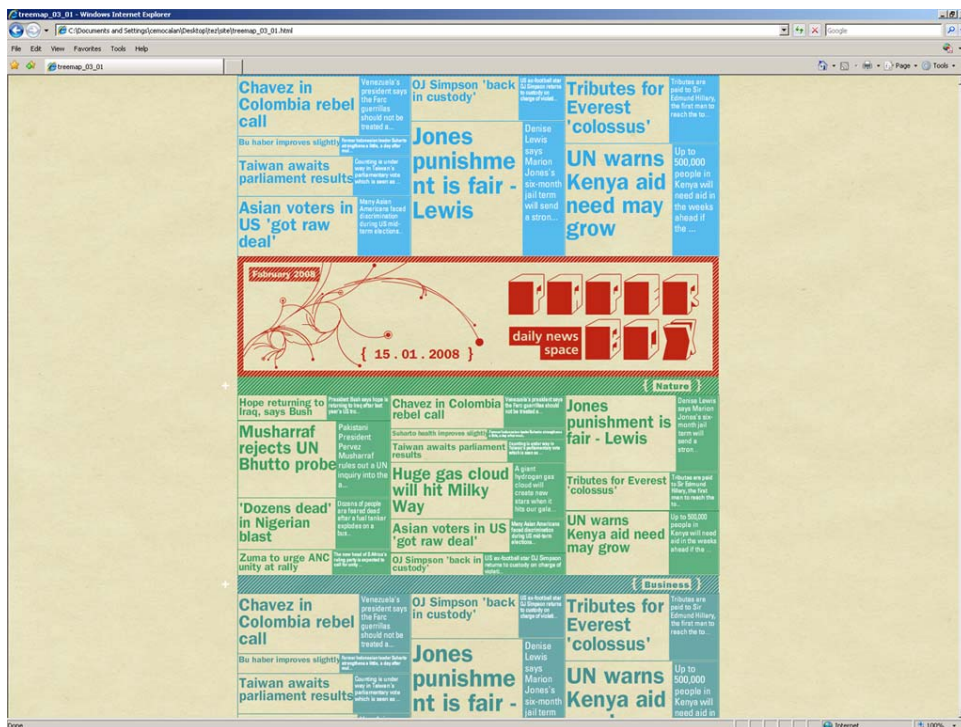


Figure 6. General view of *NewspaperBox* website



Figure 7. Detail from *NewspaperBox* (logo and page headline)



Figure 8. Detail from *NewspaperBox* (Treemap algorithm)

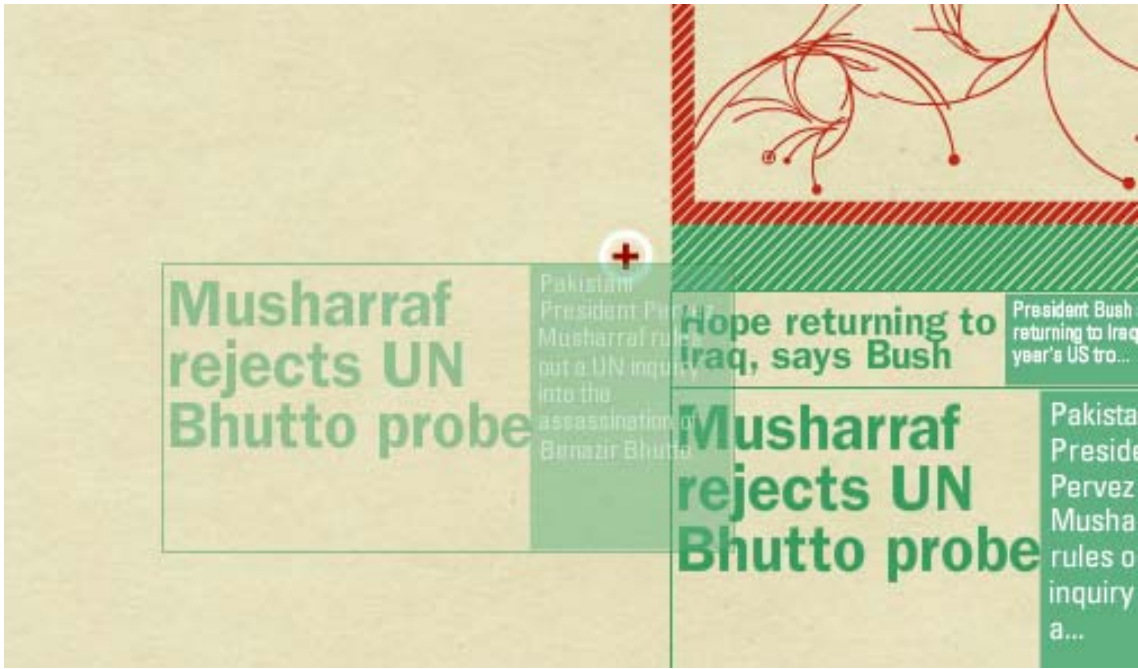


Figure 7. Detail of *NewspaperBox*. (Article interaction)

CONCLUSION

Since the introduction of the computer technologies and computer mediated communication the scene of debate over its use and possible futures was generally dominated by a view of utopianism that echoed the idealism of the Enlightenment. John Perry Barlow, for example, declared “the independence of cyberspace” as a “home of the mind” (1996) much like the ideal ‘public sphere’ that Habermas conceptualized which was constituted against state authority and was a space for rational critical discussion deprived of identities (2000: 93). In Barlow’s view, Internet was the space for this discussion as it was free of any regulation by states. A view, we now can not share in the light of copyright and security legislation, and the dominance of corporate mass media.

What this idealism entailed in conceptualization of new media was a set of definitions concerning ‘the user’ and the ‘interactivity’ of computer mediated communication, which through out this thesis I tried to redefine. The prominent property of new media is its abilities as a recording medium. The intimate involvement it has with the present of staging, as the dynamical restructuring of its content, which marks its difference from earlier mediums of recording. In combination with its property of being a shared medium, this recording and restructuring of a public memory establishes a space for play, not just with the machine, but also with the other users.

The underlying idea of the *NewspaperBox* project came from a recent change in the dynamics of Internet which opened up the possibility for internet users to share and showcase their personal content which earlier was only possible to a limited number of website builders. ‘Social’ websites equipped with content management technology is changing the landscape of the Internet into a more dynamic platform of social interaction. Since information available on Internet is mainly text based, interactive capabilities of the user are limited towards content management that is mostly regulated by copyright legislations. Social interactivity of the medium is not sufficiently conveyed in its visual representation which in terms brings an individualization of the medium.

NewspaperBox project proposes a visual model for representing the social space of a website in its form by equipping dynamic interaction between the user and the website interface. As these interactions are transmitted to the database of the site, a social memory is being built which later is passed on to the other users. As an object in exchange which bare marks of usage.

NewspaperBox was proposed as an online news site but further application is possible since the system is applicable to every text based interaction and content of the website could be altered accordingly. Once it is equipped by a user interface allowing content publishing it could be used in all text based social site, such as; independent news sites, event calendars, forums, bulletin boards, small advertisement sites, online auction sites.

Even tough the medium in which we encounter news and information has changed through the history of information our ‘response’ still continues to be articulated in the same field of mass media. Newspapers or online news space acts analogues to heterotopias, with ‘information’ symbolically and experimentally referring to all spaces of culture without necessarily compressing them into a whole. What they constitute is a space for play, if we are to take “constructed *as* construction” (Downes 2005: 122) of another space. It is the economical and structural possibility of building these heterotopias which is truly transformative about computer mediated technology, if we may choose to equip it as a tool.

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