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GEERT LOVINK

DYNAMICS OF CRITICAL INTERNET CULTURE (1994–2001)

THEORY ON DEMAND

AN ARCHIVE OF CONTENT PRODUCTION PUBLISHED BY THE INSTITUTE OF NETWORK CULTURES

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GEERT
LOVINK

DYNAMICS OF CRITICAL INTERNET CULTURE (1994–2001)

Theory on Demand #1

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An Archive of Content Production

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CONTENTS

Abstract
This study examines the dynamics of critical Internet culture after the medium opened to a broader audience in the mid 1990s. The core of the research consists of four case studies of non-profit networks: the Amsterdam community provider, The Digital City (DDS); the early years of the nettime mailinglist community; a history of the European new media arts network Syndicate; and an analysis of the streaming media network Xchange. The research describes the search for sustainable community network models in a climate of hyper growth and increased tensions and conflict concerning moderation and ownership of online communities.

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Melbourne, November 29, 2002

Geert Lovink

INTRODUCTION
CURRENTS IN CRITICAL INTERNET CULTURE

"Are you living in today's world?"
Marshall McLuhan

90s Internet Culture

The topic discussed here is set against the backdrop of a fast growing medium. Over a decade the Internet population has grown from a few million, mostly academics, to nearly half a billion.[1] In 1993 the ARPANET Internet backbone was commercialized and companies established their presence on the Net. This development coincided with the release of Mosaic, the first World-WideWeb browser. From now on stand-alone desktop PCs were able to exchange information through the 'network of networks.' After storage and computation growth and the rise of graphic interfaces the IT-revolution got into network frenzy. With the WWW, users no longer had to learn commands and type them into UNIX command lines but could easily click buttons. It was *Wired* magazine, launched in January 1993, which successfully established a 'cool' interface between IT- geeks and the business world of venture capital. An explosive mix of software, underground culture and commerce was created. This technoculture had its epi centre on the US-Westcoast, but its concepts spread like wildfire over the globe.

The period of 1993-1997 could be considered the golden age of Internet hype. The 'short summer of the Internet' is a tale of electronic frontiers explored by early pioneers facing numerous technical obstacles (unstable connections and software) while fueling the collective imagination with utopian promises of seamless bandwidth, online freedom, global intelligence and unheard commercial opportunities. The dissemination of the Internet was perceived by many (non-US citizens) as a sign of American unilateral supremacy in the post-Cold War period. The myth of the Internet in this period is one of America's invincibility.[2] Internet users outside of the US had come to terms with the specific US-American values of this global medium. There were two responses. For some the Internet had to be appropriated and freed of specific US-American values in order to become a truly global medium. For those who remained skeptical outsiders, the medium was just another symbol of the victory of (US-led) neo-liberal free market capitalism. This study is written from the first position. It looks into the way developers and early- user communities tried to acquire and then shape the rapidly growing and changing Internet environment, supporting some of the libertarian values (anti-censorship), while criticizing others (neo-liberal market populism).

1. See www.isc.org for statistical details. When counting started in August 1981 there were 213 Internet hosts. In January 1991 this had grown to 376.000. This number grew to 43.230.000 in 1999. For a brief history of the Internet, see:www.isoc.org/internet-history/brief.html and Bruce Sterling's short history of the Internet from 1993: http://www.forthnet.gr/forthnet/isoc/short.history.of.internet.
2. US invincibility is symbolized in the Microsoft slogan "The Best just got Better".

The material and reflections assembled here take as their starting point the economic and political bias and blind spots of the still dominant cyber-libertarian ideology. This is why the prime object of net criticism remains techno-libertarianism, despite its demise after the dotcom crash and 911. Central to techno-libertarianism is the belief that the state is the main enemy of the Internet and only market forces can create a decentralized communication system, accessible for everyone. Even now, despite the dotcom crash and growing monopolies, the Net is still presented to an ever expanding group of (usually young, white and male) developers as a 'pure' medium; an abstract mathematical environment, untouched by society, neutral of class, gender or race, capable of 'routing around' the problems caused by the dirty old world outside.[3]

Around the mid-nineties the discursive emphasis of techno-libertarianism shifted from the Californian alternative underground culture to the rightwing-libertarian agenda, symbolized by the author and technology newsletter publisher George Gilder. The 'New Economy' movement found its political leader in the Speaker of the House Newt Gingrich. The agenda was one of organized greed, deregulation, less state and more market. There was a common belief amongst techno-libertarians that by further pushing the technological revolution onto society, social inequalities and the 'digital divide' would disappear over time.[4] Many Internet developers were not interested in, or even aware of, the conservative agenda of these *Wired* cover idols. As Europe and most of the world lagged behind the uptake of the Internet there was little or no critical discourse that could formulate an alternative agenda. Al Gore's 1992 dream of an 'information superhighway,' built as a public project, comparable to the motor highways of the thirties, quickly faded away. This was the era of market populism. What early Internet users shared was an entrepreneurial spirit, the techno-optimism that a global medium growing 'out of control' could overturn the established pre-digital industrial order, based on the power structure that came out of 'bricks 'n' mortar' industry era and the regulatory intervention policies of the nation state.

Methodology

Unlike much of the cultural studies literature and early media theory, I will not describe what an email is, what MUDs and MOOs are and compare the Internet with book culture or television. In my view the question of what the Internet is all about has been sufficiently dealt with. It is time for critical research to move on, away from the general level of functionality. It is no longer the technical possibilities that characterize the medium. Instead of, yet again, going through general possibilities my research is based on empirical data: emails, webpages, events and personal encounters with the players in the field—both real and virtual. Where possible and useful I have made references to other (online) literature. It is my aim to write a contemporary form of media archeology in which I map the social and cultural usages of the Internet. I am writing early histories of a selected group of techno-cultural networks. The methodology of the four case studies consists of content analysis of the (publicly available) web archives of the lists and sites. I went

3. Reference to John Gilmore's famous saying, "the Internet treats censorship as a malfunction and routes around it".
4. The techno-libertarian agenda of the mid-nineties has been described in detail by Paulina Borsook, *Cyberselfish: A Critical Romp Through the Terribly Libertarian World of High-Tech*, London: Little, Brown and Company, 2000 and Thomas Frank, *One Market Under God: Extreme Capitalism, Market Populism and the End of Economic Democracy*, New York: Doubleday, 2000.

through thousands of individual postings, looking for general patterns and significant quotes. From the list archives I selected a number of significant threads and then did a close reading of a particular debate. The basis for selection has been motivated by instances whereby the discursive limits of online debate manifested in terms of an articulation of social, political, economic and cultural dimensions within the time and space of the mailinglist itself. Email filtering and critically selecting website links are essential activities in order to not get overwhelmed by the vast amount of online information. This problematic is addressed throughout this thesis. In the filtering process I searched for general discursive patterns and shifts in the exchanges, and then selected a limited number of postings. I combined a detailed analysis of web archives with my personal knowledge as a participant in each of these networks. In each of the four cases it has been essential that I have had first-hand knowledge about the players. There is a curious proximity here with regard to the presence of the event within a technicity of deterritorialized information flows. And it is precisely this relationship which drives both theoretical and methodological considerations in this study.

No matter how urgent or attractive, it is not my intention to do a discourse analysis of the dominant techno-libertarian Internet agenda with its anti-statism and preoccupation with biological metaphors. My aim is a limited one. I am mapping out the diverse spaces that constitute critical Internet culture. What is presented here is a 'communicology' (Vilem Flusser) or grammar (Marshall McLuhan) of the Internet. I am looking into the internal dynamics of those who did not follow the commercial mainstream and tried to develop a critical Internet culture. In the four case studies presented here I am describing how these non-profit cultural networks were founded, grew and discovered their boundaries. One of my key questions is what are the forces that produce change in an Internet mailinglist culture? How is ownership and internal democracy arranged beyond the good intentions of no censorship and open publishing? I will investigate how social relationships are embedded in software. The beginning of 1994 is arbitrary in this case. For some of the actors in this Brechtian 'Lehrstück' it would have been 1993, for others 1995. For various reasons this research stops around mid 2001 and does not deal with the changes after September 11, 2001. The study includes the dotcom crash but will not go into detail about the much wider accountancy and accountability crisis of WorldCom, ENRON and Andersen, late 2001 and 2002.

Biographical elements & chapter overview

In the following section I will give the reader a brief summary of each chapter plus an account of my personal involvement in each of the stories. I have worked in both new media theory and independent media (print, radio and Internet) since the early 1980s. As a theorist I have been contributing to this field under the group name Adilkno.[5] Since the early nineties my own theoretical work focused on the aim of creating an international, interdisciplinary and networked critical discourse, able to reflect and intervene in the fast changing daily economics and politics of the Internet. In 1995 this common effort was given the 'net criticism' label. The critical practices materialized in conferences, publications, lists and websites, workshops, public debates, manifestos and petitions, software, art works and, of course, my own writings. All these activities together are what I call critical Internet culture. The practice of net criticism which is at once international,

5. More on Adilkno: www.desk.org/bilwet. English translations of Adilkno books: *Cracking the Movement*, Brooklyn: Autonomedia, 1994 and *The Media Archive*, Brooklyn: Autonomedia, 1998.

interdisciplinary and networked is conditioned by the impossibility to work in the present, in any way other than a reflexivity that acknowledges the field of tensions between networked media and everyday life. The net criticism presented here contributes to the foundations for a history to come.

Chapter one opens with three positions I selected from the fast growing body of work that is being done in the field of Internet research. What unites the studies of Manuel Castells, Hubert L. Dreyfus and Lawrence Lessig, all three published in 2001, is their post- introductory mode. All three no longer ask what the Internet is all about. Instead they investigate its actual practice. Writing in the outgoing dotcom era the three authors (note: all US-American based academics), deal with the complex relationship between the Internet and society. Whereas Manuel Castells is trying to give a 'neutral' overview of a wide range of academic literature, Hubert L. Dreyfus takes a more conservative- moralistic stand. In his view the growing use of the Net, for instance in education, would lead to a loss of reality. Lawrence Lessig on the other hand plays the role of concerned liberal citizen, warning of the danger of a state-sponsored corporate takeover of the Internet, which could cripple its innovative role.

In chapter two I provide the reader with an overview of 'dotcommania,' the e-commerce hype of the late nineties. In order to situate the challenges of the non-profit critical Internet culture I analyse the dotcom boom and bust as its 'mirror.' After describing the general characteristics of dotcoms I examine a collection of dotcom biographies that were published after the fall of the Internet stocks in 2000. I have been a dotcom watcher from early on. Even though I did not work myself in a dotcom as an employee, I have been reasonably close to the phenomena because of the involvement of friends and colleagues in this area. All of the initiatives that I started have been non-profit businesses. I had a few personal experiences in the first wave of Internet commercialization (1994-1997) and witnessed the quickly fading catalyst role of artists, designers and content producers such as myself, followed by the dotcom business hype (1998-2001).[6] The reluctance of independent Internet initiatives to critically engage with business is a topic in itself. The historical fact is that, apart from a few moments in the early-mid nineties, the traditional separation between theory, academics, arts and culture on the one hand and business on the other was reproduced during the late nineties dotcom boom. This resulted in minimal 'economic competence' for one group and a profound lack of theoretical tools and cultural awareness for the other.

Cultural studies, with its emphasis on identity politics in 'old' print and broadcast media and broad analyses of globalization, overlooked the Internet boom and its techno- libertarianism. In short: it all went too fast. Traditional NGOs and social movements also showed little interest in the financial machinations of the global managerial class. Instead, activist investigative research focused on the environment, racism, migration and gender issues. Some investigations into the media and telco markets, and institutions such as IMF, Worldbank and WTO touched on some of the dotcom topics. A study such as Dan Schiller's *Digital Capitalism* reduced the New Economy to old style

6. I have described my experience with an early dotcom project, Netural Objects, which was initiated, amongst others, by the Amsterdam Society for Old and New Media. See: Geert Lovink, *Nettime*, April 21, 1998.

monopolist strategies of well known big corporations, overlooking the specific dotcom dynamics of start-ups by multi-billion companies overnight only to fold the next day.[7]

Many of the archives of non-profit Internet initiatives I am dealing with have an online component. This means that they are accessible to any scholar, and hopefully, future historian. None of the networks that I participated in have been purely virtual. All the networks described here held meetings in 'meatspace' (where the flesh meets in-real- life), published paper publications and either had their own offices and infrastructure or have been supported by a cultural organization that hosted the network.

Chapter three is a case study about the Amsterdam community network The Digital City (De Digitale Stad: www.dds.nl). Founded in 1993 this community server was one of Europe's biggest Internet non-profit community service providers. With the local government's persistent refusal to fund The Digital City, the project eventually became a victim of the dotcom craze and was privatized. In September 2001 DDS turned into a commercial broadband reseller. I had been a member of the group of founders that started the initial experiment of The Digital City as a freenet in the August 1993 to mid-1994 period. Once the decision was made to continue and move into the new office at Prins Hendrik Kade (where xs4all and *Mediamatic* were also housed) I no longer participated in regular meetings. Up to 1999 I contributed only on a project-to-project base (mainly live streaming media projects that DDS sponsored).

My contribution to the actual 'city' was limited to my involvement in setting up a 'square' on drugs information and policy (1997). Instead of getting involved in the daily operations, another DDS founder, the artist Walter van der Cruijssen and I decided to start an additional 'content provider' (read: not for dialup access services). Desk.nl would focus on the production of cultural content. In October 1994 we rented a space where artists could learn how to work with the Net, share bandwidth and knowledge and get their project up on the Net.[8] Apart from a few public terminals neither DDS nor the hackers' ISP (Internet Service Provider) xs4all wanted to raise the issue of how critical cultural content was going to be produced. According to the ISPs this was everybody's personal business. For both x4all and DDS, dominated as they were by a hacker culture, 'access' was the only issue. How content providers were going to make a living was their problem, and it was one of self-interestedness. There was no concern for the problematic of the process by which 'cultural capital' (Pierre Bourdieu) is constituted.
According to many in the ISP access business the Internet was a neutral 'infrastructure' where individual users were responsible for their own content. In this sense the culture of hackers clearly embodies the fundamentalism of US-libertarianism (hence the emergence of the cyber-

7. Dan Schiller, *Digital Capitalism*: *Networking the Global Market System*, Cambridge (Mass.): The MIT Press, 1999.
8. The wild phase of desk.nl lasted two years.In 1997 a financial manager, Ben Schouten, took over. Walter, who until then had coordinated desk.nl left. After the takeover commercialization set in. Desk.nl became a regular service provider. It moved from the old city area to the harbor and lost its appeal. Increasingly artists had found their own way to the Internet and bandwidth was no longer an appeal. Unlike DDS the 'privatization' of this collective initiative did not cause any public attention and was seen by insiders as a messy, legal issue between Walter van der Cruyssen and Ben Schouten.

libertarian). The focus on access remains an important one, especially in a climate in which media convergence and monopolies remain as the normative procedure for big business which establishes hegemony through closure (i.e. the user pays economy of information exchange). Walter and I wanted to speed up a critical and innovative Internet culture,based on content, and set up an Internet lab for (local) artists. We also wanted to become a node in the fast-growing international new media context (mainly The Thing, operating out of New York). The foundation of desk.nl gave me the freedom and distance to reflect on The Digital City. Since late 1994 I started to lecture as an independent 'DDS ambassador,' promoting the project and its ideas, mainly in German- speaking countries. The material presented in this thesis grew from these presentations and related publications.

Chapter four deals with the history of the nettime mailinglist. Nettime is a collection of mailinglists in different languages that started in 1995 as an interdisciplinary effort to find out what 'net criticism' could be all about. The case study describes the first 3-4 years in which the English language (international) list not only debated the techno- libertarian 'Californian ideology' of *Wired* magazine and others, but also organized meetings and publications. In particular, the chapter looks into the dilemma between open and closed lists and how the nettime community dealt with this issue.

Compared to the other case studies one could say that I have been personally involved in nettime more than in any other initiative. With Berlin artist and activist Pit Schultz I am the founder of this international initiative and introduced the concept of 'net criticism.' I have been at the heart of events and drove the nettime initiative for almost five years. The chapter describes in detail its prehistory and the meeting in Venice in June 1995 where the list was founded. The key argument is how the 'hybrid' strategy of Internet-based discussions were mixed with real-time meetings and paper publications, questioning 'pure' virtuality. The chapter stops at the moment nettime had become a regular list without additional activities, in early 1999. I left the moderation group late 1999 even though I remained a regular contributor to the international (English) list. My nettime activities since then have been limited to setting up parallel non-English lists such as the French, Spanish/Portuguese, Romanian, Chinese and Japanese mailinglists. The scope of this chapter is limited to the dynamics of the nettime community itself and does not look into the countless threads and debates that have taken place on the list.

Chapter five describes the rise and fall of the Syndicate network. Founded in 1996, Syndicate slowly built up a critical mass of subscribers. As a post-1989 project its aim was to open up a dialogue between new media arts practitioners in East and West Europe. After a number of meetings, workshops and publications in early 1999 Syndicate found itself caught up in the controversies of the Kosovo war. Syndicate became a lively platform for the debates about the ethnic cleansing and NATO bombing of Yugoslavia. However, the list did not survive the harsh debates. In 2000, while still an open and unmoderated list, Syndicate became the target of 'trolls' and other 'info-war' strategies of net artists. In mid-2001 Syndicate fell apart, unable to resolve the issue of moderation.

I only played a supportive role in Syndicate to get the network up, in particular in the 1996-1997 period. Ever since 1989 when it became possible to travel freely I got involved in independent media initiatives. Based in Berlin, Transsylvania and Budapest, for shorter or longer periods, I was

teaching media theory, organizing conferences, setting up arts exchanges, first in Hungary and Romania, later on throughout Former Yugoslavia, the Balkans and the Baltic region. I was on the Syndicate list from the very beginning, provided content, attended meetings (Rotterdam, Tirana) and facilitated two Syndicate workshops during Hybrid Workspace/Documenta X (Kassel, 1997) and the Kiasma Temporary Media Lab (Helsinki, 1999).

Having been one of the organizers of the third Next Five Minutes conference in March 1999, I was then amongst the group that pulled off the HelpB92 campaign to support independent media in Yugoslavia. I worked for almost three months fulltime on various Balkan media campaigns until energy flattened out in June 1999. Although I was regularly posting material to Syndicate, my main focus in the Kosovo war period was the moderation of the Nettime mailinglist, together with Ted Byfield and Felix Stalder. During the Kosovo conflict the Nettime list, roughly four times the size of Syndicate, reached previously unseen high traffic patterns. The overwhelming amount—and intensity—of Nettime postings and threads is such that it would need a separate research project. I therefore decided to limit this case study to Syndicate primarily because it had been such a distinct community. In 2000 the Syndicate project lost much of its direction—events which I describe in the chapter. As in the case of Nettime, Syndicate struggled with the issue of openness and moderation—a topic that is central to this thesis.

In Chapter six I feature some aspects of the streaming media Xchange community. Xchange, established in late 1997, has always been a pragmatic hands-on network. In this case study I describe and analyse the collaborative projects between audio artists and net.radio initiatives that make up the Xchange network. Due to the stagnating rollout of broadband and rising uncertainties about intellectual property rights the streaming media sector found it difficult to reach its full potential. This also had an impact on the non- profit, independent networks. Instead of expanding Xchange has chosen to remain small and 'sovereign.'

Even though I know a reasonable number of the active members of the Xchange network, I would not consider myself part of it. Apart from sporadic postings on the list I have made net.radio programs in collaboration with e-lab, DFM, Zina Kaye, Ralf Homann and others, doing streaming sessions from wherever possible. This research builds on my 1992 essay "The Theory of Mixing" and a few related pieces of the same time in which I described the techniques of Amsterdam free radio makers.[9] It's using an Adilkno concept from the same period to explain Xchange's media strategy of 'sovereign media': the liberation of any possible audience, or the media without audiences. This was a strategy aiming to go beyond the 'alternative media' concept as dictated by Habermas and Negt/Kluge, in which the media worker is positioned as a serf to the working classes and the Party/movement. Sovereign media was made possible by the emergence of low-cost communications technologies. From early on I have been interested in the economics and politics of bandwidth. Independent streaming media networks such as Xchange depend heavily on the availability of cheap Internet connectivity. In this chapter I will explain how the self-image of such networks is related to the (relative) bandwidth stagnation that the Internet has faced since the late nineties. The conclusion brings together the experiences of the different lists and communities. I focus on

9. See Geert Lovink, "The Theory of Mixing," in Neil Straus (ed.), *Radiotext(e)*, Brooklyn: Semiotext(e), Vol. VI, issue 1, 1993, pp. 114-122.URL: http://www.thing.desk.nl/bilwet/adilkno/Radiotext/MIXING.TXT.

the issue of moderation and how internal democracy within Internet-based networks could be shaped. The rise of 'weblogs' is one way of dealing with issues of information overload and moderation. I look into the promises of weblogs and discuss how they have emerged as a response to the unresolved, implicit power structures within list communities.

An introduction to Internet mailinglists

As three out of four of my case studies deal with mailinglists, I would like to present the reader with an introduction to this Internet application. Electronic mailinglists are described as "Internet based discussion groups (as opposed to one-directional distribution lists)".[10] On the server side they are administered by a list program (e.g. listserv, listproc, majordomo, mailbase, lyris, mailman), for the participants they are accessible via simple electronic mail. Unlike electronic newsletters, subscribers can freely post. Going back to the mid-sixties,[11] electronic lists are considered a low-tech, cheap and open way to exchange information and arguments. They often result into a (virtual) community. Josephine Berry describes lists as one of the most important significant materials and theatres of operation. "These often long running lists, generating dozens of mails each day, produce an informative, critical and sociable 'virtual community' against which and through which artworks are made, circulated and discussed". [12] According to Berry list cultures result in "group authorship, hyperlinked structures and a high level of mutual quotation and/or plagiarism".

Peter Kollock and Marc A. Smith provide us with a useful definition of a mailinglist:

> Email lists are typically owned by a single individual or small group. Since all messages sent to the list must pass through a single point, email lists offer their owners significant control over who can contribute to their group. List owners can personally review all requests to be added to a list, can forbid anyone from contributing to the list if they are not on the list themselves, and even censor specific messages that they do not want broadcast to the list as a whole. Even open lists can be selectively closed or controlled by the owners when faced with disruption. Most email lists operate as benign dictatorships sustained by the monopoly power that the list owner wields over the boundaries and content of their group. As a result, email lists are often distinguished by their relatively more ordered and focused activity.[13]

10. For a general description, see Irene Langner, *An Introduction to Internet Mailinglist Research*, http://www.gmd.de/People/Irene.Langner/docs/19990917/trier199909.html and her paper at the GMD Doktorandentag 1999, "An Introduction to Mailinglist Research in the Social Sciences," http://www.gmd.de/People/Irene.Langner/docs/19991122/. Another mailinglist study can be found at www.netzservice.de/Home/maro. See also Peter Lunenfeld, *Snap to Grid*, Cambridge (Mass): MIT Press, 2000, pp. 38-41.
11. David S. Bennahum, "The Hot New Medium Is ... Email," *Wired* 6.4 (April 1998). "The first lists existed on local networks, what people then called time-shared systems. One of the earliest systems to employ distribution lists was the CTSS computer system at MIT. Developed in 1965, MIT's MAIL was set up to send administrative messages to network users". http://www.wired.com/wired/archive/6.04/es_lists_pr.html.
12. Josephine Berry, "Introduction-Site-Specificity in the Non-Places of the Net," PhD thesis, London, 2001, quoted from Berry's posting to *Nettime*, August 22, 2001.
13. Peter Kollock and Marc A. Smith in the introduction to their reader *Communities in Cyberspace*, London: Routledge, 1999, p.5.

I agree with this definition and will examine the specific consequences of such contested software-embedded power structures. According to Serbian video maker and list enthusiast Aleksander Gubas, electronic networks must have a vision, a groove and a direction. Networking must come out from true need. In a piece called "Flocks of Netgulls" he writes: "A mailing list should always ask itself what is its sense, purpose and vision. Otherwise, the networking becomes just another empty and prostituted phrase like multiculturalism, tolerance, democracy, open society, etc".[14] Lists give a sense of community and belonging. "Maybe you'll never meet the other members of your mailing list—but it's good to know they exist. It makes you feel less alone. Subscribing to a mailing list means the definition of your flock; it means that you recognized some other gulls to cry together on-line".[15]

On mailinglists the moderation issue is the most sensitive topic. Lists, newsgroups and chat rooms create an illusion amongst users of technical freedom without human interference. However, these Internet communication forums are as socially constructed as anything else. In most cases the 'moderator' is also the 'list-owner,' the person who owns the password to change the list configuration. This list owner can switch the list from open-unmoderated to closed-filtered, let email go through with or without attachments, let people from outside the list have the possibility to post, etc. The term 'moderation' is not just negative. It may just as well refer to the encouraging and entertaining aspects of running a list. A good moderator is first of all an invisible facilitator, a host, inviting people off-list to post their material or opinion on certain topics. List facilitators are always on the look for relevant, new content, stirring up debates and cooling them down if they end up in flame wars.

List culture is all about the degrees of freedom set by the moderator/list owner, thereby creating a sense of democracy. Do moderators need to be appointed, even if they are the initiators or volunteer to do hard work in the background, cleaning up inboxes full of error messages, reformatting texts, day by day? Much of the work to keep lists running in a smooth way is invisible. How do users reach agreement on what is noise and what is useful information? How much noise and meaningless one-liners can subscribers bear? What happens if there is a sudden influx of newcomers? Who will instruct them and will they introduce themselves? At what point does the list community become an audience? These are some of the issues lists have to deal with. The nettime case went beyond issues of internal democracy. It tested the boundaries of list culture as such by putting real-life meetings and print publications above its Internet activities in order to accelerate the growth of the network and its intellectual and artistic output.

There are very few academic mailinglist studies yet.[16] Most of the studies I found deal with other aspects, such as online virtual communities in general (mostly MUDs, MOOs and other type of

14. Aleksander Gubas, "The Flock of Netgulls," *Nettime*, May 23, 2001.
15. Ibid.
16. A journalistic account would be David Bennahum's *Wired* article, 6.4 (April 1998), on list culture. URL: http://www.wired.com/wired/archive/6.04/es_lists.html. One of the first list studies into the population and behaviour of a list could be Stanley Brunn, GEOGED as a Virtual Workshop, paper presented at National Council for Geographic Education, 83 Annual Meeting, 11-14 October 1998, Indianapolis, USA. See also the work of Radhika Gajjala (www.cyberdiva.org) who researches on women-centred lists.

games), chat rooms and Usenet newsgroups. Let's look into one example. The Swedish researcher Malin Svenningson did an ethnographic study about a web chat community. He looked at how the regular users of a chat room created, maintained and expressed feelings of community with each other. An important theme in this turned out to be struggles in the borderlands of the community; that is, the insiders tried to shut the newcomers out and the newcomers tried to become insiders. To a large extent, the sense of community was actually created by making others feel left out. The community Svenningson studied was densely knit and very active. However, four years after he made the observations the chat room had turned into a ghost town. One of Svenningson's conclusions is that if members attempt to control the space, users leave.

Newcomers must take the place of old members. One always has to allow some disorder in the form of newcomers who don't know about community standards, otherwise the community will actually vanish and die, Svenningon concludes.[17] In this study however, I am more interested in the issue of continuity and sustainability. It is almost unavoidable that networks rise and fall.

I am reluctant to present Internet mailinglists as 'virtual communities.' Coming from a Euro-continental background I tend to associate the community (*Gemeinschaft*) concept with false and romantic notions of pastoral unity, comfort and dictatorial consensus rituals. This may, or may not, be the Anglo-Saxon tradition, where the term community has a more neutral meaning. Nonetheless, for me the word community is first of all an implicit reference to the domain of order, refuge and withdrawal. Howard Rheingold, the author of *Virtual Community*, has answered such criticisms in a new afterword he wrote for the second edition.[18] I would rather not do the obvious and again debunk the 1993 Rheingold position, as David Bell is doing in his *Introduction to Cybercultures*.[19] Ten years after the publication of Rheingold's groundbreaking book it is common knowledge that the 'healing' Internet is not delivering spiritual communinion. Still, a considerable number of virtual community studies contain consensual New Age talk. Take for instance Anna Du Val Smith, writing in one of the countless mass produced cyber anthologies, *Communities in Cyberspace*. She writes: "If in their attempt to control behavior, communities drive out ideas by suppression or exclusion, or escalate into chaos as a consequence of power struggles, their life and purpose will be threatened. To avoid this they must not silence the voices of their members, but give them expression. As Scott Peck puts it, communities must not give up fighting, but learn to 'fight gracefully.'" Against such idealism I am arguing that the realpolitik of information warfare is necessary in order to guarantee the very survival of today's online forums. For me nothing is as terrifying as being totalizing so I will use the (virtual) community concept occasionally since it cannot be reduced to narrow New Age visions or Third Way phantasms.

What is critical Internet culture?

The object of this study is neither the Internet in general nor new media theory as such. The

17. Malin Sveningsson, *Creating a Sense of Community. Experiences from a Swedish Web Chat*. Dissertation. Linköping: Linköping Studies in Art and Science, 2001.
18. Howard Rheingold, *Virtual Communities*, Cambridge (Mass.): MIT Press, 2000. In my book *Dark Fiber: Tracking Critical Internet Culture,* Cambridge (Mass.)*:* MIT Press*,* 2002 I have analysed the new afterword, pp. 5-9.
19. David Bell, *Introduction to Cybercultures*, London: Routledge, 2001, pp. 92-113.

amount and variety of mailinglists, e-groups, weblogs and virtual game worlds is countless. I will not attempt to give an overview of the thousands of topics they deal with. Rather, I would like to exemplify the choices I have made and what I understand to be the constitutive elements ofcritical Internet culture. I am talking about a specific 'milieu' of non-profit initiatives, cultural organizations and individuals primarily based in Europe, the USA, Canada and Australia and a few other countries. Being transnational and cosmopolitical in nature, critical Internet culture can be positioned at the crossroads of visual art, social movements, pop culture and academic research. Its interdisciplinary intention is to both intervene and contribute to the development of new media.[20]

Critical Internet culture manifests itself both in the virtual world as websites, mailinglists and chatrooms and at festivals, screenings and public debates. It stresses the need to go beyond the oppositional gesture and create a lasting independent infrastructure. Besides such counter cultural characteristics, what is specific here is the desire to intervene in the early stages of technological development. Technoculture is not just a lifestyle. The subject of critical Internet culture is 'the user as producer.' The aim is not consumer choice. Even though access-related issues are important, the demands go beyond equal dissemination of technology throughout society. It is the architecture of the networks and the underlying code which society should question—and change. This is why a critical understanding of standards and ownership plays such a key role within this context. Critical Internet culture's intent is to shape and anticipate as much as to reflect on the existing IT-products and their inherent social relationships.

Technology is not a neutral tool and this also counts for the Internet. Its structure is a result of particular historical settings. But most of all, culture at large plays a key role in the making of new media, even though most technologists deny this very fact. Critical Internet culture is therefore not just about artists working with technology. There is no avant-garde dream anymore about the artist as first user, bringing society into an aesthetic future. Instead, there is an ongoing debate about the parameters of the technological culture. What are the properties of 'the new' and who are its agencies? The critical aspect is related to the urge to reflect upon the dominant discourses while at the same time positioning one's contribution. Critical Internet culture is driven by the will to address issues that ultimately affect hundreds of millions of users, and is perfectly aware of the limited and marginal position of such non-profit cultures.

This study is a chronicle of a handful of social networks. It tells the story of critical Internet cultures in their first years of existence. Both theory and practice presented here do not herald the triumph of technology. The case studies reveal real boundaries, internal contradictions and conflict that occurred once the projects had surpassed their initial stage of euphoria. What happens

20. For me the Internet is part of the 'new media' landscape that goes from video art, computer graphics, CD-ROMs, virtual reality to digital cinema, mobile phones and DVDs. For a definition of new media I would like to refer to Lev Manovich's *The Language of New Media*, Cambridge (Mass.): MIT Press, 2001.
In the chapter Principles of New Media (p. 27-48) Manovich sums up the characteristics of new media such as numerical representation, modularity, automation and variability, which all apply to the Internet as well.

when the party is over, when you run up against the border of software and Internet standards, when the cyber spectacle fades away and everyday life, with its dirty politics, takes command?

Introducing the net criticism project

Karl Marx's saying "the traditions of all the dead generations weighs like a nightmare on the brain of the living"[21] also counts for Internet studies. The new, struggling to push aside old traditions and structures, can't afford to be haunted by shadows of a past it claims not to have. On the other hand, for many the Internet stands for a liberating the "crusade of hope against history" (Edna O'Brien). In its own popular mythology, technology blindly marches on, indifferent to recession or crisis, unaware of its past, solely focused on the Future. Eighties avant-garde cyberpunk claimed to live in the future. We may have arrived there (for cyberpunks 'the future is now'). But once information technology is installed and society is getting networked, the rhetoric of the cool, revolting against the establishment, no longer works and the mood changes.

By now, Internet culture has created its own history. Writing in 2002, ten years after the introduction of the World Wide Web, there is no more talk about the Internet as the final frontier. Streams of messages about corporate mergers and collapses have replaced popular cyberculture. There is a rising awareness of the backlash in the form of increased surveillance and control. Internet culture can no longer deny history, that is, its own present history. It has to leave its heroic, mythological stage behind. The net criticism project, of which this PhD considers itself a part, contributes to the writing of this history in the making.There are uses and disadvantages of technology history for life. Critical Internet research is faced with a dilemma. It doesn't not want to glorify technology and dotcom business models; neither does it buy into the cynical reason that, in the end, everything will remain the same.

The critical approach proposed here operates in close affiliation with 'media archeology'.[22] Media archeology is first and foremost a methodology, reading the 'new' against the grain of the past instead of telling the history of technologies from the past to the present. So far no comprehensive overview of the media archeology approach is available but we could mention a few scholars here such as Friedrich Kittler, Siegfried Zielinski, Werner Nekes, Jonathan Crary, Werner Kuenzel, Christoph Asendorf, Erkki Huhtamo and Paul Virilio. Even though I am not tracing Internet culture back to the 19th, 18th or even 17th century I still see a 'Wahlverwandschaft' (elective affinity) between my research and the media archeology approach. The dynamics of social networks on the Internet do not have to be limited to psychology. They are as much part of the history of the medium itself as the heroic tales of its inventors.

21. Karl Marx, *The Eighteenth Brumaire of Louis Bonaparte* (1852),URL: http://chnm.gmu.edu/revolution/d/580/. Source: Karl Marx, *The Karl Marx Library*, vol. 1, ed. Saul K. Padover , New York: McGraw Hill, 1972, p. 245–46.
22. Erkki Huhtamo describes media archeology as a way of "studying recurring cyclical phenomena which (re)appear and disappear and reappear over and over again in media history and somehow seem to transcend specific historical contexts.URL: http://www.uta.fi/~tlakja/GA/media01.html.See also Siegfried Zielinski, *Archäologie der Medien*, Hamburg: Rowohlt, 2002, pp. 46-47. For Zielinski archeology is 'an-archeology.' See also Zielinski's "Media Archeology" *CTheory*, http://www.ctheory.net/text_file.asp?pick=42.

Histories should open up new threads and imaginative spaces, be they in the past, present or future. However, all too often history is used as a strategic weapon against new media advocates. It may be a truism that the uptake of media takes the cyclical form from avant- garde to sellout, only to return to the spotlight of obscurity. Nothing is as easy as turning history against the Internet. Many academics and others, who felt threatened by the power of the rising medium, have tried to prove that there is nothing new under the sun. They want to make their audiences believe that the Internet's fate is that of radio and television, ready to be tamed by national regulators and the market. There is an iron law: after an invention has turned into a mass product, early adaptors drop the hype in search for the next fashion. That may sound like a historical inevitable process. But that does not make the passions and interests of the players involved less real. In the case of the Internet the emerging 'net criticism' genre is one such player—and a passionate one too—even though its existence may not yet be well known outside of certain cultural circles.

Because of the speed of events, there is a real danger that online phenomena has already disappeared before a critical discourse reflecting on it has had the time to mature and establish itself as institutionally recognized knowledge. Internet research, net criticism, techno-cultural studies, media philosophy etc. are still in their infancy.[23] Often the object of study has already disappeared before the study is finished. But that doesn't make the burning issues irrelevant. Critical Internet research has to distance itself from futuristic speculations and accept its humble role of analyzing the very recent past. Internet researcher David Silver has made a distinction between three stages. During the first stage, which he calls popular cyberculture, Internet research is marked by its journalistic origins. The second stage, cyberculture studies, focuses largely on virtual communities and online identities. In the third stage, which Silver calls critical cyberculture studies, research expands to "online interactions, digital discourses, access and denial to the Internet, and interface design of cyberspace".[24] My study presented here would fit into this third stage. It particularly re-examines the notion of virtual communities as actual social networks and the way in which they both reflect society and anticipate (and embody) new forms of social interactions.

At this moment in time, the year 2002, the passionate challenge to write down the words of theories to come, has hollowed out. After the dotcom crash, cyber visionaries and IT- consultants ran out of puff—as did their client portfolio. Festive, conceptual raves are no longer in sync with the reality of the harsh networked everyday. After discovery and colonization, what remains is the socialization of cyberspace. This is the early 21st century post-heroic age of control. The downfall of the cybergods was predicted. Since the mid-nineties a growing group of engaged users started to openly question the conservative, techno-libertarian agenda of the 'digital revolution.' Yet, by 1998, the critical Internet cultures, as described in this study, could not keep up—let alone counter—the sound and fury of the dotcom businesses and IT firms that had turned to the Internet.

23. Elsewhere I have listed the different, competing names in this field such as digital studies, Netzwissenschaften, hypermedia studies (Lovink, *Dark Fiber,* p. 136). See also the debate on the aoir mailinglist (www.aior.org), early November 2002 about the question whether 'Internet research' had to become an academic discipline.
24. David Silver, "Looking Backwards, Looking Forwards: Cyberculture Studies, 1990-2000," in David Guantlett (ed.), *Web.Studies*, London: Arnold Publishers, 2000, p. 19.

I consider this PhD part of a larger project that I, together with Pit Schultz, back in 1995 coined 'net criticism.' Net criticism as I see it is not targeted against the values of Internet pioneers from the pre-dotcom age—those with a belief in decentrality, the right to own your own words, the idea of sharing resources, code and content, and anonymity remain essential and worth defending. If anything it is aimed against cynical, populist IT journalists and PR consultants that are selling the Internet as a commodified spectacle. It is a call for a critical intellectual engagement. Net criticism is not a critique of information or technology in general. New media, in my view, deserve the best cultural resources on offer in society. In *The Future of Ideas* Lawrence Lessig has launched a dramatic call to defend the original Internet values (see chapter one). However, there is a growing disbelief that 'the market' is the appropriate partner in defending, and defining, Internet freedom. The hackers' version of a do-it-yourself capitalism, with worthy, anti- monopolistic intentions, promoting true market forces, has proven unable to beat the big software, telecom and media players who all have their own vested interests in dismantling core Internet values.

The word 'critical' does not refer to the so-called Frankfurt critical theory of Adorno, Horkheimer, Marcuse and others, no matter how tempting it may be to frame net criticism within that particular theoretical tradition. The crisis of continental critical theory into an obscure academic niche has taken its toll. There is no neo-Marxist network theory. Critical in this specific context refers to the urgent need for reflection combined with action, felt by many during the nineties, to counter the hyped-up media coverage, fixed on buzz words. What was needed was an informed discourse that could transcend the slogans of the day and could combine the shared drive towards public domain, free software and open standards with a (self)critical view on business and the role culture was playing in the formation of the 'network society.' Net criticism in my view is not a call to establish an academic discipline or appeal to existing sciences to please take notice of the Internet. The dominant marketing discourse in the information technologies was not (enough) criticized by the technologists who were pushing the medium. Contemporary thinkers such as Zizek, Virilio and Baudrillard have no hands-on knowledge about the Internet issues and keep talking in general terms about 'cyborgs' and 'virtual sex,' ignoring the dominant techno-libertarian ideology and its neo-liberal fetish of the 'market.'[25] The call for critical reflection on the emergence of a global communications medium of this magnitude does not necessarily equate with 'anti- capitalism' (or 'radical pragmatism' for that matter). Most of all it's an endeavour to 'beautify' this astonishing 'wasteful' medium (along the lines of Oscar Wilde), and aims to create a gift of excess, joy and pleasure within the Internet itself. Life does not function by rules alone. Net criticism has no obligations. It is an aesthetic undertaking as much as a field of social-political contestation. Being both engaged and informed, both utopian and negative, this should be a sophisticated and intellectual enterprise of the highest order. That's the challenge, in my view, that the net criticism project embarks upon.

25. One example. Jean Baudrillard writes: "Video, interactive screens, multimedia, the Internet, virtual reality—we are threatened on all sides by interactivity". He then goes on to praise his typewriter (which he does not consider a machine). "The typewriter is an entirely external object. The page flutters in the open air and so do I. I have a physical relation to writing. I touch the blank or written pages with my eyes— somethingI cannot do with the screen. The computer is a true prosthesis". Jean Baudrillard, *Screened Out*, London: Verso, 2002, p. 176-180.

The call for net criticism is certainly not a luddist escape route, looking for an 'alien' outsiders' position. It calls for engagement and responsibility, out of a deep concern that the Internet, bit by bit, is being closed down, sealed off by filters, fire walls and security laws, in a joint operation by corporations and governments in order to create a 'secure' and 'safe' information environment, free of dissent and irritants to capital flows. With the technical and law enforcement measures in place every bit can be labeled dissent. Radical pragmatists, like myself, believe that this is not a gloomy picture and that there's still enough space for intervention and freedom for off-the-radar initiatives. This confidence builds on the presumption of an active minority of net users willing to act, skilled enough to lobby, and equipped with enough experience to build social alliances in order to 'uphold' or indefinitely postpone closed systems (profit and control for few), while reinforcing open, innovative standards, situated in the public domain (to be accessed by all). One could think of Eric Raymond's metaphorical battle between the cathedral (Microsoft) and the bazaar (open source), or Manuel DeLanda's useful yet somewhat idealistic distinction between truly open markets and anti-markets (based on Ferdinand Braudel). Radical media pragmatism is not satisfied with some ideal notion how capitalism, or socialism for that matter, could work in theory, assisted by good willing engineers who found the perfect technology to run a 'GPL society,'[26] based on barter and 'open money.' A net pragmatism requires vigilant efforts to articulate the Net with materiality, for herein lies the possibility of a politics that recognizes the embeddedness of social practices.

The ideas and experiences gathered here do not openly draw from contemporary debates on the philosophy of technology. I am not interested in a quotation fest. Net criticism does not need the support and protection of Grand Thinkers. If it wants to be viable, the techno-discursive practices have to stand on their own feet. Theory, as presented here, is a living entity, a set of proposals, preliminary propositions, applied knowledge, collected in a time of intense social-technological acceleration. It is not yet time for a General Network Theory. There is a lot to be learned and borrowed from older fields of study such as cybernetics, systems theory or mass psychology. In this period of 'permanent transition,' scholars are stuck between print and online forms of knowledge hierarchies. Despite the hype, huge investments and commercial take-off, there is no systematic networked knowledge to speak of in the 'Western' world around the turn of the millennium, presuming that such a Grand Theory is even possible in the wake of postmodernity. Institutional power remains wary of network potentials, particularly the danger of losing intellectual property and offline privileges. The network society in the making is reluctant to theorize upon itself.

One question keeps coming back. Why use the 'criticism' concept in the first place? Isn't it a dead horse? Since the eighties *Kritik* has been severely out of fashion, and for good reasons. For my generation the critic has been perceived as a bored and cynical outsider who doesn't understand what is going on anyway. The critic as authority fueled the war between the generations and staged 'culture wars' about politically correct topics (but never about technology), promoting highbrow institutional culture. Employed by magazines and daily newspapers the critic's aim was to talk down, and if possible, destroy technological, artistic and intellectual experiments—at least, that's how we experienced criticism. Contemporary cultural theorists only made matters worse

26. GPL stands for general public license and is the legal backbone of free software production. See: www.gnu.org. 'GPL society' is a term developed by the German speaking *Oekonux* mailinglist (www.oekonux.org).

as they limited themselves to the Gutenberg galaxy of printed matter, thereby further widening a decades old gap between humanities and the world of engineers and scientists that were building the architecture of global computer networks. It was hard enough to 'think television,' let alone theorize algorithms of Internet search engines. The jump to the 'visual culture' discourse had yet to be made; meantime there was already the next technology and its attendant discourses. All of this constitutes an avalanche of the new and is symptomatic of the futility of criticism as fashion.

Within this context I am not referring to classical critics such as Edward Said who strictly remain within the realm of print (daily papers, magazines, books). The few public intellectuals around do not deal with new media issues. I was therefore tempted to go back to one of the classic postwar texts on the role of the critic. In *Anatomy of Criticism* (1957) Toronto professor of literature Northrop Frye opposes the mainstream view of the critic as a parasite or artist manqué. We could replace art with information technology and make an observation, similar to Frye. Paraphrasing Frye one could say that net critics are intellectuals who have a taste for IT but lack both the power to produce it and the money to patronize it, and thus form a class of cultural middlemen, distributing IT culture to society at a profit to himself.[27] This is a social formation that media critic McKenzie Wark has termed the 'vectoral class.'[28] Although the function to mediate still exists, today's intellectuals can no longer claim to represent the creative online other. It is not the task of the 'virtual intellectual'[29] to verbalize the ideas of programmers, designers and artists. For Northrop Frye the reason why criticism had to exist was that "criticism can talk, and all the arts are dumb".[30] In this age of interviews, specialized online and magazines, workers in the 'creative industries' are very adept at expressing themselves. They do not need the critic to do this for them. Furthermore, one could question the paternalistic assumption behind of mega terms such as 'creative industries' or the 'knowledge nation.' After all, new media workers, by definition, have established the competencies needed to function within networked societies. Some would even say that new media workers, or the vectoral class, have no choice anyway, having to write applications and academic papers in order to make a living. The rise of general writing skills, computer literacy and the Internet are closely connected.

In his book *The Function of Criticism* Terry Eagleton argues that modern criticism was born of a struggle against the absolute state. Eagleton describes how, after a golden age in the late 18th and 19th century, criticism gradually declined. "It has ended up, in effect, as a handful of individuals reviewing each other's books.Criticism itself has become incorporated into the culture industry as a 'type of unpaid public relations, part of the requirements in any large corporate undertaking.'"[31] Writing in 1984, Eagleton sees the role of the contemporary critic as a traditional one. "Criticism

27. Northrop Frye, *Anatomy of Criticism*, London: Penguin Books, 1990 (1957), p. 3.
28. See McKenzie Wark, *A Hacker Manifesto*, http://www.feelergauge.net/projects/hackermanifesto/version_2.0.
29. For my definition of the virtual intellectual see "Portrait of the Virtual Intellectual," lecture at the 100 days program of Documenta X, Kassel, July 13, 1997. Posted on *nettime*, July 20, 1997. An updated version can be found in Lovink, *Dark Fiber*, pp. 30-39.
30. Ibid, p. 4.
31. Terry Eagleton, *The Function of Criticism*, London: Verso, 1984, p. 107 (Eagleton quotes Peter Hohendahl).

today lacks all substantial social function". (p. 7) At the same time he expresses the hope that criticism will retain its timeless potential "to disrupt the consensualism of the public sphere". (p. 21)

Eagleton admits that today's battleground is no longer in English literature. Much like Frye (but unlike Raymond Williams, Marshall McLuhan, Friedrich Kittler and other literature scholars turned media theorists), Eagleton hesitates to make the 'technological turn.' He remains safely on the Gutenberg side of the fence. His analytic rigour is confined to past centuries. If we forgive his pessimism, *The Function of Criticism* should be considered a key text for net critics. There is a lot to be learned from the ups and down of literary criticism as described by Eagleton. The same could be said of film criticism, which was at its height in the 1970s. Instead we see a growing tension between media and their respective scholars. In a climate of fierce competition the danger is immanent that new media studies will take away resources from film, theatre and literature studies. Nonetheless, film theory could be a rich source of inspiration for new media critics. One does not have to start with the latest school of thought and go through the lengthy process of deconstructing deconstructivism, as Eagleton does. As much as its historical predecessors the net critic "must reflect as well as consolidate public opinion, working in close touch with the broad habits and prejudices of the public". (p. 47) If the net criticism project is to succeed, Eagleton's sober judgment of today's intellectual poverty has to be taken into account. The anti-intellectual 'clever is not cool' attitude is criticism's biggest enemy—whatever media it studies.

Over the past decades the role of the critic has diminished. Let's face it: public intellectuals are not the gatekeepers of cyberspace. However, what critics and theorists can do is to contextualize work and give the multidisciplinary reality of media works a discursive turn. Frye declared literary criticism an art form. This is not my intention here. Net criticism can only have modest claims, taking the overall decline of the position of intellectuals in society into account. According to Northrop Frye the notion that the poet necessarily is or could be the interpreter of him or herself or of the theory of literature "belongs to the conception of the critic as a parasite or jackal". (p. 6) There is indeed a tendency within new media culture to look down upon intellectuals that stick to the old rules of the Gutenberg galaxy where a selected group of editors working inside publishing houses and newspapers decided what was, and what wasn't theory.

The humanities have been mostly preoccupied with the impact of technology, from a quasi outsider's perspective, presuming that technology and society can be still separated. This also counts for media theory texts which are frequently neither available in English translation nor online. The transfer of critical knowledge and activities into the networks still has to take place, a process which might take decades if not generations, pushed by a growing number of 'netizens,' who take risks by ignoring publisher's contracts, old media reputation systems and academic publication requirements. But do not despair: the 'napsterization' of text is at hand.

Defining and exchanging key reference texts has been an important element in the 'net criticism' project. Free content clearance houses are under construction, based on peer-to- peer file exchange principles to ensure that essential reading does not get locked up behind firewalls. But we are not yet there. I will go into detail about this topic in the first chapter where I will discuss the work of Lawrence Lessig. As he explains, the general tendency is in the opposite direction. Closed image databases filled up with cultural heritage that once belonged to the general public

will most likely hold up if not stifle wide use of the Net. A growing awareness of the potentialities of the "technologies of freedom" (Ithiel De Sola Pool) goes hand in hand with an ever faster growing control, fueled by uncertainty and fear amongst users. An important task of the net criticism project is therefore to be *inside* the network, as email, uploaded texts, links and databases. It is precisely the inside that conditions the possibility of reflexivity, unlike the society/technology split of humanities criticism.

This study describes 'beginnings'—the formative processes—of networks. The Internet is an unfinished project. Here I do not focus on the early mythologies and promises but would like to map some of the first accounts of actual cultural life on the Net. Unlike George Steiner I believe that 'beginnings' are still possible.[32] The call for 'net criticism' is first and foremost a quest for quality research into actual online relationships.

Netzkultur is das was der Fall ist.[33] It is only a decade ago that the only texts about the Internet available were popular how-to manuals. A medium used by hundred of millions deserves to have the most sophisticated and imaginative criticism possible, positioning itself in the heart of the technical, legal and commercial developments. Internet criticism should position itself explicitly at the centre of operations. This requires a pro-active research approach. It is not enough to study the implications of technology, as so many social science studies do.

As is the case with books, films and theatre, the Net is in need of a lively public debate over its content and direction. This discussion has not yet hit the mainstream. There was no space for that during the late nineties. One could even ask if net criticism has not already passed its due date. Small review sections of websites in daily newspapers have already started to disappear. The confusion remains: is the Internet part of the media section, together with radio, film and TV, does it belong on the business pages or should it rather be classified under 'faits divers,' covering hackers' attacks, spam, child pornography and other controversial topics? Or should Internet issues return to the technology supplement, if that exists in the first place? To stay within the newspaper table of contents metaphor, I would suggest the best place for Internet reporting is the opinion pages, combined with background analyses in the arts and book review sections. Instead of labeling the Net as 'pop' culture, it would be a better strategy to position it as part of traditional 'high' culture and world politics. In no way am I wishing to return to the futility of the high-low culture wars; rather I wish to emphasize that a net criticism can only be 'pop' for fifteen minutes. This after all is the economy of contemporary media culture. Net criticism is a call for long-term thorough scholarship—in or outside academia. Its 'pop' phase is only a brief interlude in what Braudel calls the 'long duree' of socio-technical life.

The prisms envisioned here are not to smooth the cultural anxieties of the elites. In the early days of the Internet science fiction writers, followed by academic researchers and business gurus, took

32. "We have no more beginnings" is the opening sentence of George Steiner's *Grammars of Creation*, London: Faber and Faber, 2001, p. 1. In analogy of Bruno Latour's *We Have Never Been Modern*, one could argue *We Have Never Been Online*.
33. Translation: net culture is all that is the case; a reference to Wittgenstein's phrase "Die Welt ist alles was der Fall ist".

on the role of 'critic.' We now witness the dawn of the cultural net critic. It is no longer enough to produce images of a bright cyber future (there are plenty of them anyway). Instead, Internet theory should map the limits and possibilities of materiality. The current state of the Internet is one of conflict. Infowars are multi-spatial, fought out in electronic, material (physical/sex/gender/race, institutional, geographical) and imaginary ways. The Internet is not a parallel world and is increasingly becoming less dominated by its technicalities because of user-friendly software. Computer networks are penetrating society in a deep way. They are spreading so fast and so far that it is becoming next to impossible to define Net specificity separated from society at large.

To get a critical understanding of the Net, with all its functionalities and standards, is already a monumental task. In my view net criticism is not just aiming at the technical level, even though software critique, discussing operating systems, open source principles and the larger network architecture could all benefit from an encounter with a broader (non-technical) audience outside of the circles of programmers and system administrators. The criticism I have in mind is as polymorph and perverse as its topic, having the difficult task to bring together aesthetic and ethical concerns, issues of navigation and usability, while keeping in mind the cultural and economic agendas of those running the networks, on the level of hardware, software, content, design and delivery. That's a lot. Still, the scope may be large but the task is small and precise. Whereas the fox knows many things, the hedgehog knows one big thing. Internet research, in that sense, is a hedgehog science. The Internet is not the universe—it's just one galaxy amongst many.

In the new millennium information warfare is on the rise, and this is more than just a construct of the Rand Corporation, financed by the Pentagon. The Internet is slowly but inevitably shifting from a model of consensus to one of conflict. I am saying this with mixed feelings. The strategy of tension in the context of 'infowar' is not just a state policy (along the lines of 'counter terrorism') but rather points a global civil war in the making with a multitude of players. Even if one personally has not (yet) faced fatal data loss, it must be obvious how the general mood on the open Internet has changed into a space of suspicion, filled with untraceable tension and despair. Electronic civil disobedience[34] is only one of the 'positive' strategies available. There are plenty of negative ones as well that fuel the general climate of tension and uncertainty. Counter attacks can come from any side, both inside and outside. Much of this is still unconscious and little of it has been theorized.

Information warfare is a general state of affairs, not just military technique. It is remarkable that Manuel Castells, in the same Computer Networks and Civil Society chapter of *The Internet Galaxy*, describes the downfall of the Amsterdam Digital City and immediately after this episode moves on to security and cyberwar issues. Castells: "Informational politics naturally leads to the possibility of information warfare". Online projects in one way or another can easily deepen the "crisis of political legitimacy".[35]

34. The artist group Critical Art Ensemble has first developed the term electronic civil disobedience. See: CAE, *Electronic Civil Disobedience*, Brooklyn: Autonomedia, 1995.In his study *Future Active: Media Activism and the Internet*, Sydney: Pluto Press, 2002, Graham Meikle dedicates a chapter to this topic, pp. 140-173.
35. Manuel Castells, *The Internet Galaxy: Reflections on the Internet, Business and Society*, Oxford: Oxford University Press, 2001, p. 158.

Still, 'us and them' divisions are not very useful in this context. Hackers' knowledge is generally available. Attacks can come from every direction, not from one specific sub- culture. Cyber attacks are coming from Beirut as well as Pittsburgh, Kuala Lumpur, Melbourne or Tel Aviv. Mostly playful and innocent, testing possibilities, online 'hacktivism' can easily change character and not just bring down the webserver of the Worldbank but anyone's, including yours. In the conclusion I will come back to this dual aspect of both fostering and managing conflicts on the Net.

By 2001 the spirit of the widely propagated Information Age turned nasty. The climate is one of electronic tensions and email overload. The nineties, marked by openness, have been overturned by security concerns. Online energies and desires are now flowing towards wider debates on globalization, global warming, missile defense systems and the 'war on terrorism,' away from the Internet topic as such. A new generation of students is taking the Web for granted and no longer project any expectations on the medium. People have woken up from the libertarian consensus dream of the neutral, positive hacker ethic. Unlike Pekka Himanen in *The Hacker Ethic*, I believe that the distinction between good hackers and bad crackers, endlessly reproduced by mainstream media, is one of the past.[36] There is more to hackers than their "post-protestant work ethic," as Himanen classifies them. A polarization is becoming visible between those sticking to the outworn New Economy tales of 'good capitalism' (against the bad state) and others, questioning the disastrous dictatorship of the free market. The critique of globalization is not a backlash movement, as conservatives like Thomas E. Friedman suggest. The movements active under the 'Seattle' umbrella all have a clear blueprint of global justice and economic democracy on offer. The counter communication is as global as ever. Opposite to the branch model (logo) there are active trans-local exchanges between the 'multitudes' of (no logo) nodes. The days of the offline activists—condemned to do street actions while fighting with the print media for recognition and to get the arguments heard—are numbered.

There is undoubtedly a renaissance of media activism, both on a global and local level. Protests during numerous summits of politicians and business leaders have boosted local activities that strengthen the global, highly publicized confrontations. Different cultures of techno-geeks and eco-ferals, separated in the past, are now mingling. 'Hacktivism,' with its collective denial-of-service attacks on government and corporate websites, even though controversial, is on the rise. But there are also signs of a global civil war amongst hackers (Chinese against US-Americans, Serbs against Albanian sites, Israeli and Palestinian hackers fighting each other, Pakistani vs. Indians etc.). Activist methods, pointed at foes, backfire, leading to an arms race of even more sophisticated info 'weapons' and a further rise in restrictive network security, corporate counter campaigns and repressive state measures, sold under the goodwill slogan of 'usability.' The exercises in net criticism presented here do not explicitly deal with the strategies of tactical media and online activism. I have written about these issues elsewhere.[37] However, the rising tensions on the Net described here, should be read in that same light.

36. In Pekka Himanen's *The Hacker Ethic*, New York: Random House, 2001, hackers are portrayed as playful, passionate programmers, combining entertainment with doing something interesting, as Linus Torvalds puts it in his preface to the book. Crackers on the other hand are portrayed as computer criminals, "virus writers and intruders" and "destructive computer users" (p. viii). Himanen does not mention the historical fact that many hackers had to gain access before the Net became publicly accessible in the early nineties. Breaking the security on a system is not by definition a criminal act, especially not if you put it into the context of another hacker ethic, 'information wants to be free' (which is more than just code).

The steady rise in conflicts on the Net, combined with the battles over Internet standards— ownership if you wish—is not a development that I particularly oppose. Instead of arguing for a (nostalgic) return to a time where a handful of engineers would seek consensus through their 'request for comments,' I am arguing for the need to analyse different positions and expectations. In her book *The Democratic Paradox* political philosopher Chantal Mouffe has developed a critique of the dominant, liberal- democratic consensus approach. She calls for the need to acknowledge 'differences,' pointing out the impossibility of complete reabsorption of alterity. It is her argument that rivalry and violence, far from being the exterior of exchange, are its ever-present possibility. She concludes that "modern reason needs to acknowledge it limits".[38] All this applies to the Internet and its quasi-neutral, rational and engineering and user culture. Applying Mouffe's ideas to the Internet, I would argue for an 'agonistic' approach to network culture. As Mouffe explains, conflicts do not have to be situated between enemies but between 'adversaries.' The prime task of 'agonistic pluralism,' so Mouffe tells us, is "not to eliminate passions from the sphere of the public, in order to render a rational consensus possible, but to mobilize those passions towards democratic design".[39]

It is in this spirit that I have conducted the case studies. I will try to deconstruct, both in code and culture, Internet consensus as a "temporary result of provisional hegemony, as a stabilization of power that always entails some form of exclusion".[40]

The IT consensus culture, with its hippy-entrepreneurial dictatorship of New Age positivism, has dominated Internet circles far too long. This is, in part, a question of scalability. Up to the early nineties, the Internet community, worldwide, was small and homogeneous. With half a billion users by 2002 that picture has changed dramatically.

The "democratic project," as Mouffe calls it, that I take up in this study is different from the scalar dimension of the liberal nation state and its models of representative democracy. A call for the 'democratization' of (critical) Internet culture does not have to end up in a debate about regulatory issues. Mouffe privileges 'the political' over the term 'politics' since the former, as a field of social relations underpinned by the potential for antagonism, constitutes the possibility of politics. The 'political' in this context is embedded in software. For net criticism, software is considered as a field of social relations that constitutes the possibility of online discourse. For so many political scientists democracy still is a legal form of power, executed within the boundaries of the nation state. Internet culture, however, is a global medium in which social networks are shaped by a mix of implicit rules, informal networks, collective knowledge, conventions and rituals. It would be foolish to reduce the Internet to legal-technical standards and, for instance, presume that 'regula-

37. Lovink, "An Insider's Guide to Tactical Media," in *Dark Fiber*, pp. 255-274.
38. Chantal Mouffe, *The Democratic Paradox*, London: Verso, 2000, p. 131.
39. Ibid., p. 103.
40. Idid., p. 104.

tive ideas' will stop information warfare methods from further spreading. Instead, I am pointing at possibilities to advance the social 'settings' within software and network architectures in order to experiment with a pluriform and agonistic 'post geek' form of hegemony.

In "Against the Digital Heresy," the opening chapter of *On Belief*, Slavoj Zizek formulates what could be the philosophical underpinnings of the net criticism project. For Zizek the overcoming of 'myth' is not simply a departure from the mythical, but a constant struggle with(in) it. "Myth is the Real of logos: the foreign intruder, impossible to get rid of, impossible to remain fully within it". Following Adorno and Horkheimer's analysis in *Dialectic of Enlightenment,* Zizek's enlightenment itself is mythical. "The dynamic, rootless postindustrial society directly generates its own myth," and the Internet is a particularly strong and appealing one. Zizek does not analyze the Internet directly but makes reference to the mythological nature of computer engineering culture. "The technological reductionism of the cognitivist partisans of Artificial Intelligence and the pagan mythic imaginary of sorcery, of mysterious magic powers etc., are strictly the two sides of the same phenomenon: the defeat of modernity in its very triumph".[41] Translatedto the case of net criticism we could say that the idea of a pure global communication, assisted by software algorithms and decentralized network architectures are themselves mythological constructs, loaded with ideology. This study looks at only one tiny element, mailinglist software, and investigates its social imprint. But beyond that I am interested in the dynamics of critical Internet culture itself. I am eager to find out what pitfalls there are for the obvious reason to circumvent them in future projects.

The call for net criticism should not be read as yet another obsession to carve out a terrain.[42] There are enough sects and churches. It is not my intention to propose yet another academic discipline. If anything, I would like to see net criticism as a dirty little practice. I am not so much interested in the label as in the activity itself. Others might want to take up the interesting task to take the Gutenberg knowledge of literary criticism, critical theory and art history in order to lay the epistemological foundations for Internet studies as an academic discipline. It is also likely that historical circumstances will overrule the short-term concerns expressed in this study.

It is now common sense that the window of opportunity for the unfinished Internet is closing, even before the medium has reached a mature stage. Would the conclusion point at a spineless Internet, similar to the 'spineless' parliamentary democracy in the 1930s? There is plenty of evidence to dismiss Internet officials as soft-minded appeasers of corporate rule. That's not my mantra. As we speak, the Net is not yet a monolithic broadcast medium. I remain wildly optimistic about its potentials. The recent uptake of peer-to-peer networks, weblogs and free software are possible

41. Quotations from Slavoj Zizek, *On Belief*, London: Routledge, 2001, p. 10.
42. This is what German media scholar Mike Sandbothe does in his *Pragmatische Medienphilosophie,* Weilerswist, Velbrück Wissenschaft, 2001. Sandbothe is laying out the pragmatist foundations for a yet to be founded academic discipline, which he coins 'media philosophy.' In his study *Medienphilosophie* , Wien: WUV-Universitätsverlag, 2000, Frank Hartmann proposes something different. Unlike Sandbothe, Hartmann stays close to the media-related issues and does not address the philosophy community directly, begging for more understanding of the media. Hartmann rejects the technology-focussed and archeology- driven 'media theory'. Remaining close to Vilem Flusser's work, Hartmann emphasizes the 'communological' capacity to demystify large-size constructs (p. 14). Instead of distancing myself from media theory, I have chosen to politicize the field and give it another, perhaps more radical direction.

signs of a coming Internet renaissance. Before the 'Battle of Cyberspace' reaches its critical stage (or fades away), research into list cultures may be crucial. Lists (and weblogs) form the communication backbone of so many of today's movements and cultural/intellectual undercurrents. It is not my intention to make public claims about the essential 'truth' of the Internet, based on the gathered experiences here. Still, I feel that it is of strategic importance for the future of 'computer mediated communication' that the inner dynamics of list communities become better known. It is time for precise questions, free of nostalgia or bitterness. What can be learned from the mid nineties' web excitement? What models became predominant in the cultural non-profit Internet scene? How did artist communities on the Net distribute power?

Offline sentiments, alarmed by the digital darkness that sets in, are already calling for a halt of the ubiquitous 24/7 electronic availability. Soon it will be time to search for the non-identical, adapt the alien position and develop a negative network dialectics. This study can be read as a contribution to this, as yet unknown theory project. For the time being we'll have to stick around on the Net. The time has not yet come to go offline. The strategy of disappearance, to simply log out and switch off the computer, has become all too obvious. The saying that those who have the freedom to go offline are those in power is one of today's banalities. A transformation from digital back to non-digital seems too easy. Let's avoid the binary on/off logic and reach higher plains of immanence, enriched by the common experiences that I set out to gather in this study.

CHAPTER ONE
POST-SPECULATIVE INTERNET THEORY: THREE POSITIONS: CASTELLS, DREYFUS, LESSIG

From Vision to Research

In this chapter I will present an overview of recent Internet literature, relevant to my research. Since the mid nineties we have witnessed the emergence of academic Internet research with a social science and humanities angle. Parallel to the scientific approaches there is also net art, net activism and net criticism growing out of cultural contexts. For a while dotcom business titles were hot, but these disappeared rapidly. The biggest market for Internet book titles remains program manuals and DIY books (which I won't discuss here). Instead of deconstructing all the intellectual currents, their ideologies and respective roots, I would like to jump to contemporary theories that reflect upon the Internet after it was opened up to the general public. I will analyse the research of three (US-American) Internet theorists, Manuel Castells, Hubert L. Dreyfus and Lawrence Lessig. All their works discussed here were simultaneously published late 2001—a fact that should, in theory, not be important but actually is because the Internet is such a rapidly changing environment. All three titles were written when the speculative dotcom phase of the Internet development was coming to a close. The fact that all three are male US-American university professors, based in California indicates that, conceptually speaking, the USA is still the epicentre of the Internet, despite efforts to diversify the discourse geographically.[1]

Retrospectively, we can now start to map nineties popular cyberculture. Esther Dyson, George Gilder, Kevin Kelly, Raymond Kurzweil, John-Perry Barlow and Nicolas Negroponte could be considered influential cyber-libertarian celebrities. Then there are researchers who look into the identity side of cyberspace such as Howard Rheingold, Sherry Turkle and Sandy Stone. William Michell contributed in his way to the 'virtual architecture' hype with his book *City of Bits*. Work of a more philosophical-speculative nature came from Sadie Plant, Manuel DeLanda, Pierre Levy and Derrick de Kerckhove. Slightly more 'underground' would be writers such as Hakim Bey, Erik Davis and Mark Dery. One could also go back in time and feature the technical founding fathers such as Internet Society boss and (former) WorldCom executive Vint Cerf, the late Jon Postel (administrator of the top-level domain name system), Whole Earth Catalogue publisher Steve Brand, free software guru Richard Stallman or WWW inventor Tim Berners-Lee. However, within the framework of this study I have chosen not to feature the work of all these Net pioneers. Instead of deconstructing the founding myths and utopian promises, I am more interested in authors that reflect on the Internet as a medium in rapid transition.

Manuel Castells' network pragmatism

After his influential trilogy *The Rise of the Network Society* the urban sociologist and Berkeley

1. The LA new media theorist Peter Lunenfeld has a special interest in explaining why the US-Westcoast, and Southern California in particular, has lately become a major centre for critical new media research. For more on this topic see my dialogues with Lunenfeld, *Nettime*, April 3 and July 31, 2000.

professor Manuel Castells published a survey solely dedicated to the Internet. *The Internet Galaxy* reads like a balanced overview of recent academic literature. Manuel Castells has the brilliant intellectual capacity, connections—and global air miles—to produce a woldwide overview of the IT-business, community networks and Internet research. However, the cultural 'net criticism' ideas and networks as presented here is a world that largely remains unknown to Castells. He draws wide landscapes of academic research, avoiding close reading.His aim is "strictly analytical" but not particularly critical. He avoids the deconstruction of the 'hegemonic discourse': Remarkably, Castells fails to analyse techno-libertarianism as the dominant Internet ideology. However, he is wary of future predictions and moral admonitions. Only phenomena that have reached academic credibility within the United States make it into the Castells galaxy. References from websites, lists and emails are virtually absent in his study. With the Internet in a state of "informed bewilderment", Castells admits that the "speed of transformation has made it difficult for scholarly research to follow the pace of change on the whys and wherefores of the Internet-based economy and society".[2] This may also count for his own study—and anyone else who is trying to catch the fluid Internet *Zeitgeist* in a comprehensive study.

As a pragmatist Castells is neither a prophet nor pessimist—and this is what he and I might have in common. Writing in the midst of the dotcom crash his Internet Galaxy reads like an upbeat reminder that the networks, in the end, will be victorious. Castells really wants his 'network society' to work. We should all stick around and convince ourselves that the Internet will survive the current volatility. As many of his academic research colleagues in this field Castells is wary of conflicts. He loves to formulate carefully balanced observations. This puts him, unwillingly, in the position of an innocent outsider, a diplomat at best. There may be a need for journalistic-scientific works, written by generalists such as Castells who take up the position of the General— overviewing the battlefield from a hilltop. But analysts, in my view, have to get their hands dirty in order to deconstruct the agendas of the different, increasingly clashing cultures and factions inside the Internet at large. If the Internet is a battlefield, what we need is war reporting. Infected by the consensus virus of the Third Way culture of Blair and Schroeder, Castells tries to be friends with everyone. His aim to "better our society and to stabilize our economy" would be better served by posing uncomfortable questions, addressed to both technologists, CEOs and community networks.

Let me give an overview of the impressive variety of topics *The Internet Galaxy* deals with. The book opens with lessons from the history of the Internet. Castells briefly sums up how ARPANET engineers mixed with a utopian counterculture, resulting in a spirit of freedom, hardwired into code. Below I will say more about Castells' definition of the culture of the Internet. He then moves on to the describe e-business and the New Economy that dominated the Internet in second half of the 1990s. For Castells e-business does not equal dotcom. He sees the network economy and the changes it unleashes as real, not a bubble. In the next chapter I will go further into detail about Castells' dotcom arguments. His next topic is the social implications of virtual communities. In this he gives a brief overview of work done by scholars gathered in the Association of Internet

2. Manuel Castells, *The Internet Galaxy*, Oxford: Oxford University Press, 2001, p. 3.

Research (AoIR).[3] This overview is followed by a chapter on networked social movements and citizens' networks. In chapter two of this thesis about the Amsterdam Digital City I will discuss what Castells has to say about this project (he spends eight pages on the case).

The Internet Galaxy takes up the well-known US-American position that privacy no longer exists. It draws the dilemma of many Internet advocates: is it useful to look for government assistance in the protection of liberties—the same government that steps up restrictive legislation? *The Internet Galaxy* closes with his remarks on the geography of networks, a field Castells is widely acclaimed for. His conclusion is that geography does exist. The Internet has not erased locality. Global nodes spring up; yet its "glocality" is not confined to the industrialized nations. In the same way, the digital divide does exist. "The rapid diffusion of the Internet is proceeding unevenly throughout the planet".[4] The Internet did not correct the growing gap in terms of knowledge, technology and living standards between the developed and the developing world.Castells advises a new model of development that requires leap frogging over the planetary digital divide. It calls for an Internet-based economy, powered by learning and knowledge-generation capacity, able to operate within the global networks of value, and supported by legitimate, efficient political institutions".[5] If this will not be the case, the digital divide, Castells, "may ultimately engulf the world in a series of multi-dimensional crises," Castells predicts.

The dotcom faction took their ideas from conservative US business circles and energized different discourse fragments into a strong and appealing image of the Wired Future. As a frantically productive belief system, the dotcoms drew from an accelerating feedback loop with the *Zeitgeist*, riding on much bigger currents such as privatization, deregulation and globalization, embedded in a structurally unstable situation. The nineties economic boom also profited from the post (cold) war divident. Castells knows the limits of the bureaucratic categorizations he is using and counters his own quasi-neutral instrumental rationalism with ambivalent conclusions. As a former Marxist Castells is afraid to be labeled 'anti corporate' or even 'anti capitalist.' This fear eventually blinds his analytical capacity to analyse the 90s fuse between technology, business and culture.

No matter how much realism prevailed, the dotcom crash and downfall of telco giants such as WorldCom and Global Crossing happened, and its history needs to be analysed. One can therefore expect Castells to modify his mild judgment of e-business in the near future, stressing the need for 'corporate accountability'. Having said that, Castells is makingvaluable observations that are relevant for my research. He points at the fact that most innovation coming from Silicon Valley over the past decade has been focused on the business side rather than the technology.

3. See www.aoir.org. The archive of the list can be found at http://www.aoir.org/mailman/listinfo/air-l. Manuel Castells was a keynote speaker at the first AoIR conference in 2000. Castells refers, for instance to studies from Steve Jones, Ben Anderson, Barry Wellman and Karina Tracey, suggesting that the Internet seems to have a positive effect on social interaction.However, there are conflicting studies on the effect of Internet usage on sociability. The Internet does support "networked individualism" while at the same fostering "specialized communities, " thus "enhancing the capacity of individuals to rebuild structures of sociability from the bottom up". (p. 132).
4. Castells, *The Internet Galaxy*, p. 260.
5. Ibid., p. 272.

"After all, most technology these days is open source or 'off the shelf': the real issue is what to do with it, and for this the essential item is talent".[6] According to Castells "a typical Silicon Valley sequence in the late 1990s started with a daring business plan, and with some knowledge of how Internet technology could contribute to it, yet focusing more on business innovation rather than on technological innovation".[7] I would rather say that the crucial step was to shape, armor and then enlarge concepts into 'memes' or 'cultural viruses'—ideas that then become operational entities. A productive discourse is not mere talk. The creation of a compelling ideology was not just a matter of talent. The killer application is not just 'people' but the collective ability to mobilize and direct the Network Spirit.

In *The Internet Galaxy* Manuel Castells defines Internet culture as the "culture of the creators of the Internet".[8] Internet culture is characterized by a four-layer structure: the techno-meriotocratic culture, the hacker culture, the virtual communitarian culture and the entrepreneurial culture. According to Castells, together they contribute to an ideology of freedom that is widespread in the Internet world. The four cultures are inter-related, and have loose distributed forms of communications. However, they are not equal. First of all, there is a hierarchy in time. The techno-meriotocratic culture was there first, and this is how they claim their authority. "Without the techno-meritocratic culture, hackers would simply be a specific counter cultural community of geeks and nerds. Without the hackers culture, communitarian networks would be no different from many other alternative communes. Similarly, without the hacker culture, and communitarian values, the entrepreneurial culture cannot be characterized as specific to the Internet".[9] As an almost holistic overall view Castells summarizes: "The culture of the Internet is a culture made up of a technocratic belief in the progress of humans through technology, enacted by communities of hackers thriving on free and open technological creativity, embedded in virtual networks aimed at reinventing society, and materialized by money-driven entrepreneurs into the workings of the new economy".[10] The critical Internet culture mapped out in this study would probably fall under the 'communitarian networks' category. The Internet may be a "cultural creation"[11] but if we look at Castells' categorization, it doesn't really have a cultural arm. There is no mention of any cultural theory in *The Internet Galaxy*. In Castells' galaxy there are no designers, artists, theorists and critics. Even mainstream issues of human-computer interaction and 'usability' remain unnoticed. There is some truth in this as critical Internet culture remain marginal and had a hard time proving its very existence and conceptual urgency, lacking both media visibility (in terms of celebrities) and academic credibility.

Hubert L. Dreyfus' reality romanticism

Berkeley philosophy professor Hubert L. Dreyfus centres his study *On the Internet* around an unfortunate misunderstanding.[12] He confuses very particular Extropian cyber dreams of 'disembodiment' with the Internet as such. Unfortunately, Dreyfus is by no means alone in this. The mix-up of virtual 3D immersive environments and the rather primitive, 2D Internet goes back to the early nineties when futurist techno magazines such as *Mondo 2000* and *Boing Boing* treated all new technologies as part of one and the same 'revolution of the mind.' However, no Internet agency ever promised "that each of us will soon be able to transcend the limits imposed on us by our body".[13] There is in fact a whole range of competing ideologies—such as pragmatism, communitarianism, statism and libertarianism—fighting over the hegemony of Internet discourse. Posthumanism is only of them. There are hardly any discussions anymore about the claim that cyberspace will bring the super- and infra-human. Instead, people, for instance, argue over globalization, the 'war on terrorism' and modes of Internet governance. Dreyfus carefully routes around economic and political aspects of the Internet debate, thereby contributing to an influential undercurrent of cyberculture, the media ecologist call for a return to 'reality.' According to these backlash philosophies "the Net is making our lives worse rather than better".[14]

"I'm feeling so real. Take me away". (Moby)

According to Dreyfus, "life in and through the Web may not be so attractive after all".[15] After an initial period of curiosity and excitement, Dreyfus' reassessment of the Internet coincides with the hangover of the post-dotcom period. In such a post-bubble climate a conservative backlash can easilygain popularity. Comparable to white goods, the Internet has by now become an invisible part of everyday life. It may be a liberating relief for some that there is more to life then the Internet, but such a truism can hardly be the foundation for a philosophical investigation.

Dreyfus develops his version of 'net criticism' in four different fields: the limitations of hyperlinks and the loss of the ability to recognize relevance; the dream of distance learning (no skills without presence); the absence of telepresence and a chapter on 'anonymity and nihilism,' about the Internet presumably promoting a life without meaning. In principle such topics could be relevant, yet they do not address real concerns. While playing on sentiments Dreyfus gets stuck on the surface level of yesterday's mythologies. There is no mention of pressing issues such as free vs. proprietary software, domain name politics, dangers of corporate takeovers, cryptography and censorship, the 'digital divide' or intellectual property regimes. The battle over the network architecture must have been too mundane for Dreyfus.

It seems tempting to mix up popular culture motifs of virtual reality with the rather dull realpolitik of network architecture. So why can philosophers no longer make a distinction between substance and appearance? Both Paul Virilio and Slavoj Zizek, and with them countless others, have had the greatest difficulty distinguishing between literary fantasies, marketing video clips and real existing technologies. The press release and advertisement do not equal the product, no matter how hard public relations managers may repeat New Age mantras of becoming 'virtual'. But for certain philosophers they have become one and the same. That may be fine for luxury cars and perfums but doesn't work with, for instance, software. Body politics may have been significant at some point but cannot nearly cover the variety of all too real issues that the Internet as a global

6. Ibid., p. 79.
7. Ibid., p. 79.
8. Ibid., p. 36.
9. Ibid., p. 36.
10. Ibid., p. 61.
11. Ibid., p. 33.
12. Hubert L. Dreyfus, *On the Internet*, London/New York: Routledge, 2001. URL of his bibliography: http://socrates.berkeley.edu/~hdreyfus/rtf/dreyfus_cv_5_00.rtf.

13. Ibid., p. 4.
14. Ibid., p. 102.
15. Ibid., p. 7.

medium faces. The Internet is not in need of 're-embodiment,', as Dreyfus suggests. Instead it cries for a strong coalition, able to come up with a design for the digital commons, defending core values such as openness and access.

Philosophers are in great need to help define the ideas underpinning open source and free software such as 'freedom' and 'property'. Many can't hear the free software guru Richard Stallman talking anymore about 'free' as in 'free beer'. There is no free lunch.
Or was it no free speech? Is geek culture really as dazed and confused as it seems or is there more significance behind the Richard Stallman-Eric Raymond controversy?[16] This would be an ideal case for a techno-philosophy that wants to do 'the proper study of mankind' (Isaiah Berlin) online.

This leaves us with Dreyfus' phenomenological preoccupation with the body. Numerous Internet critics looked into the mythological disembodiment dreams of 90's cyberculture. Around 1990 science fiction futurism was used to popularize and electrify the yet unknown 'cyberspace'. There had been a lot of speculation about 'virtual bodies'. However, by 2001, the year Dreyfus' pamphlet appeared, the excitement and curiosity for the disembodiment had faded away. From early on there had been thorough (feminist) critiques of male dreams of leaving the 'messy' body behind, none of which Dreyfus mentions. In the meanwhile a range of artist practices had been developed which left the Extropian tendency far behind, developing a critical 'body politics' within the virtual arena. Scholars such as Cameron Bailey and Arthur McGee have done excellent work on race in virtual communities, arguing that online communication is never 'disembodied' but always carries racial and cultural markers. One might therefore rather expect criticism of this common sensical approach rather then going back to the same old adolescent cyberpunk culture.

Not surprisingly Hubert Dreyfus outs himself as a cultural pessimist. To be more precise, he is a media ecologist comparable to Neil Postman, George Steiner, Hans-Juergen Syberberg, Peter Handke and others.[17] The deluge of meaningless information disgusts media ecologists. Nonsense should be banned—not just filtered. It is the high task of cilivised intellectuals to rule what can, and should not enter the media archive. Media ecologists dream of an authoritarian enlightenment regime in which chatting and rambling are serious offences. Along these lines they denounce the World Wide Web as a 'nihilist medium'. "Thanks to hyperlinks, meaningful differences have been leveled. Relevance and significance have disappeared. Nothing is too trivial to be included. Nothing is so important that it demands a special case," Dreyfus complains.[18]
Dreyfus confuses elements of popular cyberculture with the agenda of the creators of the Internet. Dreyfus is unaware of the Californian Ideology debate, the agenda of digital Darwinism from the Wired clan and the critiques of techno-libertarianism in publications such as *Cyberselfish*

16. ee: DiBona, Chris/Ockman, Sam/Stone, Mark, *Open Sources: Voices from the Open Source Revolution*, Sebastopol: O'Reilly Publishing, 1999.
17. See: The Revolt of the Media Ecologists, in: Adilkno, *The Media Archive*, Brooklyn: Autonomedia, 1998, pp. 1159-164 (URL: http://www.thing.desk.nl/bilwet/adilkno/TheMediaArchive/39.txt). An adaptation of this early 90s essay with examples of the concerns about the nihilist nature of the Web by leading intellectuals: Geert Lovink und Pit Schultz, Sinnflut Internet, in: *Telepolis*, Die Zeitschrift der Netzkultur, nr. 1, Bollmann Verlag, Mannheim, 1997, pp. 5-11 (URL: http://www.thing.desk.nl/bilwet/TXT/angst.txt).
18. Dreyfus, *On the Internet*, p. 79.

by Paulina Borsook or Thomas Frank's *One Market Under God*. For Dreyfus the Internet equals Hans Moravec plus Max More times John Perry Barlow plus Ray Kurzweil. Dreyfus is focused on the, in my opinion, wrong assumption that the Extropians embody the 'truth' of the Internet, instead of analysing them as a subcultural undercurrent and post-religious sect. He then sets out to deconstruct this presumably dominant Platonic wish to leave behind the body, without analyzing in detail the specific political, economic and cultural agenda of this tendency and its relationship to different new media discourses.

Dreyfus then turns Nietzsche against the Extropians to illustrate that human beings, rather than continuing to deny death and finitude, "Would finally have the strength to affirm their bodies and their mortality".[19] When we enter cyberspace, Dreyfus answers the disembodiment advocates, we might "Necessarily lose some of our crucial capacities: our ability to make sense of things so as to distinguish the relevant from the irrelevant, our sense of the seriousness of success and failure that is necessary for learning". Dreyfus summarizes: "If our body goes, so does relevance, skill, reality, and meaning". That may be the case. As an analysis of the Extropian movement *On the Internet* is a classic case of belated *Ideologiekritik*. Dreyfus is running after yesteryears' ghosts. This leaves us with the general question of how knowledge, stored in books, can operate in an environment like the Internet that changes so rapidly. Often, the object of criticism has long disappeared once the theoretical objections are well thought through. The answer can only be a theory on the run. Internet-related critical knowledge is not only forced to operate in the present. It also expresses itself in a range of ways, as code, interface design, social networks or hyper linked aphorisms, hidden in mailinglist messages, weblogs, chat rooms or sent as an SMS message.

There is no mention here of users and groups creating their own meaning and context on the Net. Dreyfus apparently never heard of mail filters and thresholds. As if he were a small child, wandering around in the library, touching the shelves, Dreyfus is overwhelmed by the sheer quantity of accessible information that doesn't make sense to him. "One can view a coffee-pot in Cambridge, or the latest supernova, study the Kyoto Protocol, or direct a robot to plant and water a seed in Austria".[20] The data ecology of the web really is not all that different from the information universe on offer in one of the Borders bookshops where "The highly significant and the absolutely trivial are laid out together". Perhaps bookshops should also be cleansed. How about short-wave radio or the rising mud floods on the peer-to-peer networks? With J.S. Mill and Alexis de Tocqueville, Dreyfus fears the coming of the digital commons where every citizens has to do his or her own information filtering.

On the Internet traces the origins of media ecology back to Kierkegaard's 1846 *The Present Age*. Kierkegaard blames the 'leveling' of society ("Everything is equal in that nothing matters enough to die for it") on the Public. What Kierkegaard, and with him Dreyfus, really finds fearful and disgusting is democratic nothingness. The public and the press, these days renamed as 'the media' and 'the Internet' should not be allowed to celebrate radical uselessness. Instead the elites should restrict the public sphere and direct the masses towards progress, war, socialism, globalization, or whatever is on the agenda. The fear of the black hole of the commons is widespread and ranges

19. Ibid., p. 5-6. Next quotes are from the same pages.
20. Ibid., p. 79.

from left to right. "In news groups, anyone, anywhere, any time, can have an opinion on anything. All are only too eager to respond to the equally deracinated opinions of other anonymous amateurs who post their views from nowhere".[21]

What Dreyfus finds particularly disturbing about the Internet is its anonymity, which he reads not as a feature to secure one's freedom but as a sign of indifference. Nowhere does Dreyfus actually prove how widespread anonymous communication on the Net is nor does he note what measures security officials have already taken to crack down on effective anonymity and free, unmonitored browsing (if that ever existed). As everyone should know by now, online privacy is an illusion—as is anonymity. The saying 'On the Internet no one knows you are a dog' should have been deconstructed as yet another Internet myth. These days' security experts are able to trace even the most intelligent hackers. Apart from that, only in rare cases, such as reporting from war zones, is anonymity really useful. Usually the anonymity cult is a sign of boredom, exhibited as a hobby in the late hours. Not everyone is into anonymous role-playing. Anonymity is one of the many menu options, used in specific cases, not the essence of the Net. Arguably, with all the security and surveillance techniques available, absolute anonymity is getting harder and harder to maintain these days. Anonymity may soon go underground as everyone will be obliged to show his or her Microsoft Passport before logging onto the Internet. Both the chip and operating system will reveal the user identity in a split second to the authorities that ask for it.

For Dreyfus surfing is the very essence of the Net, and with it comes solitude and boredom. The undirected surfing and chatting on the Net Dreyfus so despises may have happened in the early days of excitement. By now, users know what they are looking for and no longer get lost. Dreyfus does not distinguish between phases: the academic Internet of the eighties; the mythological-libertarian techno-imagination of *Mondo 2000* and *Wired*; the massification of the medium, accompanied by the dotcom craze; followed by the consolidation during the 2000-2002 Depression. Because of this inability to distinguish, old-fashioned essentialism gets projected onto a rapidly changing environment.

In one aspect Dreyfus is right: online learning won't save the problems of mass education. But that's an easy statement. The fact is that knowledge is increasingly stored digitally, distributed via computer networks. This is not done out of a disdain for the body, purposely preventing real-life gatherings of students with their teachers, as Dreyfus implies. The Will to Virtuality has a political agenda, aimed at the privatization and commodification of public education. As David Noble proves in his *Digital Diploma Mills,*[22] the aim of the .edu managerial class is to run the university as if it was a corporation—with or without bodies. Public education demands quality and accessibility, regardless of its real or virtual character.

The question Dreyfus poses is an old one: who decides what is sense and non-sense? The debate over filtering the Internet (and mailinglists in particular) is a central topic in this thesis. Even though only few list participants would support Dreyfus' position, there is certainly a silent

21. Ibid., p. 79.
22. David F. Noble, *Digital Diploma Mills*: *The Automation of Higher Education*, New York: Monthly Review Press, 2001.

majority that favors (manual) filtering by editors in order to prevent information overload. Managing information flows is a main concern for users—one which they do not like to trade for a loss of freedom. Internet enthusiasts point to the crucial difference between old media, based on scarcity of channels, resources and editorial space and the Net with its infinite possibilities of parallel conversations. For the first time in media history the decision over the sense- nonsense distinction has (potentially) moved from the medium and its editors to the individual user. Dreyfus doesn't mention the opportunities and problems that come with this important techno- cultural shift. According to Dreyfus curiosity as such is dangerous. Groups 'committed to various causes' could potentially bring down the ethical sphere. In the end this debate is about the freedom of speech. Dreyfus doesn't want to openly raise the sensitive topic of who is going to judge content. Censorship should probably come from within the Self as voluntary self-restraint over the daily information intake and production.

Ever since the rise of virtual communities in the eighties there have been ferocious debates about how to distinguish—and balance—noise and meaning. A wide range of (self) moderation models and filtering techniques has been developed. It remains a mystery why this well informed and Internet-savvy Berkeley professor can ignore all this. *On the Internet* is therefore a setback in terms of Internet theory. At the same time this book also embodies the common desire to walk away from work (on the computer) and have a well-deserved break. Without much effort the ethical-aesthetical position Dreyfus calls for could be developed. For Dreyfus, however, the 'morally mature' have to avoid the virtual sphere, in a search for the extra medial 'unconditional commitments.'[23] Kierkegaard would reject the Internet, according to Dreyfus because, in the end, "It would undermine unconditional commitment. Like a simulator, the Net manages to capture everything but the risk".[24] Bankrupt dotcom entrepreneurs would say otherwise. Looking at the tensions and confusion, caused by viruses and trolls, one wouldn't say that the Internet is such a safe place.

The Net is not 'a prison of endless reflection,' as Dreyfus suggests. Rather I'd analyse the Internet as a challenge in the direction of a lively agonistic democracy (Chantal Mouffe), filled with controversies and irreconsible positions.[25] Neither a separate realm nor a numbed consensus factory, the Internet could foster structural dissent (to be separated from protest as a gesture, lifestyle or even opinion). The more the Internet matures, the more it will become both a fierce and fertile battleground of 'adversary' social groups. The digital divide will not be bridged but will bring new forms of conflict. Today's communication bridges are built to facilitate the redistribution of wealth, be it software or knowledge. In this understanding of a lively electronic democracy the

23. The Dutch media theorist Arjen Mulder, like me a member of the Adilkno, has dealt with the question of the 'extra medial' extensively, for instance in his first book with the same title "Het buitenmediale" and also "Het twintigste eeuwse lichaam" (both titles not translated into English). Building on Arjen Mulder's thesis there is an essay in Adilkno's *The Media Archive*, Brooklyn: Autonomedia, 1998, called "The Extramedial," which states: "Everything is medial. There exists no original, unmediated situation in which 'authentic' human existence can be experienced". p. 192 (URL: http://www.thing.desk.nl/bilwet/adilkno/TheMediaArchive/46.txt).
24. Dreyfus, *On the Internet*, p. 73 ff.
25. See Chantal Mouffe, *The Democratic Paradox*, London/New York: Verso, 2000, chapter four.

naïve discourse of 'consensus without consequences' (which Dreyfus so despises) will anyway be undermined by those reconnecting and redistributing 'virtuality' within society. As Manuel Castells points out in *The Internet Galaxy*, there is no return possible to an era before the network society: The Network is the Message. Reality romantics, similar to their historical predecessors in the late 18th century, can point at the blind spots of the Network Society, but will not succeed in outlawing or overturning the technological nature of, for instance, knowledge production and distribution.

For Kierkegaard and Dreyfus salvation can only come from the religious sphere of existence, experienced in the 'real' world. As if a pure and unmediated world ever existed. 'Real' and 'virtual' are becoming empty categories. A call for a return to the 'real' can only be nostalgic and makes itself irrelevant, as it runs away from the present conflicts over the future of the global network architecture. What is needed is a radical democratization of the media sphere. There is no reality behind the virtual, no bodies left outside the machine. 'Real' education, free of ugly computers may sound attractive to some, but as a critique of technology it runs the risk of further deepening the crisis between the rising online masses and the elites, rich enough to retreat in Fortress Reality, safely sealed off from cheap and dirty cyberspace.

Lawrence Lessig's legal activism

Let us now turn to the third book. Warnings about the decline of the Internet have been around for a few years. At the height of dotcommania, in 1999, two studies dealing with the legal and political threads to 'cyber freedom' appeared, Alan Shapiro's *The Control Revolution* and Lawrence Lessig's *Code and Other Laws of Cyberspace*. Lessig warned that Internet developers were closing their eyes. "It is age of ostrich. We are excited by what we cannot know. We are proud to leave things to the invisible hand. We make the hand invisible by looking the other way".[26] *Code and Other Laws of Cyberspace* is a friendly yet persistent dialogue with the dominant libertarian forces that rule the Internet. Two years later, Lessig's attention has shifted to large corporations, in particular the media entertainment industry.

In *The Future of Ideas* the Stanford law professor is becoming outraged over the assault on the Internet. As Lessig says, his "message is neither subtle nor optimistic".[27]
Corporate control is crippling "the creativity and innovation that marked the early Internet. This is the freedom that fueled the greatest technological revolution that our culture has seen since the Industrial revolution".[28] For Lessig this fight is not between progressive and conservative but between old and new. His tone is almost apocalyptic. We move from an architecture of innovation to one of control. It is time for the revenge of the content owners. The future looks grim. With scarcely anyone noticing freedom and innovation have been lost. "Those threatened by this technology of freedom have learned how to turn the technology off. We are doing nothing about it".[29] In chapter six I will go into detail about one such threat of Internet radio initiatives, forced to close down because of intellectual property issues and high traffic fees.

26. Lawrence Lessig, *Code and Other Laws of Cyberspace*, New York: Perseus Books, 1999, p. 234.
27. Lawerence Lessig, *The Future of Ideas*, New York: Random House, 2001, p. vii.
28. Ibid.,p. VIII.
29. Ibid.,p. 268.

In the first part of *The Future of Ideas* Lessig describes the conditions of openness. The crucial element in the design of such an 'innovation commons' was the 'end to end' principle. In the 'e2e' model the network itself is kept relatively simple. The 'intelligence' is not located in the heart of the network but allocated in the terminals, the individual machines that are being connected to the network. As a result the Internet itself is kept "simple, in the sense that it handled all packets equally, without regard to content or ownership".[30] But this structural design is changing—both legally and technically.

The open space the Internet once created Lessig calls a commons. "A commons is a place, a real physical space or an more ephemeral information space, that is not privately owned. Natural commons include the oceans and the atmosphere. Garrett Hardin's famous article *The Tragedy of the Commons*,[31] argued that such commons would inevitably be degraded and used up - like a village commons where everyone would feed their livestock until there was no grass remaining. Information commons hold the shared history of our cultures, such as myths and folksongs. Information commons are unique, because as ideas are taken from them to provide inspiration, they are not used up. Those ideas remain for the use of future generations of creators".[32]

It was the Harvard law professor Charlie Nesson who mentioned the idea of a commons in cyberspace to Lawrence Lessig. "He spoke of the need to support a space in cyberspace free from control—open and free, and there for the taking". Why would anyone need to build a commons, Lessig asked himself? "Cyberspace was not a limited space, there would always be more to build. It is not like the American continent was; we're not going to run into the Pacific Ocean some day. If there's something you don't have in this space, something you'd like to build, then add it, I thought".[33]

Digital commons are usually situated in-between the state and marketplace and are easily squashed by either—or both sides. "The civic sector represents our collective selves, in other words, particularly in all of those affairs (such as community action and cultural expression, education and social welfare) that are neither driven by the profit motive nor derived from the authority of the state".[34] The digital commons, in one possible reading is nothing more then the lost dream of a fading middle class, drawing up a harmonious picture of a consensual society, freed of conflicts. NGOs and artists in this view are essentially intermediate buffers with the aim to create

30. Felix Stalder, "The Excess of Control," review of Lawrence Lessig, *The Future of Ideas*, first published in *Telepolis* (http://www.heise.de/tp/english/inhalt/buch/11504/1.html). Posted to *Nettime*, January 13, 2002.
31. "The Tragedy of the Commons" is the title of a famous paper by the biologist Garrett Hardin, published in *Science* magazine in 1968 (162:1243-1248). In the paper Garrett describes the decline of the common pastures in villages due to overuse. Often the tragedy of the commons is used to warn against the dangers of overpopulation. Even though the possibility to copy in the digital age is infinite, there are similarities. In this case the tragedy is man-made and not caused by natural scarcity of resources.
32. http://www.centerforthepublicdomain.org/commons.htm.
33. Lawrence Lessig, "Reclaiming a Commons," speech at the Berkman Center, May 20, 1999. http://cyber.law.harvard.edu/events/lessigkeynote.pdf.
34. http://www.democraticmedia.org/issues/digitalcommons.

the illusion of 'civil society'. Advocates of the digital commons are therefore easily portrayed as 'useful idiots' that have to soften up the harsh sides of global capitalism.

The idea of a digital commons is comparable to the public sphere as described by Jürgen Habermas.[35] According to Terry Eagleton, Habermas' concept of the public sphere "hovers indecisively between ideal model and historical description and suffers from severe problems of historical periodization. The 'public sphere' is a notion difficult to rid of nostalgic, idealizing connotations; like the 'organic society', it sometimes seems to have been disintegrating since its inception".[36] The same could also be said of the digital commons. Similar to the tragedy of the commons, the tragedy of the digital common may already have happened. Yesterday's utopia may no longer be in reach today.

Long, long time ago, back in the mythological times, before 1993, the entire Internet was 'public domain'. All code, applications and content were publicly owned and accessible to all, so pioneers of the early days report. In this rational and egalitarian environment, built and maintained by well-paid engineers, tenured academics freely exchanged ideas and resources. Money was no issue because all the actors had a tenured job anyway. In this climate it is understandable that proprietary versus free software became the main controversy. This paradise-like economic situation created a paradox early Internet developers have not openly dealt with: before 'the public' everything was public. As soon as the masses invaded the new media arena, the precious public domain got overrun by 'dirty' market forces and even more 'evil' government regulators. Ordinary users requested easy to use interfaces, tailored entertainment and above all, safe and reliable systems. As a result the digital public domain vanished. Lawrence Lessig does not point to this strange circular movement of the digital commons concept—even though he must be aware of it.

According to Lessig free software, published under the GPL-licence is part of the digital commons. So are the public streets, most parks and beaches, Einstein's theory of relativity and an 1890 Shakespeare edition. These are the carefully chosen examples given in *The Futures of Ideas*. However, Lessig knows very well how little content and software is actually part of the public domain. In the USA the period of copyright has been extended 11 times over the past forty years. So, instead of thinking of the digital commons as a identifiable 'sphere' with actual info bits in them we should rather read it as a proposal for a legal framework. After the appearance of *The Future of Ideas* Lessig and others have launched the Creative Commons initiative that aims to

> offer the public a set of copyright licenses free of charge. For example, if you don't mind people copying and distributing your online image so long as they give you credit, we'll have a license that helps you say so. If you want people to copy your band's MP3 but don't want them to profit off it without your permission, use one of our licenses to express that preference.[37]

By now there are many versions of the Fall of the Net. In most of them the public domain does not really exist and what could labeled as such is all but a shadow, an echo of glorious days

35. Jürgen Habermas, *Strukturwandel der Oeffentlichkeit*, Frankfurt am Main: Suhrkamp, 1990 (1962), English:*The Structural Transformation of the Public Sphere*, Cambridge (Mass.): MIT Press, 1991.
36. Terry Eagleton, *The Function of Criticism*, London: Verso Books, 1984, p. 8.
37. Taken from the www.creativecommons.org website.

gone by. Paradoxically, it is society that spoiled the purity of the early cybersettlers' paradise. The 'tragedy of the digital commons' has been provoked by individuals and corporations that drew on the value, produced by the commons, which they then consumed privately. In *The Future of Ideas* Lawrence Lessig's lost freedom is the creativity and innovation that marked the early Internet, fueling the greatest technological revolution of our time. The globalization theorist Benjamin Barber paints a similar grim picture:

> Citizens are homeless: suspended between big bureaucratic governments which they no longer trust … and private markets they cannot depend on for moral and civic values…. They are without a place to express their commonality. The 'commons' vanishes, and where the public square once stood, there are only shopping malls and theme parks and not a single place that welcomes the 'us' that we might hope to gather from all the private you's and me's.[38]

In this thesis I am making a similar move concerning the ups and downs of critical Internet culture. The fall of independent initiatives can cause the rise of cynical or apocalyptic sentiments. Like Atlantis, the mythological empire that sank in the ocean, destroyed by a not yet understood catastrophe, the digital public domain lives on as a ghost of the past, always ready to return. In the common view the digital commons has to be 'reclaimed' in order to then become 'stewarded.' In some romantic readings commons are defined as land communally held, fields where all citizens might pasture their sheep, for example, or woodlots where all might gather firewood. Against such a harmonic, communitarian viewpoint one could suggest other, less innocent definitions in which social spaces, such as the commons, are defined in the antagonistic act of becoming media, rather then by their legal or spatial frameworks.

Instead of lamenting the disappearance of public space (in the tradition of Richard Sennett39[39]) artists, activists and other coders could actively shape and radicalize the 'dot.commons.' In doing so we may have to accept that the digital commons are temporary and unstable and fluid in nature. Looking at all Lessig's creative commons project and similar efforts, we may find out that the digital commons is a real existing, yet negative utopia. Digital commons is not a program or ideology for the worrisome few. Instead one could think of the digital commons as a temporary event, not a fixed entity. The advantage of an imaginary definition of the commons over the legal definition is that it comes closer to what techno citizens are actually experiencing.Lessig's digital commons existed in future or is about to happen in the past. Arguably, the music file platform Napster, at the height of its use, around mid-2000, was a one of the biggest, lively digital commons of our times. However, it was closed down and the Napster company is now bankrupt. It is time to tell the peer-to-peer story and draw inspiration from it.[40] No doubt Wi-Fi wireless networks will be regulated. The public sphere within the Net only exists in retrospect. This is a methodological challenge—not a reason to become cynical or nostalgic. Turning to my topic, it is time to write down the stories of what happened to critical Internet culture—the main aim of this thesis.

38. Benjamin Barber, *A Place for Us: How to Make Society Civil and Democracy Strong*, New York: Hill and Wang, 1998.
39. Richard Sennett, *The Fall of Public Man*, New York: Knopf, 1977.
40. See: Howard Rheingold, *Smart Mobs*, Cambridge (Mass.): Perseus Publishing, 2002. Weblog: www.smartmobs.com.

CHAPTER TWO
ANATOMY OF DOTCOMMANIA
OVERVIEW OF RECENT LITERATURE

Intro: Non-Profits vs. Dotcoms?

In this chapter I will analyse the dominant Internet rhetoric of the late nineties, embodied in the 'dotcoms.'[1] Before looking into the dotcom literature, I will briefly sum up what the dotcom ideology was all about. Dotcoms were more than just 'e-commerce' startups, experimenting with how to make money out of new media. They came to symbolize the era of greedy market populism. With the Cold War over, stock markets souring, a limitless hunger for new technologies, there was nothing that could stop corporate globalization and its Internet vanguard from taking command. The dotcoms set out to rule the telco and media sphere, business and society at large. Not a single aspect of life seemed untouched by the commercial Internet paradigm. Dotcoms embodied a distinctive next phase in the development of the Internet after it had left the safe walls of academia. The Internet fitted perfectly in the libertarian anti-state pro-market agenda, at its height during the mid-nineties, summarized by the "Contract with America" of the conservative US-Republican 'Gingrich revolution' that gave unprecedented powers to corporations and financial institutions.

After introducing the dotcom belief system I will browse through a number of dotcom histories, as told by the believers who were in the eye of the storm. The accounts and analyses presented here have been written in the immediate aftermath of the tech wreck. If 2000 was the year of the NASDAQ crash; inevitably 2001 was followed by pitiful dotcom biographies. As a theoretical entrée I will evaluate concepts of Manuel Castells' *The Internet Galaxy* and his take on the New Economy. I will then go through David Kuo's *Dot.Bomb* (about the e-tailer Value America) and *Boo Hoo*, the story of boo.com's founder Ernst Malmsten. From there I will look into a few broader analyses, Michael Lewis' *The Future Just Happened* and Brenda Laurel's *Utopian Entrepreneur*, reflecting upon her vanished girls' games venture Purple Moon.

Critical Internet culture, as described in this study, developed relatively remote from the dotcom spectacle. Here and there, dotcoms and the cultural non-profit had common interests and met through personal interconnections, but by and large one could describe the two as parallel universes.[2] The vicinity of a blossoming arts sector and 'creative industries' is not more than vaporware for Third Way politicians. Having struggling artists around may be a nice setting for business culture but the new media arts sector itself hasn't benefited at all from the dotcom craze. For

1. A part of this chapter was published in Cultural Studies Review, Vol.8 No.1 May 2002, pp. 130-154. Thanks to Chris Healy for editiorial assistance.
2. A third parallel universe, worth mentioning here, was the hackers-geek culture. Culture, commerce and programming were different communities, confronted with considerable communication problems. However, I will not look into the ways in which hackers responded to dotcom culture. They were certainly very much involved as they did most of the work, but the vast majority of them stayed out of the business.

a short period (1998-1999) a pressure was building up on (state-funded) non-profit initiatives to transform their activities into dotcom ventures but only few made the actual step. One of the reasons for this could be the speed of events. Dotcommania was over before it could have a lasting impact. This is perhaps also why there has hardly been a fundamental critique of dotcom business culture before the year 2000, when, parallel to the downfall of the NASDAQ, the first critical studies started to appear.[3]

Independent intellectual circles such as the Nettime mailinglist mainly focussed on the underlying techno-libertarian, neo-Darwinist discourse of the early dotcom phase, the so- called "Californian Ideology," named after the 1995 essay of Richard Barbrook and Andy Cameron. Early critics were, for instance, Mark Dery and Critical Art Ensemble. Their critique mainly focused on certain pseudo-religious trans-human (Extropian) tendencies, which stated that the 'telos' of technology was to leave the body behind and establish a posthuman regime. This type of cultural criticism did not have an explicit focus on dotcom business models as such. The dotcom scheme—from business plan, startup, stock options to IPO and sell out—did not appear on the radar screens of critical arts and theory. Whereas *Wired* and *Mondo 2000* were widely read—and criticized—IT-business magazines such as *Red Herring*, *Business 2.0* and *Fast Company* remained largely unknown publications within critical Internet circles.[4] Dotcom culture had come up in a period when most activists and digital commons advocates had already given up the fight against commercialism.

If any, the feeling of the critical new media intelligentsia towards dotcoms was ambivalent. Jealous about the ease with which the 'baby suits' could get millions of dollars as seed funding for their shaky business plans, cultural community pioneers on the other hand were unable to translate this discontent into a cohesive counter program to safeguard and (re)define the Internet as a public domain. Dotcoms, and in particular the new telcos, took initiatives where the (federal) state had failed. National telcos had been reluctant to get into the Internet business. But from 1995 onwards the commercial tidal wave seemed unstoppable. Many agreed that more infrastructure and access was badly needed, and this is where dotcoms and the non-profit critical Internet culture teamed up against vested interests of the (former) state-owned telcos such as Telstra, Deutsche Telecom, Telefonica, KPN or BT. Yet, privatization of the telco markets, worldwide, had not led to fair competition and open markets and instead further strengthened the quasi monopoly position of privatized state firms.

The failed deregulation of the telco, satellite and cable markets eventually led to a stagnation of broadband rollout, capacity so badly needed by both the dotcom e- commerce vendors and

3. First publications to come out in 2000 were, for example, Cyberselfish by Paulina Borsook, Robert J. Schiller's Irrational Exuberance and One Market Under God by Thomas Frank. A prime victim of speed could be Doug Henwood's A New Economy? (author of Wall Street), announced by Verso Books in 2000. Its publication date, due to events, got postponed a number of times. The book is now scheduled for 2003.
4. The June 2000 conference Tulipomania.dotcom (URL: www.balie.nl/tulipomania), held in Amsterdam and Frankfurt am Main, organized by Geert Lovink, Eric Kluitenberg and others of the Nettime circle, could be seen as an exception. The symposium took place a few months after the dramatic fall of the NASDAQ index in April 2000. First indications of the dotcom downfall go back to late 1999 as clearly documented in Ernst Malmsten's BooHoo story.

non-profit content producers. No one wanted to come up with the huge investment sums necessary to bring fibre-optics into everyone's homes. However, this (potentially) common interest did not articulate itself in any political way. Till today, cyber lobby groups are mainly focussed on electronic civil rights issues and ways network technologies affect democracy, wary to put the hard economic issues on the agenda. The ambivalent attitude towards telco giants remained, as they were one of the main forces that sabotaged the new media industry from taking off. With a completed fibre-optic network, reaching both households, businesses and small institutions, the dotcom story would have taken a different turn. With little broadband infrastructure in place, the financial 'bubble' aspect of the dotcoms only became more pronounced.

The Mammoth and the Hasty

The core of the dotcom ideology could be defined as the shared belief in speed. The dotgone entrepreneurs lacked patience to work on sustainable models. The mentality was one of now or never. It was presumed that Moore's law would automatically apply to the Internet economy: a doubling of customers—and revenue—every 18 months. More likely every week. The rule was: become a first mover, spend a lot of money, build traffic, get a customer base, and then figure out how to make money. No time to lose till the IPO- merger-sell out. Take the share options and run. Get out as quick as you can and leave others with the mess you created. Presuming there are others. Value accumulation was believed to grow at the speed of light: "The people and companies of the new economy— from Bill Gates to Bangalore programmers—are today's global revolutionary vanguard. And the change they are spreading moves at literally the speed of light".[5] The dotcom answer to all your doubts: "you ain't seen nothing yet". The given reason for the manic, workaholic lifestyle of dotcom executives and their staffers was competition. Working around the clock, the slaves of the New Economy painted titanic forces at work, aimed to drive them out the market. The survival of the fittest was not an outdated 19th century motive but a very serious matter. It's an irony of history that only a matter of months none of the hyped-up e-commerce portals was around anymore.

In short, the dotcom model was nothing but a 'get rich quick' formula. Would-be entrepreneurs would start writing up a business plan. Then they would spent most of the time in boardrooms, negotiating with venture capitalists, banks, retailers, ad-agencies, consultants, technologists and designers. With little or no time for beta testing or the development of content and user base, webportals would often only offer generic (syndicated) information. The target was not so much the increase of revenue streams or even profitability (as there was little or no cash flow to start with). Instead the dotcom had to collect click rates. Old media advertisement (magazines, TV, billboards etc.) and web banners in similar portals had to attract users. All the dotcoms had to do is "catch eyeballs". That was sufficient to move to the next round, the initial public offering (IPO) of the company on the stock market. At that moment venture capitalists, other financiers and the founders would get (back) their money. They would pay themselves in share options and become multi-millionaire overnight (at least, on paper). Once the dotcom had become a publicly owned company, the founders could "sell out". A few years after their departure they could cash in their stock options and retire. At least, that's the ideal version of events.

5. Quoted from Wired's Encyclopedia of the New Economy, written by John Browning and Spencer Reiss, http://hotwired.lycos.com/special/ene/. A general approach on Internet time describing the hurry sickness from the users point of view: James Gleick, Faster, London: Abacus, 1999, pp. 83-93.

Dotcommania has perfectly been preserved in the "business porn magazines" (Paulina Borsook) such as *Red Herring*, *Fast Company* and *Business 2.0*. Perhaps with the exception of the *Industry Standard*, the Watchtowers of the New Economy were willingly blind after what happened in the aftermath of the April 2000 NASDAQ downfall. The resemblance to Communist party news media in the former Eastern Bloc is remarkable: organized optimism, neglect of basic figures mixed with portraits of heroes celebrating their miraculous breakthroughs at the forefront of financial schemes. The dotcom propagandists kept on repeating their mantra of bankruptcy as a spiritually cleansing experience, hoping that the storm wouldn't be that bad after all. The blindness of the e-commerce Pravdas was bewitching. The showcased denial of reality is worth a thorough anthropological study, assisted by clinical psychologists. Morgan Stanley analyst Mary Meeker's remark about Priceline is deemed to become historic: "It wasn't troubled until it was troubled. It was fine on Wednesday, bad on Thursday".[6]

Known from New Age and religious sects, the iron belief in positivism functioned as an attitude-armor against reality. The slogan was: "We are bullish on everything positive". What was striking about New Economy believers was not so much the cult of paranoia, greed and gold rush hallucinations but the blatant lack of self-reflection. Dotcom is first of all a religion. If you were not a believer, you could not be one of them and as a consequence not get access to venture capital and vital business contacts. There was a collective refusal to analyse the broader economic and political context of information technology, taking basic economic laws into account. The general news media were actively propagating the idea of the never-ending speculative bubble. As Robert J. Schiller puts it in *Irrational Exuberance*:

> The role of the news media in the stock market is not, as commonly believed, simply as a convenient tool for investors who are reacting directly to the economically significant news itself. The media actively shape public attention and categories of thought, and they create the environment within which the stock market events are played out.[7]

The presumption of the dotcom era has been that the individual entrepreneur, together with his company will succeed, no matter what, as long as the Will remained unspoiled and focused. Success would come from the unlimited growth of users and their ever- growing hunger for online

6. Fortune magazine, quoted in Pamela Williams, Can You Trust Brokers? The Australian Financial Review, 16-17 June 2001. On August 3, 2001 The Industry Standard's Media Grok reported about two lawsuits against Mary Meeker. "Some investors say Meeker 'offered biased research and slanted investment advice about eBay and Seattle-based Amazon as a way to secure lucrative banking business for Morgan Stanley,' according to Bloomberg. Analysts are under the microscope right now, and Merrill Lynch recently settled arbitration against famous bull Henry Blodget. Unlike the Blodget arbitration, the cases against Meeker and Morgan Stanley are 'designed to go to court,' said the New York Daily News. It may not be a coincidence that these suits were filed the day after a congressional hearing that gave analysts the what-for. The SEC revealed that that 30 percent of analysts owned pre-IPO shares of companies they covered. Testimony from TheStreet.com's Adam Lashinsky suggested that financial journalists like him aided and abetted analysts' wrongdoing. CNBC always plugged stocks 'because rising stocks meant greater viewership,' he said. TheStreet.com pointed out analyst conflicts, Lashinsky said, but 'at the same time we did our share to hype the momentum stocks of the era.'"
7. Robert J. Schiller, Irrational Exuberance, Melbourne: Scribe Publications, 2000, p. 95.

services. Research, consultancy and accountancy firms (often one and the same) were actively supporting the hype with accelerated growth estimations. As with other religions, reflexivity can be dangerous and bring the whole enterprise into trouble. Says Robert J. Shiller about the upward bias of stock analysts:

> It is the vague, undifferentiated future, far beyond one-year forecasts, that lie behind the high market valuations. Analysts have few worries about being uniformly optimistic regarding the distant future; they have concluded that such generalized optimism is simply good for business.[8]

According to data from Zacks Investment Research only 1.0% of recommendations were 'sells' in late 1999.[9]

Doubts were not allowed. Setbacks came out of the blue and simply happened. The dotcom attitude remained one of a systemic disbelief over the size of the unfolding tech wreck, summarized in the response on the VC site www.tornado.com, dated May 19 2000, after boo.com's spectacular downfall: "Learn, evolve and prosper". If companies folded there were others to blame (mainly the state and 'old media'). Internal criticism was nonexistent because it could potentially undermine a company's strategy to gain value (measured in click rates) as soon as possible. Through the distribution of stock options, dotcom workers were made complicit to this 'post-democratic' business model. The atmosphere was one of organized optimism, a self imposed dictatorship of the positive, comparable to a religious sect. Internal discipline was handled in ways known only in former communist parties: dissidents simply did not exist. Everybody is happy, can't you see? Shut up and party. Think of your stock options, the football table and free breakfast buffets. Don't worry, be happy. Unleash those positive energies within!

Dotcom management went like this: be playful and don't think about anything other than accomplishing your task. Do your ping-pong and write the damned code. 'Negative elements' had to be marginalised and were labeled as simplistic, one-dimensional, outmoded ideologues.[10] Critique was essentially viewed as a dinosaur phenomenon, coming from those who could not keep up with the pace. Feedback, a fundamental mechanism of cybernetics, was banned because it could endanger a precarious market position. The rigid 'new era' ideology of permanent success was the main reason why most insiders of the network revolution did not anticipate the dotcom crash. It simply could not happen. Hadn't we got rid of dialectics a long time ago? Differentiation and rhizomatic growth had replaced the linear thesis-antithesis-synthesis model. In the existing age of viral guerilla marketing there is no place for ordinary ups and downs. Long and short waves,

8. Ibid., p. 31.
9. Ibid., p. 30.
10. More on the working conditions in the dotcom sector: Andrew Ross, Mental Labor in the New Economy, posted on nettime, June 12, 2000, published in: Geert Lovink/Eric Kluitenberg (ed.), Tulipomania DotCom reader, a critique of the new economy, Amsterdam: Uitgeverij De Balie, 2000; See also: Bill Lessard andSteve Baldwin, NetSlaves: True Tales of Working on the Web, New York: McGraw, 2000. URL: www.disobey.com/netslaves and Dana Hawkins, Lawsuits and Workplace Monitoring, posted on nettime, August 10, 2001.

crisis and recession, irrational exuberance, all constructs of evil minds, attempting to play down and deny the seemingly endless growth potential of the Internet economy and the global market in general. Those pointing at possible signs of a downturn were seen as agents of negativism. Their constant talk of 'overvalued stocks' eventually brought down the stocks.

Get There First

What is striking in the dotcom narratives that I will present here is the desire to capture the excitement, the drive to "get there first", and the strong belief in a slavery-type of (yet playful) hard work. The dedication to network technologies and trust in commercial applications is overwhelming. Every idea had a million potential customers. Remarkably, in all these works the ideological origins of the dotcom model remain uncontested, no matter how different the background of the authors may be. Only few years after the bubble, the dotcom stories are about to fade away for good. Let's therefore take back some of the elements of dotcom's golden days and how they were reassessed during the Internet's first recession of 2001-2002.[11]

One of the ways to talk one's self out of the responsibility for the larger financial crisis following the dotcom crash is to disassociate the 'pure' and innocent, spiritual and alternative (Californian) IT-industry from the 'dirty' money laundering, gambling Wall Street mafia. Kevin Kelly, Wired editor and author of the 1998 bible *New Rules for the New Economy*, retrospectively smuggles away his personal responsibility into the whole affair. "Three trillion dollars lost on Nasdaq, 500 failed dotcoms, and half a million hi- tech jobs gone. Even consumers in the street are underwhelmed by look-alike gizmos and bandwidth that never came". This revised view of the Internet, as sensible as it is, Kelly writes in The Wall Street Journal, "is as misguided as the previous view that the Internet could only go up. The Internet is less a creation dictated by economics than it is a miracle and a gift". [12] Kelly hastily runs away from the CEOs he hung out with during the roaring nineties. In order to cover up his own involvement he then praises the army of amateur website builders:

> While the most popular 50 websites are crassly commercial, most of the 3 billion web pages in the world are not. Companies build only thirty percent of Web pages and corporations like pets.com. The rest is built on love, such as care4pets.com or responsiblepetcare.org. The answer to the mystery of why people would make 3 billion web pages in 2,000 days is simple: sharing.[13]

It is a comfort, for both those who missed out and those who lost their savings, to get such quaint words. Voluntarism will be the penance for all the bullish sins.

John Perry Barlow, co-founder of the Electronic Frontier Foundation, has a more down- to-earth approach. Speaking in early 2002 Barlow admits, being an Internet guru isn't what it used to be.

11. An early overview of the dotcom bubble is Dot.con by John Cassidy, London: Penguin, 2002. F'd Companies: Spectacular Dotcom Fallouts by www.fuckedcompany.com's founder Philip J. Kaplan (New York: Simon & Schuster, 2002) lists some 150 ill-fated companies.
12. Kevin Kelly, The Web Runs on Love, Not Greed, Wall Street Journal, January 4, 2002.
13. Ibid.

> I lost probably 95 percent of my net worth. But it's been good for the Internet, and in the long term it's going to be very good for the dot-communists. Never has there been a time when there are so many young people who have been poor and then rich and then poor again. I think it's an educational experience that teaches you what's valuable in life. To have a whole bunch of money at a really young age and see how completely useless it is—it trains a lot of folks in the real value of things.[14]

Like Kelly, he interprets dotcommania as a hostile takeover attempt, lead by forces from the past. Barlow refrains to name names, pointing for instance at venture capitalists, investment banks, or other established industries. Instead he uses the familiar biological metaphors:

> The whole dot-com thing was an effort to use 19th and 20th century concepts of economy in an environment where they didn't exist, and the Internet essentially shrugged them off. This was an assault by an alien force that was repelled by the natural forces of the Internet". However, unlike Kelly, Barlow is admitting his own errors in all of this, "trying to evaluate where to go because we've so massively screwed up. [15]

In his first mea culpa interview with Gary Rivlin for *Wired* technology guru George Gilder confesses: "When you're up there surfing," he says, "the beach looks beautiful. You never think about what the sand in your face might feel like until after you've crashed". While Gilder avoided investing in the companies he wrote about in his newsletter because of the potential for charges of conflict of interest, the Global Crossing telco was a notable exception. According to Wired it was Gilder, as much as anyone, who helped trigger the hundreds of billions of dollars invested to create competing fiber networks. Then everything imploded, and company after company went under. The telecom sector proved to be an even greater financial debacle than the dotcoms. Wired:

> 'Global Crossing going bankrupt?' Gilder asks, a look of disbelief on his face. 'I would've been willing to bet my house against it.' In effect he did. Just a few years ago, he was the toast of Wall Street and commanded as much as $100,000 per speech. Now, he confesses, he's broke and has a lien against his home.[16]

The article fails to mention that for all these years *Wired* had been an all too willing megaphone for Gilder, putting out one uncritical interview after another, all conducted by its senior editor Kevin Kelly.

Underneath the dedicated excitement of the late nineties we can find a deep sense of inevitability. I hesitate to say fatality because that may sound pompous. Unfortunately, dotcoms lacked suspense. As other aspects of the 'transparent society' they were driven by essential human blandness. Generation @ were nothing but ordinary people and there is perhaps no secret which

14. Rachel Konrad, Trouble Ahead, Trouble Behind, Interview with John Perry Barlow, News.com, February 22, 2002, http://news.com.com/2008-1082-843349.html.
15. Ibid.
16. Gary Rivkin, The Madness of King George, Wired #10.7, July 2002. URL: http://www.wired.com/wired/archive/10.07/gilder.html.

needs to be revealed. There are no signs of despair, or hope. At best there is white-collar crime. Theft and robbery are presented as perfectly legitimate ways of doing business. The dotcoms, filled with excitement over all their vaporware business opportunities, in fact lacked sufficient conspiratorial energy. It is questionable whether the schemes can be reduced to individual cases of white-collar crime. There is a sense of cold cynicism about a gamble lost. No depth, only light. There was no thing as wrong doings.
Former dotcommers are still baffled. Claiming that everything in their New Economy would be different they were unaware of the historical reality that every revolution will eat its own children. The unjust crisis without cause overwhelmed the heralds of virtual enterprise, with hardly anyone to blame. Lawyers may have advised the dot.bomb authors not to dig too deep. Class actions may be taken. That could explain the stunning lack of (self-) analysis. More likely is the superficial and packaged experience, sensed as something uniquely exciting that the dotcom generation, worldwide, went through. Dotcom antagonists had history on their side. Opportunities could only multiply. So what went wrong?

Castells' New Economy

Until late 2001 there had been the widespread belief that the IT-sector could not be affected by economic downturns. It was presumed that there would always be strong demand for technology products and services and after many decades of growth the tech industry simply could not imagine that it could be hit by a recession itself. Moore's law, the doubling of chip capacity every 18 months was presumed to be applicable to the tech- business. Overproduction could not occur. The industry was only familiar with over demand for the latest models. Technology was in the drivers' seat, not Wall Street. Even Manuel Castells in *The Internet Galaxy*, is not free of this dogma. He writes:

> For all the hype surrounding the dot.com firms, they only represent a small, entrepreneurial vanguard of the new economic world. And, as with all the daring enterprises, the business landscape is littered with the wreckage of unwarranted fantasies.[17]

Castells can only see bright futures ahead and uncritically copy-pastes Maoist-type forecasts of e-commerce growth predictions into his text, fabricated by Gartner, a bullish consultancy firm that is itself highly dependant on the continuous (stock value) growth of the IT-market and never predicted the coming of the 2001/2002 IT recession.

Castells denies that economic growth in the 90s was "speculative or exuberant, and that the high valuation of technology stocks was not a financial bubble, in spite of the obvious over-valuation of many firms". (p.111) Unlike his proclaimed "strict analytical purpose" Castells refrains to analyse the ideological aspects of the New Economy paradigm and its agents such as the 'business porn' magazines with its conferences, management celebrities and its God-like IT-consultants. Instead he neutralizes the term New Economy by lifting it to a general level of all economic sectors that introduce network technologies. The "network enterprise", for Castells, is neither a network of enterprises nor an intra- firm, networked organization:

17. Manuel Castells, The Internet Galaxy, Oxford: Oxford University Press, 2001, p. 64.

> Rather it is a lean agency of economic activity, built around specific business projects, which are enacted by networks of various composition and origin: the network is the enterprise.[18]

Unlike the New Economy prophets such as George Gilder, Tom Peters or Kevin Kelly, Manuel Castells does not have to sell a business model. He abstains from electrifying his readership with upbeat concepts. Castells 'correctly' points to the two sides of the coin in an ongoing attempt to reconcile industry and community. One thing Castells does not want is to upset technologists and business people. He switches back and forth, praising the 'real' changes of IT while playing down the long-term effects of the speculative bubble. As a techno realist and "natural capitalism" sympathizer, Castells favors regulation and sustainable growth models. Facing the legitimacy crisis of governments Castells still sees the necessity of political representation and effective public policy. "Until we rebuild, from the bottom up and from the top down, our institutions of governance and democracy, we will not be able to challenge we are facing". (p. 105) These are huge tasks and the Internet gets a huge responsibility projected onto it to solve pretty much all of today's problems. Castells did not travel to the edges of the Galaxy to explore possible limits of his own discourse. For him, society equals network. We're drawn deeper and deeper into cyberspace. There is no room to question possible limitations of the network as a metaphor and question its agenda. There are no parallel poetic universes. As for many techno-determinists, Castells declares history a one-way street, leaving no option to quit the network society.

Within Internet theory, Manuel Castells represents a third generation of pragmatic social scientists who have come after the computer scientists and cyber- visionaries. For Castells the impact of network technology on business, culture and society is everything but empty: "betting on the technological revolution was not a foolish idea" (p. 105). On the other hand, the current economic laws are still in place. Ever since the mid nineties financial markets are dictating the technology sector, not the other way round—and Castells is well aware of this fact. Technology in itself is no longer the driving force. "The new economy is not the fantasy land of unlimited high economic growth, able to supersede business cycles and be immune to crises". (p. 111) Two pages further Castells, again, switches position:

> To consider that the Internet or genetic engineering are the driving forces of the technological engines of the 21st century economy, and to invest in firms that are producers or early users of these major technological innovations, regardless of their short-term profitability, do not seem irrational.[19]

In the society of risk, theory can no longer produce a fixed morale from a meta perspective. But neither does Castells want to become a degraded PR tout for the 'Internet age,' characterized by systematically volatile, information-driven financial markets. The ability to live dangerously becomes a part of the business way of life, says Castells. But how dangerous is Castells'thinking? His adverse of both speculative thought and ironic negativism puts him in a somewhat difficult position. Castells wants to be part of an accelerated *Zeitgeist* while safely covered by an insur-

18. Ibid, p. 67.
19. Ibid., p. 87.

ance policy. As a result Castells' careful positioning lacks risk taking, avoiding both speculative futurism and critical analysis. A worthy position, but not very innovative. Providing the reader with an impressive overview of new research, unlike the accelerated *Zeitgeist*, the outcome of The Internet Galaxy cannot be other than modest. However, these tempered thoughts do not really help us in understanding the wild fluctuations in the State of the Internet.

Throughout his research for *The Internet Galaxy* (March 2000-March 2001), which coincides with the 'dotbomb' period, Castells makes a few critical remarks about the (dominant?) 'exuberance' discourse. One could label this viewpoint, as if there had only been a "speculative financial bubble" as old economy liberalism. Castells:

> I think the 'bubble' metaphor is misleading because it refers to an implicit notion of the natural market equilibrium, which seems to be superseded in the world of interdependent global financial markets operating at high speed, and processing complex information turbulences in real time.[20]

Both the overvaluation of tech stocks in 1996-2000 and the following devaluation happened "regardless of the performance of companies". Castells is searching for a valuation of the network economy outside of the financial markets—and fails to find it. Castells describes the 2001 downturn as "a new form of business cycle". What he attempts here is the heroic task to conceptually unravel the technology sector and the stock market. He is right in saying that the volatility is systemic. Post-Marxists would perhaps describe it as a 'permanent crisis.' It is significant that Castells does not blame fraudulent schemes but the "nay sayers of the old economy of the industrial era".

Here I disagree. The capitalist logic is fundamental to the the IT-sector—perhaps only a massive delisting of IT-companies on the stock exchange and a closure of the NASDAQ, both very unlikely moves, could disentangle capital from the computer industry. There was no 'alien' assault from 'old' (read: Anglo-Jewish) Wall St. money on the 'new' and innocent West coast hippie engineers, coding for the common good. Silicon Valley should not be portrayed as a victim of Wall Street. Still, Castells' intent to think together business and society is the right strategy. There is no 'pure' Internet any longer that can be situated outside of the market. Capital rules computer technology (and this may always have been the case). Despite the utopian work of coders, artists and activists, the Internet cannot easily be disassociated from the capitalist logic. Castells' message: we live inside the Internet Galaxy (as if we can pretend otherwise?) is a pragmatic message. It remarkably resembles Michael Hardt and Toni Negri's thesis in their millennial work *Empire*: we live inside Empire (and do pretend there is an outside). And so with Castells' closing remarks:

> If you do not care about the networks, the networks will care about you. For as long as you want to live in society, and this time and in this place, you will have to deal with the network society.[21]

20. Ibid., p. 111.
21. An analogy to Moholy-Nagy's warning, proclaimed in the 1920s, that those who are ignorant in matters of photography will be the illerates of tomorrow (see: Afterword, Hubertus von Amelunxen, in: Vilem Flusser, Towards a Philosophy of Photography, London: Reaktion Books, 2000, p. 90).

Even after the dotcom crash, technological innovation will be economically driven—even more so than it ever was. The fight has just started over the terms and conditions under which a techno-renaissance could unfold: free software, open source, copyleft, barter, free money, 'love', etc. The role of cyclical financial market movements and profit oriented corporations in this process of 'freedom enhancement' is highly disputed—and yet unclear. If the trajectory from bubble to burst is not to be repeated, the Internet community at large need to quickly dream up alternative economic models, otherwise capital will, again, knock on the door.

Dot.Bomb and Boo Hoo

It is an ironic detail that the dotcon ur-parable, Michael Wolff's *Burn Rate*, already appeared in 1998, way before the phenomenon got its 'dotcom' label. Wolff, a "leader of an industry without income" describes the 1994-1997 period which his New York new media publishing company turned out to be an 'Internet venture', attracting venture capital. Michael Wolff was the creator of the best-selling *NetGuide*, one of the first books to introduce the Internet to the general public. Being one of the first movers he quickly turned his company into a 'leading' content provider. With a 'burn rate' of half a million a month Wolf New Media LLC subsequently got dumped by VCs. Michael Wolff explains the hype logic under which he operated:

> The Internet, because it is a new industry making itself up as it goes along, is particularly susceptible to the art of the spin. Those of us in the industry want the world to think the best of us, Optimism is our bank account; fantasy is our product; press releases are our good name.[22]

The company operated under Rosetto's law, named after *Wired* founder Louis Rosetto that says that content, not technology, is king. Early Internet entrepreneurs with a media and publishing background such as Rosetto and Wolf had the utopian believe that technology would become a transparent and low-priced commodity. Revenue streams would come from marketing partnerships, advertisement, direct sales and most of all, content replication, not from technology-related businesses. Views diverted as to whether or not consumers were willing to pay for content. So far Internet users would only pay for hardware, access and, to a certain level, for software. "On the West coast, the Wired disciples believed information wanted to be free; here in New York they blissfully believed information wanted to be paid for".[23] Neither model worked. Users were mistaken for customers. Around the same time Michael Wolff left the scene, the nearly bankrupt *Wired*, after two failed IPOs, in early 1998 was sold to the 'old media' publishing giant Condé Nast. Wolff: "My early belief that the Internet was a new kind of manufacturing and distribution economics, was replaced".(p. 328).

The dotcoms became victims of their own speed religion. The dromo-Darwinist belief in the 'survival of the fastest' (you are either one or zero, with nothing in between) dominated all other considerations. The 'amazing over-the-horizon radar' capacity (John Doerr) broke down almost immediately after first signs of a recession set in. The hyper growth dogma and drive towards the dominance of a not yet existing e-commerce sector overshadowed the economic common sense, fuelled by the presumption of something, very big, out there, an opportunity, as blank and beautiful as a virgin, waiting to be snatched.

The dotcom could be defined by its business model, not by its technology focus. There was hardly any emphasis on research ('too slow'). The domination of high-risk finance capital over the dotcom business model remains an uncontested truth. Dot companies were depending on capital markets, not on their customer base. Michael Wolff sums up what was going to be a dotcom mantra:

22. Michael Wolff, Burn Rate, London: Orion Books, 1999, p. XII.
23. Michael Wolff, p. 63. In Burn Rate there is, in my view, an accurate description of Louis Rosetto's Amsterdam-based magazine Electric Word and the climate in the early nineties which let to their move to San Francisco (not New York) in order to found Wired (described in the chapter 'How it got to be a wired world' pp. 26-51).

The hierarchy, the aristocracy, depends on being first. Land, as in most aristocracies, is the measure. Not trade. Who has the resources to claim the most valuable property – occupy space through the promotion of brands, the building of name recognition, the creation of an identity – is the name of the game. Conquer first, reap later.[24]

David Kuo's *Dot.Bomb* is perhaps the most accessible dotcom story in the genre thus far. Unlike Michael Wolff with his investigative new journalism style, Kuo lacks the critical ambition and just wrote down what he experienced. The book tells the story from an employee perspective about the rise and rise and sudden fall of the retail portal Value America.[25] Craig Winn, a rightwing Christian with political ambitions who already had gone through an earlier bankruptcy case with Dynasty Lighting, founded the retail portal in 1996. Comparable to mail order, the basic idea behind Value America was to eliminate the middlemen and ship products directly from manufacturers to consumers. Winn got powerful financial backing but the portal didn't quite work and attracted only few customers, offering poor service to its clients. In the face of rising expenditure, the board of directors forced Winn to resign not long before the company was liquidated in August 2000.[26]

Value America is a perfect example of a dotcom scheme which had the coward mentality of messing up, knowing that someone else would deal with the carnage. As David Kuo writes of the underlying logic: "We were supposed to do the Internet shuffle—get in, change the world, get rich, and get out".[27] The New Economy could only function under the presumption that in the end the 'old economy', in one way or another, was going to pay the bill; either in another round of venture capital financing, investments of pension funds or institutional investors, banks, employees or day traders. Somebody was going to bleed. In dotcom newspeak this scheme was better known as 'prosper'. Akin to pyramid schemes everyone was going to 'prosper'. Not from the profitability of e-commerce but from large sums of money that would change hands quickly, in a perfectly legal way, covered up by official auditing reports, way before the world would find out about the true nature of the New Economy.

Towards the end of his account, David Kuo wonders why events didn't turn out the way they were meant to: "We discovered that the prevailing wisdom was flawed. The Internet is a tremendous force for change, but the industry chews up more folks than it blesses". (p. 305) As a true Darwinist of his age, Kuo admits that chances of getting rich that quick and easy weren't really that high. While in Las Vegas, looking at an IMAX movie about the Alaska gold rush of the 1890s, he muses:

24. Michael Wolff, p. 8.
25. http://web.archive.org/web/20000619022736/http://www.valueamerica.com/ (this is the URL of Value America as kept alive inside one of the worlds biggest web archives).
26. Value America's downfall from $74.25 a share on April 8, 1999 to $2 one year later made VA one of the first in a long series of dotcom crashes. John A. Byrne in Business Week Online, May 1, 2000 wrote a stunning reconstruction of Value America's doings.
27. David Kuo, Inside an Internet Goliath – from Lunatic Optimism to Panic and Crash, London: Little, Brown and Company, 2001, p. 305.

> More than hundred thousand people ventured near the Arctic Circle in search of their chunk of gold. Of those only a handful ever found anything of any worth. A few thousand covered the cost of their trip. Most came back cold and penniless. Thousand froze to death.[28]

And then comes the revelation:

> The truth hit me over the head like a gold miner's shovel. Despite the hype, headlines, and hysteria, this was just a gold rush we were in, not a gold mine we found. We might look like hip, chic, cutting-edge, new economy workers, but in fact, a lot of us were kin to those poor, freezing fools, who had staked everything on turning up a glittering of gold. [29]

The comparison with the 1890's gold rush might be attractive explanation for those involved. The gold rush narrative reinterprets business as lottery. There were no concepts or decisions, just chance statistics. The right historical parallels would perhaps be tulipomania (Amsterdam, 1636), the South Sea bubble (UK, 1720), railway stocks in 19th century UK or the boom of the Roaring Twenties that ended in the 1929 stock market crash. Compared to the Alaskan Gold rush there was no hardship during Dotcommania. Long hours were voluntary and compensated by parties and stock options. Besides some social pressure to comply there was no physical endurance to speak of. All participants are still in an ecstatic mood and would go for it again, if they could. None of the dotcommers froze to dead. It was good fun. As the now famous quote of a boo.com analyst says:

> For the first nine months of its existence, the company was run on the economic rule of the three C's—champagne, caviar and the Concorde. It's not often you get to spend $130 million. It was the best fun.[30]

Boo.com, a fashion, sports and lifestyle venture, is another case of the pursuit of arrogance. Sold as entrepreneurial courage, it got into the fortunate position to fool around with investors' money while flaunting all existing economic laws. Boo.com was destined to be become a global e-tailor empire. Way before a single item was sold it was valued at $390 million. Founded by two Swedes, Ernst Malmsten and Kajsa Leander in early 1998, when the New Economy craze picked up in Europe, boo was supposed to become the first global online retailer of sports and designer cloths, "using only the most cutting-edge technology". *Boo Hoo* is Ernst Malmsten's stunning hubris-laden account that tells of the excitement of how easy it was to collect millions for an over-hyped business plan, assisted by offline 3D demo design and the right buzzwords. London- based boo.com got backing of the Bennetton family, a small British investment firm called Eden Capital, the luxury-goods magnate Bernard Arnault and a number of Middle Eastern investors. Despite, or thanks to, all the money boo.com turned out to be a management nightmare. As a Swedish report analysed the company:

28. Kuo, p. 306.
29. Kuo, p. 306.
30. London Telegraph, May 19, 2000. Richard Barbook, in a private email, remarks: "It was *4* Cs in the joke about Boo.com. Being an up-tight Tory newspaper, The Daily Telegraph had to leave out the C which can make you feel very self-confident about everything: cocaine. Don't forget that the English consume more illegal chemicals per head than any other nation in the EU".

> Ericsson was no good at systems integration. Hill and Knowlton did not know how to sell the story to the media. JP Morgan was not bringing in investors fast enough. The chief technology officer was not up to his job. Even Patrik Hedelin, a fellow founder, was too much of an individual to be a good chief financial officer.[31]

The Boo dream imploded, only six months after its launch. After having burned $130 million Boo.com folded less than a month after the NASDAQ crash in April 2000.

Retrospectively, Ernst Malmsten is ready to admit that the core of the problem at boo.com was speed, the belief that Rome could be built in a day.

> Instead of focusing single-mindedly on just getting the website up and running, I had tried to implement an immensely complex and ambitious vision in its entirety. Our online magazine, the rollout of overseas offices, and the development of new product lines to sell on our site—these were all things that could have waited until the site was in operation. But I had wanted to build utopia instantly. It had taken eleven Apollo missions to land on the moon; I had wanted to do it all in one.[32]

Those who taught Kuo and Malmsten & Co. these New Economy truisms remain un- named. George Gilder, Kevin Kelly or Tom Peters do not show up in these chronicles. As in a psychedelic rush the dotcom actors got caught in events and moments later were dropped into the garbage bin of history, left behind with nothing but question marks. Ernst Malmsten:

> In my head I see images of all boo's employees, who worked day and night with such enthusiasm; and the investors who were so confident of our future that they had put $130 million into the company. Two years' work, five overseas offices, 350 staff. All these people trusted me and now I have failed. What have I done? How could things have gone so wrong?[33]

As instructed by 'leadership' gurus, Ernst and Kajsa wasted a lot of time and resources creating a brand for their not-yet-existing business. The company image got turned into a *Gesamtkunstwerk* (total art work). The founders showed total devotion. "We determined that every aspect of our business, from the look of our website to the design of our business cards, should send a clear message who we were and what we stood for".[34] The launch of the (empty) boo brand throughout 1999, fuelled by press releases, demo designs and parties, all of which created the risk of media over-exposure at a time when the web portal itself was nowhere near finished. On the technology front, Ericsson, responsible for the e-commerce platform, turned out to do a lousy job. As Malmsten explains it:

31. Incompetence backed by less expert investors, 4 December 2001. Reviewer: A reader from Stockholm, Sweden (found on thewww.amazon.com.uk site).
32. Ernst Malmsten, together with Erik Portanger and Charles Drazin, Boo Hoo, a dotcom story from concept to catastrophe, London: Random House, 2001, p. 233.
33. Malmsten, p. 4.
34. Malmsten, p. 106.

> The breaking point had come when its 30-page feasibility study landed on my desk… The first thing that struck me how flimsy it seemed. Then I got the bill. At $500.000, it was roughly five times more than I'd expected. As we had been having considerable doubts about working with Ericsson, I saw no reason why I should accept it.[35]

This left Boo without a master plan, thereby creating a delay of many months:

> There was one thing guaranteed to bring us back down to earth again. Technology. As we began to pull together the different parts of the platform, more and more bugs seemed to pop up. So many in fact that no one had any clear notion when the launch date would actually be.[36]

Still, "technology felt more like a pip in the tooth than something we really had to worry about. It barely dented that summer's mood of bullish self-confidence". (p. 215-216) In early August 1999, only weeks before launching the boo.com site, Malmsten discovers that pretty much nothing works.

> Systems architecture, the user interface, product data, the application development process—there were problems in pretty much all these areas. Our overall project management was a disaster too. We were now working with eighteen different technology companies who were scattered around the world. What they needed was a central architect.[37]

Boo didn't have any version control. A central system of management should have been in place to track versions and create a central code base.

In the case of Boo and Value America it is significant that there was no executive technologist on board in an early stage of the venture. The lesson Malmsten learned from all these disasters is a surprising one. Instead of scaling down at a crucial moment, thereby giving technology more time to develop and give technologists a greater say in the overall project planning, Malmsten retrospectively suggests outsourcing. "We should never have tried to manage the development of the technology platform ourselves". (p. 308) However, in e-commerce there were—and still are—no out-of-the-box solutions. Unaware of the imperfect nature of technology the dotcom founders showing off a regressive understanding of the Internet. Instead of entering deeper into the complexities and the ever-changing standards, they simply instrumentalized technology as a tool, which was supposed to do the job—just like the ads said.

Surprisingly, both Kuo and Malmsten admit they hadn't used Internet before they got involved in their dotcom venture and do not even particularly like the medium. Internet entrepreneur Malmsten confesses he doesn't particularly like computers and hadn't used the Internet before September 1996. In both stories technology is portrayed as an 'obstacle,' not the core and pride of the business. As technological outsiders Kuo and Malmsten have visibly been irritated about the imperfect nature of technology. The permanent state of instability is a source of eternal enjoyment for geeks—and should be permanent worry for those who are in it for the business.

35. Malmsten, p. 108.
36. Malmsten, p. 215.
37. Malmsten, p. 231.

The anxiety may be understandable coming from suburban mums and dads; but from executive level management of major Internet startups? The Internet in the late nineties was anything but perfect, especially in cases where a complex variety of operating systems, networks, databases, applications and interfaces had to talk to each other. Dotcom management lacked the passion to fiddle around. There was simply no time for bugs in the now-or- never time schedules.

The fact that these *Ueberyuppies* were unaware of the non-functionality of new technologies illustrates the guest appearance role of the dotcom workforce in the larger Internet saga. David Kuo was a political adviser and CIA operative. Boo founders Ernst Malmsten and Kajsa Leander ran literature events and a publishing house. Lawyers, former humanities and arts students and corporate employees went back to their previous professions, disappointed about the millions they failed to make. The dotcom class of 99 did not have the marketing expertise to lift their dreams beyond the level of good ideas, nor the technological experience to understand the very real limitations of the web. Blinded by financial deals their religious optimism forced them to believe that technology and markets did not have to be developed and therefore their company could become mega-successful instantaneously. There was no time scheduled for mistakes. Didn't the Darwinist doctrine teach that those who hesitate would be slaughtered? The dotcom class did not hesitate and was slaughtered nonetheless.

Boo.com investors may have been lured, not to say fooled, with fancy offline demonstration models. "Boo.com suffered from delays, technical hitches and a website that made broadband access a prerequisite for purchasing sneakers," www.tornado.com wrote, a venture capital network that itself died in early 2002. The home computers of most potential boo customers on their slow 28-56K dialup connections were unable to access the high bandwidth 3D images of the retail products on sale. Yet Malmsten doesn't touch this problematic aspect of the boo concept. Possible customers lacking bandwidth did not cross his mind. Like so many dotgone leaders, Malmsten presumed the latest technologies to be flawless and omnipresent. The future had already arrived. Everyone had seamless bandwidth under his or her fingertips. Fire up your browser, surf and buy. What's the problem? The six months that boo.com was online were too short to touch bandwidth and usability issues. None of the investors pushed for a low bandwidth version of the website. They had all blindly bought themselves into glamorous beta versions—until reality kicked in.

Boo's scheduled IPO was postponed. Investors produced a list of demands. A signed supplier agreement had to be secured with either Nike or Adidas; there had to be clear evidence of further revenue momentum, etc. Staff had to be cut by half. The first department to be closed was boo's 'lifestyle' web magazine *boom*. It had been Kajsa Leander's brainchild. "The notion that art and commerce could be mutually supporting— that we could be mutually supporting—that we could create a loyal customer base through a magazine that had its own independent validity—appealed enormously to her". (p.322) It had failed to work out, as with most online magazines, run by a staff of editors, designers and programmers and a pool of freelance writers, who all needed to be paid, and little or no revenues. In April/May 2000 there had been a sudden mood swing in the press. Boo.com felt victimized. Investor confidence dropped below zero and on May 18, 2000 boo.com became one of Europe's first dotcoms to close its doors. "In the space of one day our glorious schemes for expansion had vanished in a puff of smoke". (p. 318) In a matter of weeks boo.com followed the downfall pattern, as described by Kuo:

> "Company after company followed the same death script: 'restructurings' that would help 'focus on profitability' led to explorations of 'strategic alternatives,' which led to 'further layoffs' and finally to bankruptcy". (p. 311)

The dotcom generation is, in part, an example of the dominant credit paradigm. Borrow first, let others pay back later. This dotcom pattern is already visible in earlier practices of the boo.com founders. Their earlier publishing house, LeanderMalmsten survived on "delaying what payments we could," leaving their printers with unpaid bills. Their next project, a Swedish Amazon clone,www.bokus.com, which sold books online, didn't even have to make decent revenues. The venture was immediately sold to old economy retail giant who then had to figure out a business plan. The Value America story is even weirder in this respect. It is only towards the end of his engagement that David Kuo discovers the true magnitude of a huge bankruptcy scandal Value America Craig Winn founder had caused earlier. Despite Winn's bad reputation amongst some Wall Street analysts, he was still able to borrow US $ 200 million, until creditors—again—pulled the plug.

Michael Lewis' Future Sagas

The Future Just Happened by Michael Lewis followed the model of his last bestseller *The New New Thing,* the story on Jim Clark and and the Netscape IPO. Lewis wisely keeps quiet about the whereabouts of his New Thing heroes and the tragic marginalization of the web browser company Netscape after its takeover by AOL. For Lewis dotcommania is no longer a process shaped by technologists, but a scheme, run by financial professionals. In an opportunistic manner Lewis states: "In pursuit of banking fees the idea that there was such a thing as the truth had been lost". (p. 47) The active role that his own, immensely popular, dotcom book might have played in talking up stocks remains undiscussed. Instead, Lewis sets out to map the social impacts of the Internet.

The Future Just Happened is the accompanying book to a television series with the same title Lewis wrote for the BBC. In both the book and the television series Lewis develops a wildly uncritical crackpot sociology. Well-known usages of the Net are suddenly sold as an "invisible revolution". In order to avoid dealing with the flaws of dotcom business models, the Microsoft monopoly, intellectual property rights, surveillance and other urgent issues, Lewis casts himself as an "amateur social theorist" who discovers a new set of pioneers not corrupted by Wall St. money and corporate greed.

Like many of his contemporaries Lewis notices, "capitalism encourages even more rapid change" (p.6) without mentioning which changes are meant. Change for the sake of change, no matter in what direction? Lewis shares with Manuel Castells an attaction to the diffuse term 'change', away from the Old, towards to anything that seems to tend towards the New. For Lewis technology seems to have no agenda; only heroes who are driving a wild and unspecified process. "The only thing capitalism cannot survive is stability. Stability—true stability—is an absence of progress, and a dearth of new wealth". (p. 125) Lewis equals change to economic growth. Instead of looking into marketing techniques, the production of new consumer groups and the role of early adopters, Lewis reverses the process. He mistakenly presumes that the first users of technology are actually driving the process. Sadly enough for the early adoptors, this is not the case. If any identifiable

agency is driving technology it would arguably be the military, followed by university research centers, in conjunction with large corporations and an occasional start-up.

In the television series and book *The Future Just Happened* Lewis' heroes are not dotcom CEOs but ordinary people, and, in particular, adolescents. Finland provides his key example. The Fins were successful because they were especially good at guessing what others would want from their mobile phone. Lewis follows the corporate rhetoric of Nokia who presumably spent a lot of time studying children. However, the assumption made here is a wrong one. Finnish schoolboys did not invent instant messaging. What they did was using existing features in a perhaps unexpected way. An interesting detail is that SMS is a relative low-tech feature. The Nokia anthropologists then picked up on this informal mobile phone use in their marketing strategy.[38] In short, the Finnish youth neither invented nor further developed the SMS standard. It found new social uses, in a close feedback with the corporate (research) sector. The loops between marketers and the 'cool' rebels are stunningly subtle and banal at the same time. Such dynamics are perhaps too complex for Lewis and so, he sets out to merely celebrate them, in the same way as he had done earlier with Netscape/Healtheon entrepreneur Jim Clark.

The Future Just Happened also tells the story of the fifteen-year-old Jonathan Lebed, "the first child to manipulate the stock market". (p. 15) In September 2000 the U.S. Securities and Exchange Commission (SEC) settled its case of stock market fraud against this computer wiz kid who had used the Internet to promote stocks from his bedroom in Cedar Grove, New Jersey. "Armed only with accounts at AOL and E-trade, the kid had bought stock, then, using "multiple fictious names," posted hundreds of messages on Yahoo Finance message boards recommending that stock to others". (p. 16) Lebed agreed to hand over his gains of US$285.000. Lewis' inability to frame events becomes clear here. He completely fails to mention that these same young fellow day traders only a few months after the Lebed case lost billions and billions of dollars. But, of course Lewis is not visiting the losers, especially losers who can't be fitted into his success story about the "democratization of capital". Instead, the impression of the reader has to be: clever kids can make a lot of money on the Net and the establishment doesn't let them. How unfair.

Lewis' attack on the established Wall St. experts may seem attractive but it's a safe form of rebellion, backed by long-term developments within the financial system itself. First the trading floors of the global stock markets had been wired, and then the trading moved to trading offices, no longer located in Lower Manhattan. It was only going to be a matter of time until Wall St. would no longer be a physical centre but a hub of computer networks, located somewhere, especially after 911, preferably anywhere but Manhattan. Day trading is part of this overall process, but certainly doesn't drive it, its numbers are way too small compared to the vast sums institutional financers are moving around. The professionals are based in New Jersey offices, Atlanta, Tokyo, anywhere.

38. The complex dynamics between marketers and the cool, young rebels is well documented in the PBS television production The Merchants of Cool. URL: http://www.pbs.org/wgbh/pages/frontline/shows/cool/. The script of this insightful documentary can be downloaded under http://www.pbs.org/wgbh/pages/frontline/shows/cool/etc/script.html.

They operate from behind walled communities in the suburbs, equipped with laptops, broadband, PDAs and cell phones, busy tracking stocks and global news.

Within this process, which began in the mid eighties, Lewis rightly classifies the SEC as a conservative force. "Right from the start the SEC had helped to reinforce the sense that 'high finance' was not something for ordinary people. It was conducted by elites". Hobby day traders such as Lebed weren't going to change that fundamental fact. Over the past decades the rich had become richer and the middle class had become under an increased pressure in terms of the level of lifestyle it could no longer maintain. The New Economy did not turned out to be the big leveler as it once promised. At best, it convinced a whole generation that life was a gamble. Not a sustainable, balanced business plan but the right lottery number was the ticket to prosperity. Dumb luck.[39]

In relation to Lebed, Lewis argues that it was unfair to punish a kid for pushing shares by confiscating his profits. That may be so. Regulation works to protect those in power. Lewis' sense of injustice expresses itself in the following oppositions: young versus old, mass versus elite, outsiders versus insiders. Because reason tells us so, the Internet will prevail over the "old rules" and will eventually claim victory. This iron fist me each time I read it. In order to support the cause of the Internet, I would argue that a deeper understanding of the current power structures is inevitable. Reason will not triumph, nor will the newbies, no matter how genius. There is no friction free Internet world without setbacks or responses of the establishment. For instance, Michael Lewis features the Gnutella, peer-to-peer (P2P) software, launched in March 2000 by the twenty-year-old AOL employee Justin Frankel. The Gnutella case is a real challenge for the capitalist Lewis' belief system. He interprets the post-Napster free exchange movement in an interesting way. For Lewis P2P stands for the post-1989 'capitalism without alternatives', which 'allows' peer-to-peer networks to experiment.

> Now that the system is no longer opposed [by communism, GL] it could afford to take risks. Actually these risks were no luxury. Just as people needed other people to tell them who they were, ideas needed other ideas to tell them what they meant.[40]

In other words, now that capitalism has vanquished all alternatives, corporate technology needs its own internal antagonists such as Linux, PGP and Gnutella. All the virus does is test the system:

39. A response to one of my "from the dotcom observatory" nettime posting could illustrate the gambling attitude: "It was pure dumb luck if a startup was successful or not. Many of the netscapers went to other startups because they thought, "Hey, we have the magic touch" (as everyone else thought as well... hiring magic lucky charms was very popular then) but nearly all of them failed. Most frequently massive misuse of money and no customers caused this (We have to hire 100 people in the next two months!... the ramp-up lie), but it is also being in the right time, right place, with the right connections. Dumb luck. Most people think it was their talent. Because the alternative is horrifyingly unfair. The ones who don't think it was their talent that made them successful, who made lots of money, have huge issues about deserving the money they made--I know one person who felt so guilty that he *gave* 2 million dollars to the girl he was dating....and she immediately broke up with him, of course. This is not to say that having a group of smart people in your startup wasn't important--it was, but I can count hundreds of startups that were just "smart" experienced people that failed just the same". (Anya Sophe Behn, re: nettime, From the Dotcom Observatory, December 26, 2001).
40. Michael Lewis, The Future Just Happened, London: Hodder and Stoughton, 2001, p. 135.

"That's perhaps one reason that people so explicitly hostile to capitalism were given a longer leash than usual: they posed no fundamental risk". (p. 145) Herbert Marcuse couldn't have expressed it better. In Lewis' one-way street model the rebel has no option but to integrate. Duped by a fatal cocktail of historical necessity and greedy human nature, the Internet rebel will ultimately change sides. Sooner or later, writes Lewis, playing ventriloquist for the speechless hackers,

> some big company swoops in and buys them, or they give birth to the big company themselves. Inside every alienated hacker there is a tycoon struggling to get out. It's not the system he hates. His gripe is with the price the system initially offers him to collaborate.[41]

In order to explain the very real struggles between inside and outside, Lewis trots out a good-evil distinction. Capitalism from before the Fall of Man is pure and good in its very nature and cares for the Internet. Comparable to Kevin Kelly and Manuel Castells, it is the lawyers, CEOs and financiers who are the evil elements. They are imperfect, greedy human beings trying to frustrate "change" as practiced by the youngsters. Yet, Lewis does not ask himself the obvious question why the Internet has not been able to disassociate itself from these elements. Lewis' own book *The New New Thing* describes in detail how finance capital took over the Internet in 1994-1995.

A pure and innocent capitalism, without evil monopolistic corporations, ruled by the Market, is an old idea that can be traced back to Adam Smith. Lewis then sets out to reinterpret 'socialist' intentions of youngsters as "rebel ideas of outsiders" whose only wish, and legitimate right it seems to be, is to get incorporated. Here Lewis really shows his cynical nature, overruling legitimate concerns of hackers in favor of his own conservative political agenda. Lewis advises us not to take notice of anti-capitalist sentiments. "Socialistic impulses will always linger in the air, because they grow directly out of the human experience of capitalism," (p. 124) Lewis reassures us. However, "the market had found a way not only to permit the people who are most threatening to it their rebellious notions but to capitalize on them". (p. 125) Daniel, a fourteen-year-old English Gnutella developer "didn't see things this way, of course. He was still in the larval state of outsider rebellion".

In reference to the debate sparked by SUN's senior technologist Bill Joy on the ethical borders of the technological knowledge,[42] Lewis states that such questioning is dangerous because it could stop "change". In his purist techno-libertarian worldview progress is a blind process without direction or values, which cannot and should not be directed. What remains is friction between the generations. Lewis calls for the Old to make way for the New.

> The middle-aged technologist knows that somewhere out there some kid in his bedroom is dreaming up something that will make him obsolete. And when the dream comes true he'll be dead wood. One of those people who need to be told to get out of the way. Part of the process.[43]

41. Lewis, p. 124.
42. Bill Joy, Wired, April 2000.
43. Lewis, p. 146.

But power doesn't exactly follow the logic of knowledge production (as Lewis describes it). Those in power, worldwide, are perhaps not producing "change". But they are perfectly aware how to own "change" once it has reached the point of profitability. Giving up power is not "part of the process". Change is a disruptive affair, often caused by (cultural) revolutions, (civil) wars and recessions. It is a violent act. The babyboom elites are in no danger of being overruled because the youngsters lack basic understanding how power is operating (and Lewis would be the last one to tell them). It's pathetic to suggest the elderly will voluntarily make way for the next generations, just because they know more how technology works.

In his review of *The Future Just Happened*, Steve Poole writes:

> By the end of his series of meetings with horribly focused children, there is a whiff in Lewis's prose of real, old-fashioned nostalgia - nostalgia for the past, when kids were just kids, and authors could more easily get a handle on the changing world around them".[44]

Lewis is not ready for the looming conflicts over intellectual property rights, censorship and ownership over the means of distribution. The option of an enemy from outside of the technological realm, for instance Islamic extremists or fundamentalist Christians, doesn't cross his mind. The *a priori* here is one of technocratic hegemony, determining all other aspects of life. This is perhaps the most outdated idea in Lewis work, that technologists are the only ones who really shape the future.

Brenda Laurel's Purple Moon

The last dotcom testimony analyzed here has firm roots in cultural IT-research. *Utopian Entrepreneur* is a maxi-essay by Brenda Laurel, author of *Computer as Theatre* and female computer games pioneer. The booklet is an honest and accessible account of what went wrong with her Purple Moon startup, a website and CD-ROM games company targeted at teenage girls.[45] Sadly enough Laurel's economic analysis does not cut very deep. After having gone through the collapse of computer (games) company Atari, the prestigious Silicon Valley Interval research lab and most recently Purple Moon one gets the sense that Brenda Laurel, along with many similar good hearted "cultural workers", is again gearing up for the next round of faulty business. Nervous how-to Power-Point-ism prevails over firm analysis. As long as there is the promise of politically correct ("humanist") popular computer culture is there, for Laurel any business practice seems allowed.

Brenda Laurel is an expert in human computer interface design, usability and gender issues around computer games. She is a great advocate of research. *Utopian Researcher* could perhaps have been a more accurate title for the book. Laurel is insightful on the decline of corporate IT research: how the speed religion, pushed by venture capitalists and IPO-obsessed CEOs, has all but destroyed long-term fundamental research:

> Market research, as it is usually practiced, is problematic for a couple of reasons. Asking people to choose their favorites amongst all the things that already exist doesn't necessarily support innovation; it maps the territory but may not help you plot a new trajectory.[46]

44. Steve Poole, The Guardian, July 21,2001.
45. http://web.archive.org/web/20000815075140/http://www.purple-moon.com
46. Brenda Laurel, Utopian Entrepreneur, Cambridge (Mass.): MIT Press, 2001, p. 41.

Laurel's method, like many of her colleagues interested in computer usability, is to sit down and talk to users:

> learning about people with your eyes and mind and heart wide open. Such research does not necessarily require massive resources but it does require a good deal of work and a concerted effort to keep one's assumptions in check.[47]

Laurel declares herself as a "cultural worker", a designer and new media producer, experienced in communicating to large and diverse audiences. However, this does not make her necessarily a utopian entrepreneur. Like other authors discussed here she doesn't want to articulate her opinion about the world of finance. She hides her anger at those who willingly destroyed her promising venture. It has to be said here that Purple Moon's business model predated the dotcom schemes. Revenues did exist, which mainly came from CD-ROM sales. Despite solid figures, high click rates on the website and a large online community of hundreds of thousands of girls, investors nonetheless pulled the plug. The recurring problem of *Utopian Entrepreneur* is Laurel's ambivalent attitude towards the dominant business culture. Laurel, and with her countless others, keeps on running into very real borders of real existing capitalism. The difficulty to develop a (self) critical analysis is becoming apparent throughout the "cultural" arm of the new media industry. The references Laurel makes to America as a culture obsessed with making more money and spending it are not very useful: "In today's business climate, the story is not about producing value but about producing money". (p. 66) Yet the book does pose the question: what role does culture play in the dynamics of business and technology?

While *Utopian Entrepreneur* is able to describe the chauvinism of 'new economy' gurus—the analysis proceeds no further than moral indigation. Sadly, the economic knowledge Laurel calls for is not practiced in her own writing. One of the fundamental problems may be that Brenda Laurel equates critical analysis with "negativism". Her passion to do "positive work" backfires, on the level of analysis, because it does not allow her to investigate deeper power structures at work behind the companies in which she is involved when they keep crashing. Theory can be a passionate conceptual toolkit and is not necessarily 'friendly fire'. Criticism, in my view, is the highest form of culture, not 'collateral damage.' Organized optimism, so wide spread in the New Age-dominated business and technology circles, effectively blocks thinking. Critique is not a poison but a vital tool to reflect on the course technology is taking.

Laurel seems to suffer from the curious fear of being criticized by radicals, which results creating an unnecessarily defensive form of writing. Brenda Laurel writes: "A utopian entrepreneur will likely encounter unexpected criticism—even denunciations—from those whom she might have assumed to be on her side". What Laurel can't make is the difference between a tough assessment from an insiders' perspective and public relations newspeak. Purple Moon was tremendously successful amongst young girls—and got killed for no (financial) reason. Contrary to the Darwinist dotcom philosophy I think such 'failures' should not happen again. There should be other, less volatile business models which are more hype-resistant, providing projects such as Purple Moon

47. Laurel, p. 84.

with enough resources to grow at their own pace. There is no reason to comply with unreasonable expectations and buy into speculative and unsustainable 'speed economics'.

Brenda Laurel is on a mission to change the nature of the computer games industry, away from its exclusive focus on the shoot-'em-up male adolescent market. She outs herself as a Barbie hater and her aim is to get rid of the "great machine of consumerism". Although Brenda Laurel sums up all the problematic aspects of short-term profit driven technology research, she does not propose alternative forms of research, collaboration and ownership out of a fear to "activate the immune system". Her fear of being excluded from the higher ranks of the virtual class is a real one, not to be easily dismissed. Laurel carefully avoids mentioning dotcom business gurus such as George Gilder, bionomics priests and others, whom Europeans, for better or worse, tend to think of as representatives of the 'Californian ideology.' Laurel may never have been a true believer in the mould of Kou or Malmsten, but she remains as silent as they do about the once so dominant techno- libertarian belief system.

Compared to other dotcom crash titles, Laurel's agenda remains a secretive one. In *Dot.Bomb* David Kuo is remarkably honest about his own excitement—and blindness— for the roller coaster ride of America's once most promising e-commerce portal. Laurel's report remains distanced, general and, at times, moralistic ("live healthy, work healthy" p. 92). It is as if the reader is only allowed to get a glimpse inside. Laurel is on the defensive, reluctant to name her protagonists. Perhaps there is too much at stake for a woman to be a perpetual outsider. Unlike Kuo, who keeps on rapping about all the ups and downs inside Value America, we never quite understand Laurel's underlying business strategies. Her motivations are crystal clear. Her approach towards the powerful (male) IT moguls and VC Uebermenschen are implicit and has to be decrypted like a Soviet novel. There is no reason to describe those who destroyed a corporation as (anonymous) "aliens" (as Laurel does). The 'suits' have name cards and bring with them a particular business culture. In this sense the *Utopian Entrepreneur* brings to the fore the question of 'inside' and 'outside'. Laurel is desperate to position herself as an insider.

> It took me many years to discover that I couldn't effectively influence the construction of pop culture until I stopped describing myself as a. an artist, and b. a political activist. Both of these self-definitions resulted in what I now see as my own self-marginalization. I couldn't label myself as a subversive or a member of the elite. I had to mentally place my values and myself at the center, not at the margin. I had to understand that what I was about was not critiquing but manifesting.[48]

Laurel is afraid of theory, which she associates with critiquing academism, cultural studies, art and activism, thereby replicating the high-low divide. For Laurel theory is elitist and out of touch with the reality of the everyday life of ordinary people. That might be the case. But what can be done to end the isolationist campus-ghetto life of theory? Instead of calling for massive education programs (in line with her humanist enlightenment approach) to lift the general participation in contemporary critical discourse Laurel, blames the theorists. This attitude, widespread inside

48. Laurel, p. 10.

the IT-industry, puts those with a background in humanities and social sciences in a difficult, defensive position. It also puts a critical analysis of the dotcom chapter of the Internet history in an 'outsiders' position. As soon as you start to reflect on the inner dynamics of the Silicon Valley, you seem to be out. Instead of calling for the development of a rich set of conceptual tools for those working 'inside' Laurel reproduces the classic dichotomy: either you're in (and play the capitalist game), or you're out (become an academic/artist/activist, complain and criticize as much as you can). Despite the strong tendency towards the corporatization of universities, the mutual resentment between those involved in technology and business and the ivory tower humanities on the other hand seems more intense then ever.

On the other hand, postmodern theory and cultural criticism haven't been very helpful, either for Laurel, Castells and the study of the Internet in general. As long as 'celebrity' thinkers such as Slavoj Zizek continue to confuse Internet with some offline cybersex art installation there is not much reason to consult these thinkers. Contemporary thought has to be upgraded urgently and fully incorporate technology in all debates. This counts for instance for Michael Hardt and Toni Negri's *Empire*, the presumed bible of the 'anti globalization' movement. Despite the worthy and abstract category of 'immaterial labor' critical knowledge of both the Internet and the New Economy is virtually absent in this fashionable millennial work. The dotcom saga has virtually no connections to the identity politics and body representations, two favorite research angles within humanities.

Today's leading theorists add little to Laurel's conceptual challenges in the field of user interface design or the criticism of the male adolescent geek culture. Cultural studies armies will occupy the new media field only if the IT-products have become part of popular culture. This means a delay in strategic reflection of at least a decade. In the meanwhile there is hardly any critical theory, equipped to intervene in the debates over the architecture of the Network Society and its economic foundations—of which the dotcom bubble was only a brief chapter.

The baby boom generation, now in charge of publishing houses, mainstream media, in leading university positions, share a secret dream that all these new media may disappear at the same pace as they arrived. Lacking substance, neither real nor as a commodity, new media is failing to produce their own Michelangelos, Rembrandts, Shakespeares and Hitchcocks. The economic recession which followed the NASDAQ tech wreck only further deepened the gap between the forced 'freshness' of the techno pop workers and the dark skepticism of the intellectual gatekeepers.

Dotcommania is likely to become a forgotten chapter, not just by the punters and vendors but also by new media theorists, Internet artists and community activists. The dotcom stories are overshadowed by the much larger corporate scandals of ENRON, Andersen, Global Crossing and WorldCom. Both young geeks and senior technologists have already started to deny their involvement in dotcom startups, hiding behind their 'neutral' role as technicians ("Don't shoot me, I was only a programmer"), forgetting their techno- libertarian passions of days gone by. For *Australian Financial Review* commentator Deirdre Macken the legacy of the dotcom daze is symbolized by the Aeron designer chairs, still in their packages, on offer at office furniture auctions. At the same time, the era has had a lasting influence on business culture. As Macken says:

> From the casualisation of work attire throughout the week, to the deconstruction of the office, the flattening of power structures and the creation of new layers of capital providers, the dotcom culture has much to its credit..[yet] the Internet industry itself has failed to annex the future.[49]

Looking across the landscape of dotcom ruins, what remains is the unresolved issue of sustainable models for the Internet economy. The contradiction between developing free software and content and the desire to abstract a decent income for the work done, beyond hobbyism and worthy aims, is still there. The Indian summer of the Net has only postponed the real issues—both for business and the non-profit sector.

49. Deirdre Macken, Fitting end to dotcom daze, Australian Financial Review, March 8 2002, p. 72.

CHAPTER THREE
THE AMSTERDAM DIGITAL CITY GLORY AND DEMISE OF A COMMUNITY NETWORK

Power of a Metaphor

The Amsterdam Digital City (1993-2001) has been one of Europe's largest and well known independent community Internet projects. It was a 'freenet,' made up of free dial- up access, free email and webspace, within which many online communities formed. As one of its founders I have lectured and written about de digitale stad (DDS) on numerous occasions.[1] In the introduction I have explained more about my personal involvement in this project. Not having to run the daily operations but still dedicated to certain aspects, this relative distance gave me the freedom to report and theorize about the inner workings of such a large system with tens of thousands of users.

The Digital City Amsterdam did not intend to be a representation of the real city. Nor was it expressing a need to catch up with the global economic dynamics. In this case the city concept was used as a metaphor.[2] Ever since the rise of computer networks there has been a desire to 'spatialise' virtual environments. The 'cyberspace' concept is a prime example of a powerful space metaphor. The name Digital City appealed to the imagination of thousands of users. Although maps were provided to assist in the navigation of the Digital City webspace, the city metaphor was used in a restrained way. The spatialization was neither a representation of a computer network nor a simulation of an actual city. The reference to the urban environment should rather be read as city being the prime space of culture. 'City' referred to a conceptual density that in its turn results into diversity and debate. Compact, compressed spaces are where culture is born from, not the vast and empty deserts (with dispersed homepages here and there). The collective mapping of complex community spaces was seen as an act of culture-in-the-making. The

1. Research presented here draws from my ongoing collaboration with Patrice Riemens. Material for this chapter has been partially based on the following (English) publications: "Creating a Virtual Public, The Digital City Amsterdam, in Mythos Information: Welcome to the Wired World, Catalogue of the Ars Electronica Festival, Karl Gerber, Peter Weibel (ed.), Springer Verlag, Wien-New York, 1995, pp. 180-185; "The Monkey's Tail: The Amsterdam Digital City Three and a Half Years Later," in Possible Urban Worlds: Urban Strategies at the End of the 20th Century, INURA (ed.), Birkhäuser Verlag, Basel-Boston- Berlin, 1998, pp. 180-185 (earlier version posted on Nettime, June 16, 1997); "Amsterdam Public Digital Culture: Contradictions among User Profiles" (together with Patrice Riemens), posted on Nettime, July 20, 1998; "Amsterdam Public Digital Culture 2000" (with Patrice Riemens), in RiskVoice, 002, Stiftung Risiko-Dialog, St. Gallen, pp. 1-8, October, posted on Nettime, August 19, 2000. Another version, in German, appeared in the Telepolis web magazine: http://www.heise.de/tp/deutsch/special/sam/6970/1.html. Much of my thinking about DDS goes back to an unrealized hypertext project from early 1995 in which I mapped the (critical) DDS discourse. Other related material in the interview I did with Michael van Eeden, DDS sys-op and founder of the Metro MOO (in Dutch), posted to Nettime-nl, November 29, 1996. Articles written in Dutch are not mentioned here.
2. This distinction between three types of digital cities is taken from P. van den Besselaar, M. Tanabe and T. Ishida, "Introduction: Digital Cities Research and Open Issues," in Lecture Notes in Computer Science, 2362, 2002, pp1-9; accessed via http://www.swi.psy.uva.nl/usr/peter/peter.html.

city experience, made operational for the Internet context was that of a cosmopolitan flair, ready to ignore the all too obvious dichotomies of real-virtual and local-global. What kind of Internet culture would result out of this choice of metaphor remains up to its players and users, and is the topic of this chapter.

Over a period of eight years the Digital City (www.dds.nl) went through many phases of growth and change, anticipating and responding to Internet developments at large. Reflecting its actual and symbolic significance, research about DDS communities and the history of DDS also expanded.[3] The privatization of its online community services in late 2000 sparked a fierce debate amongst active users. Attempts were made to keep the public domain community parts of DDS out of the hands of commercial interests.[4] By mid 2001 the turbulent history came to an end with the closure of the free access services. As of August 1, 2001 DDS was transformed into a regular commercial Internet provider offering broadband DSL services to a largely reduced customer base. By mid 2002, after its DSL provider had gone bankrupt, DDS only offered regular dailup accounts, webspace and a few other services.

Considerations presented here are to be understood within the specific Dutch context of the nineties, a period of fierce neo-liberalism in a country once known for its opulent welfare state. Dutch independent Internet culture, driven by a demand for public media access, grew up in the economically fragile post-recession years of the nineties in a climate of permanent budget cuts in the state funded cultural sector. Non-profit Internet initiatives therefore had to find new ways to operate in-between the state and the market. The Digital City story tells of the difficulties in building up a broad and diverse Internet culture within a *Zeitgeist* of the 'absent state' and the triumph of market liberalism.

Social movements and local media

By the early nineties the (in)famous Amsterdam squatters' movement, which had dominated the social and cultural (and law-and-order) agenda of the previous decade, had petered out in the city's streets, but its autonomous yet pragmatic mode of operation had infiltrated the workings

3. A overview of DDS research papers in English: http://rrr.dds.nl/dds/index.html. The official history DDS page: www.dds.nl/archeo. A critical analysis from an outsider's perspective, written in mid-1998: Stefan Wray, "Paris Salon or Boston Tea Party? Recasting Electronic Democracy, A View from Amsterdam" http://www.nyu.edu/projects/wray/teaparty.html. One the earliest research papers is Schalken, K./Tops P., "The Digital City, a Study into the Backgrounds and Opinions of its Residents". URL: http://cwis.kub.nl/~frw/people/schalken/dceng.html.
4. Debates about the privatization of DDS, mainly in Dutch, can be found on the server of the DDS users' association www.opendomein.nl (originally http://viodds.dds.nl). In April/May 2001 Zenon Panoussis made an online archive of 6.248 homepages he managed to trace back on the public domain DDS servers and downloaded: http://dds.provocation.net/rst/. For insiders' reports see Patrice Riemens, "Last Update on the 'Refoundation' of the Amsterdam Digital City (DDS)," Nettime, March 22, 2001; Patrice Riemens, "Michael ('Mieg') Van Eeden on the current situation with DDS," Nettime, February 19, 2001; Patrice Riemens, "'Refoundation' of the Amsterdam Digital City Update: 1st General Assembly of the DDS Users Association," Nettime, February 16, 2001; Patrice Riemens, "'Refoundation' of the Amsterdam Digital City (vioDDS): Update," Nettime, January 31, 2001.

of the more progressive cultural institutions.[5] The autonomous movement of the eighties had successfully occupied both urban spaces and the electronic spectrum (free radio and even a brief chapter of pirate television). The movement had built a sustainable alternative infrastructure beyond street riots and political conflicts. It was the time that the cultural centres Paradiso and De Balie,[6] which were both at the vanguard of local cultural politics, embraced the 'technological culture' theme in their programming.[7] In the beginning, this took the shape of a critical, if somewhat passive observation of big and abstract technologies and their risks, but it quickly evolved into a do-it-yourself approach. Technology was no longer seen as the preserve of science, big business, or the government. It could also become the handy-work of average groups or individuals. Mass availability of electronic hardware and components had created a broad user-base for 'low-tech' applications, something that in its turn spawned feasts of video art, robotics and other forms of 'post-industrial culture', free radio and public access television and well attended cultural events where technology was rearranged and playfully dealt with. The public domain within cyberspace had to be shaped by citizens. Politicians, with budget cuts and privatization on their agendas, showed little interest in the emergence of new media. Why start a new public utility? There should be less of them, not more. Yet, many in Amsterdam had already made experiences with the inability of the market to create interesting local media structures.

The concept of public access media in Amsterdam was already largely in place thanks to the remarkably deep penetration of cable broadcasting (radio and television, with over 90% of households reached by the mid-80s). This cable system had been set up and was owned by the municipality. It was run as a public service, and its bill of fare and tariff rates were set by the city council. The council had also legislated that one or two channels were to be made available to minorities and artists groups--also as a way to curb the wild experiments of TV pirates—and so various initiatives sprung up whose offerings, to say the least, were far removed from mainstream TV programming. This peculiar brand of community television did not go for an amateurish remake of professional journalism, but took a typically Amsterdam street-level (mostly 'live') approach, on both the artistic and the political plane. Whereas the now co-opted TV pirates were thus successfully taken out, the presence on the airwaves of three non-profit 'cultural pirate' radio stations remained tolerated. All this resulted in a politically (self-) conscious, technically fearless, and above all, financially affordable media ambiance, something that was also very much fostered by the proliferation of small, specialized, non-commercial outfits such as STEIM in the realm of electronic music, Montevideo/Time Based Arts for both general and more political video-art, and the *Mediamatic* new media arts magazine.

5. More on the relation between urban strategies and media tactics of Amsterdam's 1980s squatters movement in: Adilkno, Cracking the Movement, Autonomedia: Brooklyn, 1994. Online version: http://www.desk.org/bilwet. More information on recent squatters' movements worldwide can be found at www.squat.net.
6. URLs: www.paradiso.nl and www.balie.nl, two buildings situated almost next to each other on the Amsterdam Leidseplein square.
7. The term 'technological culture' was introduced in the Netherlands by Michiel Schwarz, a researcher and editor who worked at De Balie cultural centre in the late eighties/early nineties. Schwartz organized numerous debates, conferences and publications on technology and society in the Netherlands and also worked as a consultant for the Dutch government. URL: http://www.doorsofperception.com/doors/who/schwarz/.

These developments contributed to a media culture in Amsterdam that was neither shaped by market-oriented populism nor informed by highbrow cultural elitism. The various players and the institutions in the field did get subsidies from the usual funding bodies and government agencies, but they have managed to retain their independence thanks to a mostly voluntary-based mode of operation and a low-tech (or rather: 'in-house tech') and low-budget approach. Also the shifts in funding practice, moving away from recurrent subsidies to one of project-linked disbursements, in keeping with the ruling market populism of the time, left their marks on the format of these activities. Many small-scale productions have thus seen the light, but the establishment of more permanent structures has been constrained. This in turn has led to the prevalence of a hands-on, innovative attitude, an ingrained spirit of temporality, and the deployment of 'quick-and-dirty aesthetics' by groups such as TV 3000, De Hoeksteen, Park TV, Rabotnik, and Bellissima (all active in the 'public broadcasting space' provided by the cable channel SALTO). [8]

And not to forget the Digital City's own innovations in the realm of streaming media and Internet radio and television (http://live.dds.nl), which took place with the grudging approval of its own management. This 'edgy' climate also was the result in the relative absence of direct links between the new media culture and the political establishment. The emerging new media culture was seen by decision-makers as a buffer, an employment scheme for the creative surplus mobs, an in-between zone of sorts, far removed from the concerns of parliamentary democracy, 'significant' shapers of 'public opinion' and 'real' culture. However, if public access media in Amsterdam were not an instrument in the hands of the political class, this did not mean that they were non- political per se. It simply meant that there was no intervention from above, and more particularly, no censorship or even surveillance.

Electronic activists were meanwhile poised for the next phase: the opening up of the Internet for general use. The hackers movement, operating under the banner of the HackTic group (which also publishing a magazine with the same name, whose technical 'disclosures' annoyed the telecom no end), threw up a coup by obtaining from the Dutch academic network permission to hook up officially to the Internet and resell the connectivity. What no one had anticipated, least of all the budding hackers 'entrepreneurs' themselves, was that all the 500 accounts that formed the starting base of the HackTic Network would be snapped up on the very first day. Not for profit access to the Internet was henceforth established early on as a norm of sorts in the Netherlands. Combined with the technological savvyness of the hackers, this created a situation in which commercial enterprise would follow and benefit from the existing creative diversity rather than riding the waves of the Internet hype and making quick money without

8. URLs of some of the media-related cultural organizations in Amsterdam: http://www.desk.nl (cultural/commercial content provider) http://www.tv3000.nl (cultural/commercial service provider) http://www.montevideo.nl (Dutch Institute for New Media Arts), http://www.steim.nl (Laboratory for Electronic Music), http://www.bellisima.net (experimental cable TV group), http://www.hoeksteen.nl (live cable program on politics and arts), http://www.desk.nl/100 (free radio station), http://www.mediamatic.nl (design company, plus (former paper now) online magazine for new media arts and theory), http://www.anma.nl (Amsterdam New Media Association), http://www.dds.nl/~virtplat (Dutch Virtual Platform), www.doorsofperception.com (Design conference and website).

any incentive to innovate or concern for public participation. In less than two years the hackers venture morphed into a profitable business, renamed Xs4all (access for all).[9]

The importance of hackers

In *The Internet Galaxy*, where the DDS case is discussed in detail, Castells stresses the importance of hacker culture for the emergence of citizen networks.[10] Developments did not escape the smarter elements of the government who were on the look-out for ways of modernizing the economic infrastructure of the country in the wake of the globalization process. Since electronic communication was also at the same time perceived to pose all sorts of possible threats on the law-and-order front, a two-pronged approach was necessary, meant to contain the 'menace' and to co-opt the 'whizz-kids'. Comprehensive and fairly harsh 'computer crime' laws were approved by parliament in 1993. The second big hackers convention in the Netherlands, Hacking at the End of the Universe (HEU), in the summer of 1993, responded to this potentially repressive climate with a PR offensive. By stressing the public liberties aspect, a coalition was formed between 'computer activists' and other media, culture, and business players who did not want to be reduced to mere consumers of the content and context agenda set by big corporations. The idea being that programmers, artists, and other interested parties, can, if they are moving early enough, shape, or at least influence, the architecture of the networks. This happens also to be the favorite move of early adopters, and enables one to gain ideological ascendance when influential projects are taking shape, a move suitably, if somewhat cryptically, called in German 'to take the definition of the situation in one's own hands' (Die Definition der Lage in die Hand nehmen). It is a form of DIY-citizens activism, which in the late nineties would have been identified and re-labeled as 'entrepreneurial leadership'...

Elected politicians meanwhile were struggling with another 'situational' problem: that of their very own position amidst fast dwindling public support and sagging credibility. This was—not surprisingly—blamed on a 'communication deficit' for which a substantial application of 'new media' suddenly appeared to be an instant antidote. The clue was not lost on De Balie cultural centre which approached the city hall with a freenet based proposal to link up the town's inhabitants through the Internet so that they could 'engage in dialogue' with their representatives and with the policy-makers. The system itself was to be installed by the people at HackTic Network, the only group of techies at that time that was readily available—or affordable. The Digital City was launched in January 1994 as a ten weeks experiment in electronic democracy. The response from the public was overwhelming. And in no time, 'everybody' was communicating with everybody else. With one exception though: the local politicians never made it to the new medium.

The launch of the city

The Digital City was an initiative of Marleen Stikker, the later director of the Society for Old and New Media (www.waag.org), then a staff member of De Balie. Before 1993 Marleen had organ-

9. In December 1998 the Internet provider was sold to the Dutch telecom KPN by its two founders, Rop Gronggrijp and Felipe Rodriquez. More about the history and context of xs4all: http://www.xs4all.nl/uk/absoluut/history/overname_e.html, http://www.xs4all.nl/~evel/beat.htm and www.hacktic.nl (online archive of the HackTic magazine).
10. Manuel Castells, The Internet Galaxy, Oxford: The Oxford University Press, 2001, p. 151.

ized projects on the crossroads between performing arts, new media arts and public debate in which technology always played a key role. In the festivals she got artists to work with interactive television, voicemail games, live radio and video- conferencing systems. During1993 Marleen shared her room in De Balie with Press Now, a newly founded support campaign for independent media in Former Yugoslavia. In order to keep in contact with peace groups and media initiatives on either sides of the conflict email proved to be a vital communication tool.
Marleen Stikker: Amsterdam Digital City.

Through the use of email I got fascinated by the use of other possibilities the Internet at that time offered such as irc (chat), muds and moos (games), gopher (document directory), telnet and freenets. During the hackers gathering Hacking at the End of the Universe in August 1993 I began to look for people that could do the technical support for such a project. Those running the hackers camp were way too busy so I got to talk with a guy, a system operator working for Albert Heyn (the Dutch Coles Myer) who ran a BBS-system. I was very charmed by him but we unfortunately lost contact. Then two artists, Paul Perry and David Garcia, pushed me at the crucial moment to simply start so I went to the bookstore and passionately jumped into the Unix manuals.[11]

The name of the project drew a lot of attention. How did Marleen Stikker come up with the name? Marleen:

> "When I was looking for a name David Garcia suggested *The Invisible City* after Italo Calvino's novel. I didn't find 'invisible' the right term so I changed it into Digital City. I was intrigued by the city concept, not in order to build a bridge to the geographic reality, as to metaphorically use the dynamics and diversity of a city. I was interested in the presence of both private and public spaces, the exchange between people and the way in which different cultures and domains meet. In a city science, politics and culture intersect".[12]

Felipe Rodriquez, with Rop Gronggrijp the founders of the first Dutch ISP xs4all got involved in the discussion about Digital City at an early stage. Felipe:

> "It was Marleen who came up with the name. The reason we chose the city as metaphor was to make the functionality of the city easy to express. It allowed us to let our imagination run, and make connections with the available technology, and things one can find in any city. I was one of the persons that had to make the translation from the metaphor to the technology, and this was not always an easy job. It is easy enough to translate between a post office and email, and between a café and a chat room. But how does one translate a park into Internet technology?"[13]

11. Email interview with Marleen Stikker, August 2, 2001.
12. Ibid.
13. Email interview with Felipe Rodriquez, July 28, 2001.

The freenet model was imported from the USA where early citizens' networks such as the Cleveland freenet were already operational.[14] The independent or tactical media element of freenets, run as non-profit initiatives was combined with another rumor that had blown over the Atlantic, the 'electronic town hall.'[15] The idea was that only an independent public domain could guarantee 'electronic democracy' (comparable to the role of the print media). It was not up to the state or local governments alone to decide how the political decision making mechanism was going to be transformed in the future network society. In order to get there the citizens themselves had to be empowered to use technology in their own, often weird and seemingly irrelevant ways. What had to prevented, in the eyes of the Digital City founders was a 1:1 copy-paste from the 'old' days of mass democracy with its political parties, television and the power of media moguls into the new electronic era. In order to prevent this from happening the Amsterdam group decided not to write manifestoes or reports with recommendations but to take the avant-garde stand and move into the terrain as soon as possible: establish a beach head, land as many troops as possible and occupy the entire territory.[16]

The Digital City started as a temporary and local experiment. In the first half year DDS was not perceived as a non-profit organization nor as a business. The limitations of being a temporary project which was only going to last a few months (and therefore not in need of a legal title) determined both the early success and its failure in the end, eight years later. As a project, run out of De Balie, temporary funding could relatively easily be found. In the early days of DDS De Balie took care of the administrative side and provided the initiative with first a desk and then a small office space. It was almost a year after Marleen Stikker, the main force behind the Digital City project, had come up with the basic concept that office space outside of De Balie was found. Around mid 1994 a legal structure was formed: a non-profit foundation with a board consisting of experienced administrators, all of them neutral outsiders. The foundation had no legal ties to the users and the employees were not represented either. The Digital City freenet was founded as a cultural organization, not as a business. In 1994 the dotcom years were still a way off, despite *Wired* magazine giving a glimpse of what was about to happen. The Digital City had other ambitions, political ones. It was important to get normal citizens involved in shaping the medium which until then had only been used by academics and hackers. The commercial tidal wave was about to happen, that much was clear. But would commerce really empower average users? With

14. The Cleveland Freenet initiative goes back to 1984. For those interested, this is one of the definitions of a freenet: "a public network that gives you free access to community news and information, as well as basic entry to the Internet. Think of a freenet as an electronic town since it has a post office for your email, a library for research, and bulletin boards for community events". (www.maran.com). On October 1 1999, at the height of the dotcom craze America's oldest community computer system had to close because of a lack of funding , see Nettime, October 4 1999. There was an attempt to restart the Cleveland initiative: http://new.cleveland-freenet.org/. More on the community network movement in Doug Schuler, New Community Networks: Wired for Change, New York: Addison-Wesley, 1996. Recommended reading is Howard Rheingold's interview with Doug Schuler: http://www.salon.com/11/departments/rheingold.html.
15. The 'electronic town hall' concept is usually traced back to a proposal Ross Perot made during the 1992 US-presidential elections and the use of email by Bill Clinton as a part of his campaign strategy.
16. This was Louis Rosetto's strategy for Wired as Howard Rheingold once described it to me, which later became known as the 'first movers' strategy for dotcoms.

the history of radio and television in their minds, the fight over a public domain within cyberspace couldn't start early enough.

Users and politicians

The prime cause of the Digital City's success was the freedom it granted to its users from the very beginning. This may sound trivial, but it is not, if you take the increasing control over net-use in universities and corporations into account (especially outside the Netherlands). Awareness of privacy issues, corporate media control and censorship was high and the necessity to use cryptography was felt early, as was the right to anonymity while communicating via the Internet. The Digital City did not turn into a propaganda- mouthpiece for the City Hall, under the guise of 'bringing politics closer to the common people thanks to information technology.' The DDS-system was not the property of the Municipal corporation, even though many people assume this to be the case. In fact, DDS never received substantial subsidy from the municipality (the city council was one its biggest customers, though). In the end the 'netizens' were far more interested in dialoguing among themselves than engaging in arcane discussions with closed-minded politicians.

In 1996 Nina Meilof, who had a background in local television, was hired by DDS to organize discussions about local political issues, such as the—failed—attempt to restructure the municipality into a 'urban province,' the controversial house-building drive into the Y-lake at IJburg, the even more controversial North-South underground railway project, and the extension of Schiphol Airport which had the whole environmental community up in arms. The techno-savvy aspect aside, the main goal of DDS was to look at how to transcend immobile political rituals into new forms of online participatory democracy. To achieve this, the limits and limitations of the political game had to be well understood. Nina:

> "A major advantage of DDS remained its anarchic character. There were a lot of secret nooks and crannies such as text-based cafes in out of the way places. One could look into homepages and find the history of that particular cafe, replete with the club-jargon, a birthday-list and a group-snapshot. There was a Harley-Davidson meeting point for instance, that coalesced around one particular café, which brought out its own newsletter. These kinds of subcultures were of course far more thrilling than the mainstream sites maintained by big corporate or institutional players. No way those sites would ever swing".[17]

DDS looked for a balance whereby subcultures grew optimally without politics being discarded altogether. Precondition for this was the community system's independence. But that was costing money, and quite a lot to boot. By 1998 DDS had increasingly grown into a business with 25 employees and 70,000 regular users while wishing to retain its not-for-profit character at the same time. The management under Joost Flint was pursuing a policy of courting a handful of major customers who brought some serious money in. It was all about attracting projects which would fit into the DDS set-up, but that wasn't a totally friction-less process. DDS was divided into three components: a commercial department that hunted for the hard cash, an innovation department that developed applications for corporate customers and the community aspect.

17. Interview (in Dutch) conducted in early 1997, Nettime-nl, June 16, 1997.

The 'virtual community' image was never really appropriate in this case. After a few years of hyper-growth DDS had turned into a multi-faceted amalgam of small communities who shared the intention of perpetuating the DDS system as an 'open city.' If anything DDS was a facilitator for communities, not a community itself. It is there that the central interface of the DDS played a key-role. The graphic user interface (designed mainly by Marjolein Ruyg) was made in such a way as to provide an overview of the mass of information on offer. In keeping with the name of the system, the DDS web interface was build around the notions of 'squares,' 'buildings/homes,' and '(side-) streets,' but it did not show pictures or simulations of the actual (Amsterdam) cityscape, as many people expected. There were, for instances, 'squares' devoted to environmental issues, sports, books, tourism, European affairs, women, gay and lesbian issues, information on drug use, social activism and both local and national government. In between the squares there were tiny house icons pointing at the thousands of homepages. DDS also had its own cemetery, a web memorial for those who had passed away. Unlike Yahoo-type web directories, the interface was not pretending to give a full representation of the underlying activities. The central interface worked more like a guidance to give the vast project a look and identity without presenting itself as a portal. Nina:

> "I was getting the statistics of the most popular 'houses' (= home-pages), so I went to look into them from time to time. We had a network of male homosexual 'houses' springing up that showed pictures of attractive gentlemen. Those were popular sites. All this was fairly down-to-earth. Cars, drugs, how to grow your own weed, music sites with extensive libraries. There was also a massive circuit where you can obtain or exchange software, and some of these 'warez-houses' were up for one or two days and vanished again. You had Internet-games, that's an evergreen. But there was also a homepage dedicated to some very rare bird that turned out to be an internationally famous site attracting ornithologists from all over the planet. Others freaked out on design or Java-scripts. And you had the links samplers. And don't forget the jokes-sites".[18]

DDS was a gigantic alternative and 'underground' world. In contrast there was also the official 'city' on the surface. The subject matter there was, in one way or another, 'democracy and the Internet.' For example for 6 months in 1996/97 there was an experiment on one of the 'digital squares' on 'traffic and transport issues,' sponsored by the Dutch Ministry of Public Works and Roads. Registered DDS 'inhabitants' with an email address could react to such propositions as: "if we don't pull together to do something about congestion, traffic jams will never subside". Or: "aggressive driving pays: it gets you there faster". Or then: "the automobile is the most marvelous invention of the previous century". The experiment even boasted the luxury of a professional moderator, journalist Kees van den Bosch, who was inviting every month another high-profile politician to stir up the discussion. And the government was footing the bill. In the evaluation of the project van den Bosch said he was satisfied about the degree of participation. Yet it was easy to fall prey to an over optimistic estimate. Just a handful of participants generated an impressive amount of statements. Genuinely new ideas and arguments had been few and far between. The evaluation report also stated that little use had been made of the opportunity to

18. Ibid.

obtain background data on the issues at stake. A large majority (say 75%) of the participants made one contribution and disappeared from view, whereas the remainder soldiered on and went deeper into the discussion.

Technology-wise DDS was not exactly a low-tech enterprise. There was an overriding ambition to be on the cutting edge in innovative technology, in particular streaming media. Nina:

> "We got heavily involved into streaming media combinations of Internet with radio and TV. The aim was to provide streaming facilities for all our users. We had to be well aware of the latest technical developments and nurtured a good relationship with the bandwidth owners. We wanted to prevent the situation in which people have to go to big corporate players if they want to put television on the net. We felt that these things too should be readily available to the greatest number, so that any private person could start a web-TV station at home".[19]

The technical innovation push did not always square well with a large number of users' growing expectations regarding content, and the quality of public discussions. In the beginning phase of DDS there was that idea that the (digital) city was some kind of empty shell that would be filled up by users and customers, without very much intervention from the DDS staff. But that formula turned out to result in a very static system. Yet not very much changed in the DDS content-structure over the years. It remained unclear whether the Net really was such a good place to conduct a meaningful, in depth discussion. The first hurdle was of course the issue of moderation. Or to put it differently: was DDS a medium like others with editors who organized and edited (and hence, censored) the discussion, or was it some kind of digital remake of the Hyde Park Corner soap box? Within technical media there was never going to be absolute freedom. In the end there was always an owner (the one with the password) and someone who had to pay the bills. Those who cried 'censorship' clearly did not run an Internet forum themselves. But in the DDS case this wasn't so much of an issue as long as the users had the right to be left alone to do their thing.

Freedom of Metaphor

Another question pertained to the much-vaunted urban metaphor of the Digital City. What about its strictly local role, would that dwindle into insignificance? As a free community service provider DDS was faced the paradox that the local significance and the global 'non-located' online components were both growing exponentially. A few years after its launch no more than a quarter of the 'inhabitants' actually lived in Amsterdam yet DDS remained a Dutch-language site. The management for a long time maintained that upholding the Dutch language was a legitimate aim. For many users it was difficult to express themselves in English. The Internet was increasingly used in a very local or regional context, for example one could go on-line to check out the program of the nightclub next door, or when the movies would start, etc. At the same time DDS never tried to impose its own (local) metaphor onto users. Nina:

> "The city metaphor stood for diversity, not for Amsterdam in particular. People settled in on the Net then went to look for 'neighbors.' These turned out to be living in the USA, but might as well be living nearby, ready to meet in a local bar and that happened all the time. And so you could be getting of the train in Groningen (200 km to the north of Amsterdam) one day, and the platform was crowded with people sporting 'DDS Metro Meeting' buttons, ready to have a MOO gathering in-real-life".[20]

19. Ibid.

By the late nineties, Amsterdam, long known for its large and diverse alternative social movements, faced some major shifts in its cultural landscape. The once solidly unconventional activists had in large numbers relocated themselves as creators and managers in the so-called new media culture, which was largely (though not exclusively) ITC-driven. For quite a time after it started to come into its own, this new cultural landscape had remained remarkably free of influence by mainstream or commercial interests. The new media scene morphed into something very different from what the Amsterdam model of public digital culture, with Digital City as one amongst many projects had become famous for.

Growing economic pressure

In itself the notion of a public sphere within the media had already been solidly entrenched, thanks to the policy of the municipality to cable nearly every household by the early 80s, and to manage the system as a public utility like the water or electricity supply. So this approach was expanded into the realm of Internet access provision and associated new media facilities without much difficulty. However, the ongoing onslaught of 'the market,' and of its attendant ideology of commercialism and privatization proved increasingly difficult to resist. Like in many other global cities Amsterdam in the late nineties got into the firm grip of dotcommania. With hindsight, what was actually amazing was how long the new media culture had remained nearly immune to the dictates of the corporate sector. Partially, this had been due to the fact that the traditional elite took a fairly lenient and sometimes even supportive view of this state of affairs. But at the same time they kept resolutely clear of any involvement into it, this according to the hallowed Dutch 'polder model,' which established a delicate consensus between state, business and trade unions on the basis of non-regulation. By the late nineties the Dutch economy had turned into a period of rapid economic growth, not seen for decades. The long years of rampant unemployment were finally over. Businesses started moving into the Amsterdam region again.

Five years after its founding the Digital City had evolved from an amateur, low-tech, non-budget grassroots initiative into a fully professionalized, technology and business driven organization with 20-30 fulltime staff. And this culminated in its transformation from a non-profit foundation into a private sector ICT venture. Come December 1999, the astonished 'inhabitants' learned that the directorate of the DDS had opted for a corporate framework, and that community-building and support were no longer a paramount objective. By 1998-99 the free DDS facilities were available everywhere. Scores of new commercial providers and services had popped up all over the place (such as Hotmail, Geocities and even free dial-up providers), offering the same services (often more extensive, better ones) than the DDS was able to provide. The free Internet services advertised massively and attracted a customer pool far removed from the idealistic concerns that used to inform the original Digital City. This resulted in a substantial quantitative, but more importantly,

20. Ibid.

qualitative erosion of the DDS user base. Even if the absolute number of accounts had risen to reach an all time high mark of 160,000 in early 2000, an analysis of the use patterns showed that these could no longer be considered conducive to community building or even to socio-politically relevant information exchange—homepage-building and upkeep for instance, no longer attracted much interest. The once so valuable webspace had turned into empty lots. Despite an overall growth of Internet use the Digital City began losing its attractiveness for common users.[21]

As a platform for discussion of local issues, the DDS receded in importance, despite various efforts to trigger debates around important political events. Because of this, by 1999 the DDS had basically been turned into a facilitation structure providing the usual ICT services to its 'clients,' most of which saw it as a convenient funnel for one-to-many, Dutch language interchange, with little care for the 'community' as a whole. The decline in the quality and the social usefulness as a whole had been unmistakable. Keeping the Dutch language on the outside layers of the interface and as the principal medium of transaction was indeed said to be the sole remaining distinguishing feature of the DDS as a community network. But inside its wall DDS was as intercultural as the Internet itself.

Another constraining aspect of DDS's operations, and the one which ultimately resulted in its corporatization, laid in the structurally weak and insecure nature of the early days when the DDS was conceived as a temporary experiment. However, when the (somewhat ad hoc) decision was made for a permanent status, investments in hardware and bandwidth together with increasing (underpaid) staff numbers, necessitated ever-larger disbursements. This capital was not easy to get within a structure characterized by a hybrid and often somewhat uncomfortable mix of community service, technology R&D, and (first tentative, then ever increasing) commercial activities. Meanwhile, neither the Amsterdam municipality nor the Dutch state were prepared for various reasons to provide for recurrent subsidies after their initial disbursements and also the European Union, which was approached later, declined to do so. Europe's arguably biggest and well-known non-profit Internet community project was left in the cold and, thanks to merciless Third Way policies, forced into the market.

Post-democratic management

This left contract work for, and sponsorship by, the corporate sector as the only remaining avenue for resources mobilization, together with a not-inconsiderable amount of more or less obscurely tendered consultancy and hosting jobs for various public and semi-public bodies. Advertisement revenues from web banners were modest but not enough. This crisis mode of operation, besides not sitting very well with community- building and community service in general also gave rise to an increasingly obfuscating rhetoric of public-private partnership masquerading

21. Peter van den Besselaar and a group of students at University of Amsterdam over the years have done a number of surveys about the shifts in the DDS user base. URL: http://swi.psy.uva.nl/usr/peter/publications. See also the research of Els Rommes who has written her Ph.D. about gender issues inside DDS (publication forthcoming). Also: Rommes, E., van Oost, E., Oudshoorn, N., "Gender in the design of the Digital City of Amsterdam," in: E. Green, A. Adam (ed.), Virtual Gender, Technology, Consumption and Identity, London/New York: Routledge, 2001. pp. 241-261. URL: http://www.infosoc.co.uk/00108/ab4.htm.

as policy. As could be expected the hybrid business model (having to do a bit of everything at the same time) proved elusive in the end and this lack of direction left the DDS fatally underfunded. Surrounded by a booming IT-sector the DDS-management were both forced and lured to go the dotcom way.

Last but not least something needs to be said here about the management culture and choices, which, either by design or by default, presided over the unhappy evolution of the DDS fortunes. Very early on, the opportunity to turn the Digital City in a truly self- governed networked community were put aside in favor of an allegedly more efficient, but in the end messy and contentious 'executive' model of governance. Users were absent on the foundation board. Before long, the 'inhabitants' grew tired of the paltry instruments of participation given to them, and DDS coordinator, later self-appointed director, and finally co-owner Joost Flint could exercise his authority unchallenged, which he chose to do in the opaque issues and debate dodging style that is the hallmark of the stubborn and rigid Dutch regent class. The original co-initiator of the Digital City, 'mayor' Marleen Stikker had left DDS already around 1995, to co-found the Waag Society for Old and New Media (www.waag.org), together with the Paradiso staff member Caroline Nevejan. The Waag building opened its premises early 1996, causing a shift of activities.

As far as the decision to go corporate was concerned and in parallel to similar developments such as the sale of Hotmail to Microsoft, it was obvious that the DDS management, besides other considerations, must have had individual account value and brand visibility firmly in mind. While the latter aspects were quite firmly evident in the Netherlands—and even worldwide, the former had reached absurd multiples of thousands of dollars per unit at the height of the dotcom/IPO/convergence craze that characterized the last months of 1999. The actual realization of these wet dreams, however, remained somewhat clouded as long as the complex issues pertaining to the new ownership structure had not been sorted out. The former DDS foundation was split in three autonomous branches, consolidated in a holding.

Hapee de Groot worked at DDS as a content manager in the years 1997-99. Like Joost Flint, the director, Hapee had a background as a radical squatter activist. There had always been two sides to DDS, the outside and the inside, Hapee explains:

> "In the beginning there was no difference between the two. The whole of DDS was a collective, everybody was doing everything. No bosses or dedicated persons. It was a tight group of interested people working for a good cause, a feeling that I recognize being activist. The inside DDS slowly changed but the outside picture did not".[22]

When Hapee joined DDS there was already a division of labor in place with a sales department, programming department, one for the techies, the public domain department and administration. Hapee:

> "The head of the organization was Joost Flint. At the time it was still a foundation, not supposed to make profit, but internally it had grown into a top-down organization. Nothing could

22. Interview with Hapee de Groot, Nettime, January 14, 2001.

be done without permission from Joost. The board of the foundation received its information from Joost. It was the board, in collaboration with Joost, which developed the future of DDS. The internal structure concerning the division of labor may have been inevitable. Combined with an open internal structure it could have worked perfectly. But there was no open structure. Access to the board was monopolized by Joost Flint".[23]

The lack of transparency was the reason why Hapee de Groot left in 1999 to work for the One World development portal.

Digital City, like most of new media initiatives described here, lacked basic forms of internal democracy. This could be blamed on the founders, back in 1993/1994, which had failed to think through the issues of ownership. In a backlash against the democracy overkill of previous decades with its collectives and workers' councils, these NGO-type organizations were ruled in a pragmatic autocratic fashion. Because of the lack of money in the cultural sector, the general interest in building up a democratic structure remained absent both on the side of management and employees. Hapee:

"After a decade of activism a lot of people, having a lot of energy, were looking for new opportunities. Some of them joined the NGO communities as subsidized unemployed workers. Others worked in media projects such as DDS. They became so involved, almost obsessed, in their jobs that they completely identified themselves with work, thereby closing down the possibility for others to unfold their ideas".[24]

Back in the exciting pioneer years when everyone participated in the construction of the Big Internet, it was just not done in the Dutch cultural sector to ask questions about ownership, power relations and working conditions. Demands to participate in ownership and power structures, if at all expressed, were categorized as 'old economy' remnants coming from losers, cultural pessimists and other negative forces aiming at undermining the constructive and positive atmosphere inside the new media organizations and companies.

This is how Hapee described the management takeover inside DDS:

"At some point Joost started to put 'coordinator' signatures underneath his email messages. Some time later, with the commitment of the board, he was assigned director. In that time there were no staff meetings and Joost only talked to one staff member at the time. He has tremendous capability to play individuals and even groups off against each other. He monopolized the information for the board, thereby preventing team-discussions. This made it possible for him to continue to work on his hidden agenda and preventing others from having one. Later on a kind of management-team came into existence. All the team members had to achieve their targets, except Joost, because he had his responsibilities towards the board. If one questioned this publicly you were invited for a job audit. In such one to one conversations one would always lose the discussion".[25]

23. Ibid.
24. Ibid.
25. Ibid.

To go back to the wider context, the fundamental problem that remained untouched was the outline of an open, public domain within cyberspace. In fact the digital public domain had not even been precisely defined—despite numerous and sometimes outlandish fantasies and speculations. The question was which department or authority was going to take responsibility to finance non-commercial culture in cyberspace. More importantly even: who was going to 'own' the concept, the content, and finally 'public' cyberspace itself? It was clear—in the Netherlands at least—that political parties had withdrawn from this whole debate. Or even worse: they had never heard of it. They were prepared to put money and energy into making their own viewpoints available online, but that did not make for a public independent platform. Bringing government services online was unrelated to the question of how electronic democratic decision-making should take place. Nor were financial injections into the IT-sector a real solution. The 'knowledge nation,' a favorite concept toy of politicians, bureaucrats and their consultants was too vague of a term to provide a precise and critical analysis of who was going to own and manage the public information infrastructure. In this age of convergence between 'platforms' what was in fact called for was a successor to the public broadcasting system. But only a few regents were willing to put this question on the table. With national telecoms in the process of privatization the question of who was going to define, design, finance, roll out—and manage—digital public infrastructure couldn't have been less palatable.

As a result of the Digital City board having only neutral members not involved in the daily operations, Joost Flint and his partner Chris Göbel convinced the board to hand over the ownership to the two of them. Joost and Chris were to become co-directors and the only shareholders. The chief asset was their ownership of the domain name dds.nl.
The web design and hosting business had only been modest and had to operate in a highly competitive market. The value of the user database was uncertain as no one really knew the accuracy of the figures. Also it was highly uncertain how many users were in fact willing to continue their online activities within a privatized Digital City.

Privitization of independent Internet culture

During the year 2000 Joost Flint and co-director Chris Göbel spent most of their time implementing their privatization plans. In according with the old board four LTD's were founded: a Services Ltd., DDS Projects Ltd., DDS City Ltd. and DDS Venture Ltd. Then, in late 2000 the public domain section (DDS City) was closed. This was the signal for many to take action. In January 2001 a group of DDS users decided to put the sales of the public domain part of DDS on hold. 400 people joined ranks of a DDS users' association, whose goal it was to take over the Digital City of Amsterdam from its present 'owner,' the DDS Holding, and preserve, if not its entirety, then at least substantial parts of this public domain in cyberspace. Provisionary statutes of the future association were posted on the site after due consultation of the constituency on the mailinglist. Various areas of 'governance' (legal, financial, technical, political, public relations, etc.) were identified and tasks apportioned amongst the ad interim 'councilors.'

Beside subjects pertaining to the (self-) organization of the users' association, a lot of discussion was devoted to the future of the DDS, presuming that it was going to be taken over. Consensus had in any case inside the users' association been reached on scuttling the principle of free services as a holy cow, though it may be retained if practicable. For the remainder, there was

still a lot of discussion about 'what to salvage' from the 'old' DDS, subsumed under the header 'historic monument,' and whether large numbers of (by necessity, 'passive') accounts should be retained at all costs, or if on the contrary the 'new' DDS would be firmly geared towards the active participation 'networked community' format. However, neither the general assembly of the users association, nor the ad interim council of the association had very much influence on the ultimate decision-making process within the current structure of the Digital City, the DDS Holding, and its two shareholders. Negotiations between the association and the Holding did not go anywhere and within a few months the initial energy amongst DDS-users vaporized. In the end the conflict boiled down to the primal question who owned the actual dds.nl domain name. DDS-founder Marleen:

> "The social, cultural and democratic potential of the Internet has yet to be realized. All the more sad, therefore, that the commercialization of DDS resulted in the relegation of the organisation's public mission to a secondary priority. The name Digital City should in my opinion never have been privatized".[26]

Felipe Rodriquez regrets that DDS by mid 2001 had become an ordinary Internet provider (ISP).

> ISPs are providing a product whereas a freenet intends to create a community of people. DDS became an ISP in the end, because there was no other way to fund its activities in any other way. As a community the DDS was a very interesting experiment. When it was forced to become a business much of the focus on the community aspect was lost.[27]

Felipe doesn't believe the freenet model to be applicable in 2001:

> Today the freenet model would not work, because Internet access and services have become a commodity. They are available to almost anyone in the western world. Today other communities exist on the Internet such as Slashdot or Nettime.[28]

The choice to become a business has destroyed the DDS community. But according to Felipe there was also another reason for the decline.

> In order to maintain a community an organization needs leadership that knows how to communicate online, how to resolve conflict and how to create a pleasant environment. People from Hacktic had quite a lot of experience with online communication. I had run a bulletin board for a number of years and had been involved in many online discussions. When DDS started the Hacktic people already had the ability to communicate online and maintain the peace. When Hacktic after a while pulled out of the project, communications from the DDS to its community became more formal and distant. Flame wars in its discussion groups were poorly dealt with, creating an image in the community of a shy and incompetent management.[29]

26. Marleen Stikker, "The Internet as Public Domain," in: The Waag Society (ed.), Metatag: 26 Hits on Technology and Culture, Amsterdam: The Waag Society, 2001, p. 19 (Dutch/English), based on an interview with Geert Lovink (in Dutch) posted on Nettime-nl, March 7, 2001.
27. Interview with Felipe Rodriquez, July 28, 2001.
28. Ibid.

It was this inability to communicate, both within the more or less random group of users, which had formed the users' association to save DDS, and between the users' association and DDS Holding which let to the tragic ending of Digital City as a public domain initiative. Reinder Rustema had taken up the initiative to save DDS in December 2000. He wrote to me about the lesson he learned from half a year organizing, negotiations and internal fights within the users' association of which he was president of the board until he stepped down. Reinder:

> "What is the digital public domain? It used to refer to a certain place where people could meet and gather. It is difficult to talk in terms of places on the Internet. Hence the metaphor of the Digital City to make this clear. The dispute with DDS Holding in the end was only over the use of the domain name. Owning the physical machine is less relevant as long as the domain is yours. You can make the domain name refer to any machine you wish, the machine does not even have to be your property, just one which you have enough control will do".[30]

Reflecting on the fall of DDS

DDS is a classic case of the tragedy of the digital common, with a great future that is lying in the past. Reinder doesn't see much future for shared communal domains like DDS.

> "Never again would I want to be dependent on an organization for my domain name. For some years now there is this trend to buy your own domain name. I have now also made this step. Just like a cell phone number I see everyone ending up with their own personal domain name. You will be able to find public spaces in USENET, mailinglists, chats, MUDs and other virtual places. These 'places' have been there when we first discovered the Internet and also happened to be the interesting parts of DDS. They won't go away. Interesting projects will just adopt another name and move away from systems such as DDS".[31]

In his doctoral thesis on the rise and fall of DDS Reinder Rustema writes that the "experience with DDS suggests that the free and open information and communication space can hardly be institutionalized". [32] Rustema suggests that the choice for an interface is best left for the end-user.

> "It can choose to make an interface, to use an interface made by others or buy an interface. What is most important is that the underlying protocols and standards do not end up in the hands of a single company or organization, but that it should belong to the Internet community at large. Only then the Internet can live up to the ideals of a truly open network".[33]

29. Ibid.
30. Email interview with Reinder Rustema, July 30, 2001.
31. Ibid.
32. Reinder Rustema, The Rise and Fall of DDS, doctoral thesis, University of Amsterdam, 2001, p. 49. URL: http://reinder.rustema.nl/dds/rise_and_fall_dds.html.
33. Ibid.

This call for individualism (everyone owning their own homepage and domain name) is understandable but avoids the uneasy questions that arise from collective and collaborative structures. The liberal solution of interface freedom could be a regressive move rather than a solution. Community networks, hosting servers, lists, weblogs and streaming media facilities are bound to grow, transforming into other, yet unknown media. It is the task of Internet critics to analyse the dynamics of social networks and feed their findings back into the Net—no matter how problematic they may be.

The strategic issues raised here also point at the problematic relationship between local and global. Net activists and artists are confronted with the dilemma between the presumingly friction-free 'machinic globality' and the experience that social networks, in order to be successful, need to be rooted in local structures (if only for financial reasons). Internet culture pops up in places where crystals of (media) freedom have been found before. At the same time the Net is constantly subverting the very same local ties it grows out of while creating new forms of 'glocality.' The often posed choice between global and local is a false one. Even though urban and spatial metaphors in general may have exhausted themselves there is little to be found in the mathematical emptiness of 'pure' disembodied virtuality. Discontent within the Digital City project in the spatial metaphor existed right from the start. Due to Dutch pragmatism no 'metaphor police' was established to look into identity, language and nationality.[34] In that sense DDS was, more than anything, a social experiment in translocal Internet freedom with only a few hints of what political liberty in the technological future could look like.

According to Manuel Castells it was competition that killed DDS. Another reason Castells mentions, based on Dutch academic Peter van den Besselaar's research, is the steady decrease of activity in political forums. The commercial success of DDS and the Internet in general "created major contradictions among the idealistic activists at the origin of the network and the managers of the foundation".[35] Says Patrice Riemens, reporting to Castells, "the fact that the telephone system is the property of the people does not entitle them to occupy the telephone exchange"[36] Castells seems to disagree with Van den Besselaar's conclusion that the experiment of DDS has failed.[37] "As usual,

34. For a general debate on the spatial metaphor, see individual contributions of Brian Carroll and Pit Schultz and the debate between these two 'electromagnetic' scholars on the Nettime list. Postings: Pit Schultz, there is no space in cyberspace, September 9, 2000; Brian Carroll, Redux: 'Spatial Discursions' by Robert Nirre, responding to Pit forwarding Robert Nirre's CTheory article to Nettime on February 13, 2001; Pit Shultz, re: 'Spatial Discursions' - no space, February 14, 2001; Pit Schultz, no space III, March 13, 2001; Brian Carroll, No Space Like Cyberspace, April 20, 2001. Brian Carroll, Seeing Cyberspace, The Electrical Infrastructure is Architecture, July 15, 2001. Brian Carroll's research can be accessed through www.electronetwork.org.
35. The Internet Galaxy, p. 151.
36. Ibid., p. 152.
37. Peter van den Besselaar writes: "We may have to rethink the role of the public sector for guaranteeing and regulating the electronic public domain. As with the physical public space, virtual public space requires care and maintainance, and resources to do so. The main question is whether there is room left for non-commercial Internet culture and social interaction". (quoted in Castells, p. 153). I am not sure about the usefulness of such nostalgic calls for a return of the welfare state. Rather, activists should prepare for a further withdrawl of the state and its obligation to care for and innovate national infrastructure.

the process by which historical change muddles through is far more complex. Instead of emphasizing failure and decline, the networked community scene appears to "forshadow a new, global civil society," so Castells.[38] He even talks about a "new, meaningful layer of social organization".

Again and again Castells proposes close links between community networks and the local state, counterpointing the merger between the nation-state and global capitalism. Yet, the DDS example points at another direction. A lively civil society network may as well work as a potential competitor to the interests of local politicians who do not see why they should fund media initiatives that are not under their direct control. For good reasons community networks are reluctant to create a longterm dependency of the city hall. Often, community networks with close affiliations to local politics look dull and dead, offering only few possibilities for users. Instead of calling for more (local) funding it may be better to diversify income sources through membership fees, micro payments, content syndication, webbanners, sponsorship, donations from private foundations, consultancy work, online services and reselling of Internet capacities. The story of DDS calls for Internet-specific forms of democracy and the development of legal structures that prevent a small group of highjacking/privatizing the digital public domain. The lesson of the Amsterdam Digital City, now an ordinary ISP offering dailup services, is an economic and legal one. It deals with the high art of staying independent in an increasingly commercial environment, no longer relying (solely) on government support. The DDS story calls for experiments with internal democracy and shared ownership—a phase within critical Internet culture that has yet to start.

38. Castells, The Internet Galaxy, p. 154.

CHAPTER FOUR
NETTIME AND THE MODERATION QUESTION BOUNDARIES OF MAILINGLIST CULTURE

The Nettime mailinglist has been widely recognized as one of the leading forums for the discussion and practice of innovative Internet culture and Internet-based art. Its aim has been to bring together different disciplines and practices such as electronic arts, computer science, media theory, IT-journalism and media activism. Topics have been the canon of net.art, foundations of media aesthetics, tactical media aspects of protests against corporate globalization, the fight against censorship and the politics of Internet domain names.

This chapter is a case study of the Nettime mailinglist, a cross-disciplinary, international exchange for the "cultural politics of the Net", founded in 1995. An analysis of Nettime postings can be written by anyone as its web archive is publicly accessible (www.nettime.org). Such a reconstruction will, most likely, look into the dynamics of the postings and the content of the numerous threads. Different from most lists, Nettime developed a dynamic beyond the Internet itself. This chapter describes the conditions under which Nettime was formed and emphasizes its first years of existence. It is by no means a comprehensive history.

This case study should provide the reader with an insider's perspective on the workings of the list, how it dealt with rapid growth, conflicts, phases of information overload and diversification. In the introduction I have already mentioned my personal involvement in Nettime as one of its founders. I do not pretend to cover the entire period from 1995 to 2002. After a number of years of intense conditions, Nettime became more mature—others would say less interesting. In the 1999-2000 period the list found a balance between overload and 'censorship,' resisting pressures of institutionalization and exhaustion to which most non-profit Internet projects were subjected.[1]
Ceasing to organize meetings and publications, Nettime eventually became more of a mailinglist like others.

A short history of Nettime

Let's zap through the events first before going into detail. The centre of Nettime is the international mailing list, in English, called nettime-l. It grew from 500 subscribers in mid 1997 to 850 in late 1998 and reached 3000 in late 2002. An increasing number of users read the list via the archive on the website, www.nettime.org. Then there is a growing number of lists in other languages with an average of 200-400 subscribers in Dutch (established in late 1996), French (1999), Romanian and Spanish/Portuguese (2000) and Mandarin (2002). The lists are not related content-wise, run on the same server, use the same name and together with 'neighboring' lists

1. Jonathan Peizer, head of the Internet department of the Open Society Institute, is one of the few doing research into the dynamics of difference between the dotcom IT-company model and the non-profit NGO sector. See: Jonathan Peizer, Venture Philanthropy - Developing the Standards for Success, *Nettime*, December 12, 2000, The Trusted Source Relationship, *Nettime*, 29 May, 2001.

and websites, create a common context, a critical Internet culture, in contrast to the centralised portal model that is based on customised and syndicated content.

For the back cover of the *Readme!* anthology, filtered by Nettime in 1998, a collective effort was made to come up with a brief description of the project:

> What is Nettime? A wild East-West saloon? A journal? A bulletin? A bulletin board? A soapbox? An endless open-mike night? A typing pool? A mailinglist on the Internet? No one really knows, let alone agrees. But the result is clear: a vigorous international discourse that neither promotes cash-cow euphoria nor propagates cynical generalizations about the cultural possibilities of new media. Whether the boom gurus or doom gurus like it or not, the net is becoming the medium of the multitudes". Nettime presents itself here as "the other side of the net.[2]

The focus of Nettime has always been to be more than just an Internet forum, to actively connect different disciplines (arts, theory, activism, journalism) and break out of the digital realm through paper publications and real-life meetings. During the phase of the *Wired*-Netscape hype (95-97), the Nettime group brought out several publications, amongst others a free newspaper with a circulation of 10,000, which was mainly distributed during the Kassel Documenta X and through media labs and media arts organizations around Europe. Nettime was represented at several events and held its first (and perhaps last) own meeting in Ljubljana in May 1997 where 120 members discussed strategies for critical discourses in electronic arts and (new) media activism.

In the next period of consolidation (1998-99) Nettime became a more structured (and moderated) forum where political and cultural aspects of technology and Internet development were discussed. Most of the contributions to the list were peer review articles. The efforts to gather critical writings on net culture resulted, amongst others, in the book publication *Readme!*, also known as the Nettime Bible. A weekly compiler for announcements was set up to inform the readership of the many conferences and new web sites. In order to master the growing amount of postings, discussion digests were introduced, postings bundled together by topic, a system that proved of particular use during the Kosovo war (March-June 1999) in which the community was deeply divided over the NATO bombings of Serbia.

In 1998-1999 moderators were rotating. From 2000 Nettime is being moderated by a stable group of 4, located on three continents (Europe, North America, Australia).[3] The content and the life of Nettime is provided by its growing and changing subscriber base, using the many-to-many capabilities of Internet-based communication. The problem of 'lurkers' (read only members) is virtually absent. Having started as a European-North American dialogue on the premises of cyber-culture, the list has broadened its view and readership over the last years. The process of

2. *Readme!*, filtered by Nettime, Brooklyn: Autonomedia, 1999.
3. Nettime moderators in 2001/2002: Ted Byfield (New York), Felix Stalder (Toronto), Scott McPhee (Sydney) and Andrea Mayr (Vienna).

'collaborative text filtering' creates a pool of texts and discussions, which are gradually reposted, printed and translated and end up in the non-English speaking world.

Personal and intellectual roots

One of the many roots of Nettime could be described as discontent after the death of critical theory. What might 'net criticism' in the digital age look like? A fight over the definition of a new arena was at hand. In the early nineties, neither the apocalyptic thinking nor the speculative theory fiction seemed to reflect the rapidly changing techno configurations. Contemporary thought got trapped into a self imposed melancholy deliberating never ending endings, whereas leftovers of critical theory had bitterly withdrawn into historical reference systems, negating the world altogether. The question was posed: can theory still intervene in emerging phenomena such as the Internet? Adilkno, the Foundation for the Advancement of Illegal Knowledge (a group of which I am a member) in a piece written in the morning twilight of net culture called "What is data criticism?" stated: "Data criticism is the denial of all that exists, it starts where cynicism ends; it does not put down the world, but responds to the challenge posed by the unpredictable. There is no alternative to data. Like a Medusa, the only option is to meet them -face-to-face".[4] This meant making dirty hands. Intellectual involvement could no longer be meta critique from the safe position of the outsider. Activism was required. The business jargon for this attitude was 'creating opportunities.'

In late 1993, half a year after I had gotten my first email address (geert@hacktic.nl), I came in contact with a Berlin-based artist named Pit Schultz. Back then, exchanges via email were sporadic, sudden and filled with the excitement of the new. Pit was the organizer of the last gig of Adilkno's *Media Archive* book release tour through German-speaking countries (including Budapest). These were the heydays of speculative media theory and the trip, doing 15 cities in 15 days, had the style of a DJ tour.[5] Pit was the only local organizer with email. The first version of Mosaic, the first World Wide Web browser had just been released. Huge "radical chic" crowds showed up, night after night, filling the air with an exciting, yet undefined sense of the coming. Of what? The Dutch datadandies actually only tempered the illusions, using the ironic strategy of radical pragmatism in order to master the utopian promises of the "virtual reality" and "cyberspace" people had vaguely heard about. The textual tactic of Adilkno was one of pushing the imaginative boundaries way beyond the introductory phase of digital media. Condemning the computer worlds as mere simulation, invented by the military-entertainment complex, had be

4. In: Adilkno, *The Media Archive*, Brooklyn: Autonomedia, 1998, p. 59.
5. The book, *Medien Archiv*, by Agentur Bilwet (German for Adilkno), published by Bollmann Verlag, had come out at the Frankfurt book fair in October 1993, presented at a special book launch party, including speakers, amongst others Arthur and Marilouise Kroker, organized by Andreas Kallfelz and his Frankfurt art society Verein 707. After this successful event, Andreas took on the job to organize a book tour. Besides Geert Lovink and Arjen Mulder (on behalf of the Adilkno group), a German SF-critic, Dietmar Dath, joined the crew.

come a cynical worn-out remark. The atmosphere had turned Deleuzean. The playful, productive schizo pole blossomed.[6]

The first collaboration with Pit Schultz was a commissioned television interview with *Wired* editor and *Out of Control* author Kevin Kelly.[7] Shot during a Berlin telco conference in December 1994, it gave us both a direct encounter of what Richard Barbrook and Andy Cameron not much later coined as the "Californian Ideology". What struck us was Kelly's routine professionalism, his unshakeable belief in the religious quality of technology, and his passion for techno-Darwinism. He loved all biological metaphors as long as they could denounce and mystify complex social relationships and economic interests. Portraying computer users as a beehive, as Kelly did in *Out of Control*, Pit and I both considered this a setback in the understanding of computer networks. Why would users, faced with the tremendous empowerment the Net could give, suddenly have to be labeled as ants or bees? Why was such a biologism sold as a revolution and not condemned as a regressive cultural movement? Considering the popularity of Kelly and Wired, how had these notions become the centrepiece of the Internet ideology?[8]

The takeover of the Internet by corporate power, way beyond the bravery of dotcom enterpreneuralism, was already visible in Kelly's historical grandeur. This was a humble man who not only sensed the titanic magnitude of the network imperative, but also truly understood its metaphysical nature, and above all, was ready to sell the Net to the big corporations. Unlike his teachers such as George Gilder and Tom Peters, Kelly was not a heroic revolutionary. He acted more like a modest strategic thinker. His point of departure is situated beyond the omega point of the digital. From there he looks back on the late 20th century. A true visionary, Kelly presupposed short-term harsh changes the global business world had to go through. Corporations were only transitory vehicles of trans-historical things to come. Kelly combines technological determinism with a biblical drive towards the final apocalyptic chapter of humankind. As the born-again Christian Kelly said, when humans were about to become gods, it wasn't long to meet God. Technology was going to assist humankind in this eschatological enterprise.

6. In an interview with *Mute* magazine editor Pauline van Mourik Broekman, posted on *Nettime*, February 3, 1997, Pit Schultz described his biography as such: "I was involved with The Thing BBS network from 92-94, the high time of ascii and text based internet like MUDs and MOOs, before the Web. At the same time I was working with the group Botschaft. There were also some exhibitions of low media art, a communication performance in the TV tower in Berlin, meetings, long term projects in the public sphere like an installation with Daniel Pflumm in a subway tunnel, a collaboration with the group Handshake, which later became Internationale Stadt, or Chaos Computer Club which Botschaft shared office space with. After an Agentur Bilwet/Adilkno event we organized, I started to work with Geert Lovink, which was a truly new phase of work". A German translation appeared in the *Telepolis* web magazine: http://www.heise.de/tp/deutsch/inhalt/te/1108/1.html.
7. Commissioned by Stefaan Decostere, then still working for the Belgian state television BRT, recorded for his documentary "Lessons in Modesty" (1995). Arthur and Marilouise Kroker were initially involved in discussions over the concept of this film but later left the team.
8. Only few critics have analysed the biological preoccupation of the Wired avant-garde. By far the best is the insiders account Pauline Borsook's *Cyberselfish*, a critical romp through the terribly libertarian world of high-tech (New York, 2000). Borsook traces back libertarian biologism back to Michael Rothschild's work *Bionomics*: *Economy as Ecosystem*. "Bionomics borrows from biology as opposed to Newtonian mechanics to explain economic behaviour. It favours decentralization and trail and error and local control and simple rules and letting things be. Reduced to a bumper sticker Bionomics states that the economy is a rain forest.'" (p. 32).

Kelly's libertarian blessings were not targeted at a young audience who thought of starting up a business, despite his strong belief in the bottom-up approach. Kelly, and with him most of the digerati were most of all focused on the CEO level of the world's most powerful corporations. What was so interesting about these telecom suits, hidden in a West-Berlin hotel near Bahnhof Zoo? It was in the (monopolist) interest to get rid of state regulation, privatizing as much as possible. Didn't the environmentalist Kelly promote decentralization? Why then did this *Wired* editor want to convince the old economy establishment? Shouldn't it crumble by itself? Why talk to them? Our questions to Kelly during the interviews however lacked precision. The distance in knowledge and experience was too big. There had been much talk about making machines more like us, nature never being in balance, growing complicated software, and a new economy not based on scarcity but on sharing. It was hard to pinpoint our discontent towards this unfamiliar form of hippie capitalism. A much more thorough deconstruction of this set of ideas was necessary before the attractive side of the *Wired* agenda could be publicly addressed. There was more to this than the male adolescent dream of disembodied collective intelligence. A net critique should go further then body politics. But where to start?

From Spessart to Venice

A few months later Andreas Kallfelz invited Pit Schultz and I to organize a small event as part of the celebrations of 10 years of Verein 707, Andreas' Frankfurt-based art society. A concept was developed to do a weekend of discussions on media strategies in the forest outside of Frankfurt. From March 16-19 1995 the "Media ZK" (ZK stands for Central Committee) was held near Spessart with a subtitle "terminal theory for the nineties - secret knowledge for all". Around 30 mainly German video artists, activists and critics attended. Some of them brought their computers.[9] The aim was to discuss possibilities of building up critical net practices and discourses. The invitation had an ironic undertone. The reference to a secret organization, deciding over the direction of the Net, was prompted by the fact that this was the moment to act. Internet was about to kick off in Germany, as it already had in the UK, the Netherlands and Scandinavia. The rest of Europe would soon follow, with Eastern Europe using its strategic advantage of having to reform its economies anyway. Some of the ZK-participants were already involved in initiatives such as Handshake, connecting Berlin techno clubs via terminals to chat. Amsterdam had a whole range of models on offer: the hackers' provider xs4all.nl; the digital city free net; and a content provider especially for internet-based art projects, named desk.nl. There were various nodes of the art BBS-system The Thing, all about to get connected to the Net. In Berlin the Internationale Stadt project had just taken off, a mix of art-based content provider, ISP and freenet. The energy was there but the concepts somehow seemed confused.

How could sustainable Internet projects outside of the commercial realm be developed? The ZK also had theory on the agenda. How did the real existing body's desires relate to the cleanness of the cyberspaces? What to do about the poverty of new metaphors such as the "digital city"? How do real and virtual relate? What happens with the crisis of politics and the presumed decline of

9. Amongst the participants were Hans-Christian Dany, Andreas Kallfelz, Jochen Becker, Florian Schneider, Verena Kuni, Pit Schultz, Felicia Herrschaft, Stefan Beck, Barbara Strebel, Geert Lovink, Florian Zeyfang, Ed van Megen, Gereon Schmitz, Joachim Blank, Armin Haase, Ute Süßbrich, Janos Sugar, Dietmar Dath, Barbara Kirchner, Christoph Blase, Wolfgang Neuhaus, Ludwig Seyfarth and Mona Sarkis.

the public in the digital city? Would the body be neglected with the Net becoming the new 'clean' drug? A lecture by Hans-Christian Dany stressed the relation between Microsoft Windows and multiple personality disorders, whereas Jochen Becker pointed at quasi-subversive marketing strategies, taken from pop culture, already in use in the music video industry.

There were no immediate outcomes to the ZK Spessart meeting. The discussion within Germany was to be continued at the (first) Interfiction meeting in Kassel, in early December 1995, under the title "net criticism - perspectives and myths of counter- public in data-nets".[10] The German context was a perfect mix of skepticism and slackerdom. There was a great devotion to software tinkering, mixed with a disbelief that networks could be set up for a broader public. The German population was presumed to be critical about technology. Perhaps the state should provide its citizens with general Net access. But there was no indication in that direction. Confronted with huge debts and an economic recession, all the German state would do is send its prosecutors to its Internet pioneers over censorship cases. The attitude after the fall of Berlin Wall was anything but German diligence. The festive, ecstatic rave culture refrained from fanatic activism. The political atmosphere in the outgoing Kohl era was defensive, if not lame. The sudden reunification of Germany had not brought much except racism and neo-nazis. So wasn't the Internet just another imperial trick to seduce and diffuse resistance, critical artists and activists asked themselves? Or, to put in continental-European terms, a gadget invented by the US- military to further intensify the simulacrum of all good things past such as politics, arts and … the media. In short: the Internet could not be embraced uncritically. Theory was needed, if not to master, then at least to circumvent aggressive commercialism without falling pray to cultural pessimism. The question on the table was how to turn the potentially immobilizing dilemmas into a productive setup, encouraging rather than dismissing radical critique.[11]

The next opportunity occurred with the newly established Berlin Biennale intending to 'exhibit' the vibrant Berlin club culture at the Venice Biennale (June 1995), with the hope of importing 'techno' into the art context.[12] For this purpose, the 18th century Theatro Malibran had been hired.

10. See: Herbert A. Meyer (the organizer of the first Interfiction), ZKP Interfiction, *Nettime*, January 12, 1996 with a report, most of it in German, of the Kassel meeting, December 9, 1995.
11. Typical European questions of the early-mid nineties would go like this: "Is technological development bringing us to self-destruction or to a new Renaissance? Are we experiencing the last phase of Western civilization, or the dawn of the digital era? Does computer revolution favour alienation or communication? Does computer simulated closeness increase actual solitude? (..)Scientific progress offers infinite possibilities, previously unknown or even imaginable. But there is something that must be safeguarded, and that is the value or unique, unrepeatable, irrevocable personal and collective history". (Symposium Art+Technology, Venice, June 1995).
12. Pit Schultz, one year later: "While having good food and bright talks during the day, the 'co-optation' of 'techno- underground' during the night became an imprinting birth experience for this project. Since then *Nettime* remained what one can call independent and extremely cautious towards processes of converting cultural capital. This is not happening because of dogmatism but because of the will for maximum freedom, freedom money cannot buy". From: Panic Content, Intro to *ZKP 3*, Berlin, October 9, 1996, never published draft, posted on the *Nettime* list on April 8,1998. Refraining to advertise for Nettime remained a policy through the years. Being "semi-closed" referred to a subscription policy of getting the right mix of participants, not just lurkers. What counted was the quality of postings in a common effort to contextualize each other's material. Essential texts would anyway find their way out of *Nettime* to other lists, sites and media. Multiplication happened elsewhere, hence no need for marketing.

A room on the first floor could be used as a conference space. Pit Schultz arranged to have a three-day net theory workshop where the "ZK" topics could be further discussed, this time within an international context.[13] The idea was to do workshops and debates, not a conference with lectures. Through Nils Röller, Italian philosophers and others working on urban and electronic spaces would be invited. During the preparation in May, via email, Pit, Nils and myself worked on three topics. The ideas were somewhat finished, written down.
The name of the meeting: <net.time>.[14]

The first day was called "hi-low" and dealt with a discourse analysis of *Wired* magazine: "euphoria/phobia," analysis of the hype and the conceptual politics of magazines such as Wired, *Mondo 2000* and *Virtual* (Italy). "What is the relevance and impact these cult movements will have on the art world. The desire to be wired is the myth to have more power". The second day was going to deal with net theory, politics and the city metaphor. Venice, Amsterdam, Berlin and the old European net culture. Is a city defined by the market, the agora, its canals and roads or by technologies such as defense walls and resource management? What defines a city anyway? Its image, walls or rules? What is public domain in the age of Internet (post-Habermas and Negt/Kluge)? Who will become the Camillo Sitte of the Net and define the aesthetic of the digital public layout? Is there any similarity between the gated (Mike Davis) and virtual (Howard Rheingold) community? And what to think of Paul Virilio's chrono-politics, suggesting that time, not space is becoming the central topos of power. Also it became important to question the whole idea of "home": "Why is the home page such a common term, surfing from homepage to homepage instead of wandering through semiotic deserts?" (Nils Röller). The third day would deal with Kevin Kelly's neo-vitalist ideology, life on the Net and a read through Deleuze and Guattari's *Mille Plateaux* with topics such as digital dynamics and millennial romanticism, culminating in a critique of the Californian artificial life ideology.

13. The <net.time> meeting was organized by Pit Schultz, Nils Röller and Geert Lovink. Involved in the organization of Club Berlin were, amongst others, Mercedes Bunz, Daniel Pflumm and Micz Flor. One of the curator was Klaus Biesenbach. On the participant list: David Garcia, Heath Bunting, David D'Heilly, Paolo Azuri, Claudia Cataldi, Vuk Cosic, Hans-Christian Dany, Camillo De Marco, Paul Garrin, Carlos Leite de Souza, Alessandro Ludovico, Siegfried Zielinski, Diana McCarty, Suzana Milevska, Roberto Paci Dalo, Katja Reinert, Gereon Schmitz, Tommazo Tozzi. The email invitation and some of the correspondance related to the Venice meeting were posted on the *Nettime* list a few years later for archival purposes. A one hour radio program, produced by Geert Lovink for the Dutch VPRO radio containing interviews with Garrin, Dany, Cosic, Bunting, Schmitz and Schultz can be found on http://www.ljudmila.org/*Nettime*/jukebox.htm.
14. The name <net.time> was chosen by Pit Schultz, who, known for his critique of the space metaphor within electronic media, was drawn to the idea of a network-specific time as a possible common artistic experience. In a Proustian manner Pit Schultz was in search for lost net time. "The time of *Nettime* is a social time, it is subjective and intensive, with condensation and extractions, segmented by social events like conferences and little meetings, and text gatherings for export into the paper world. Most people still like to read a text printed on wooden paper, more then transmitted via waves of light. Nettime is not the same time like geotime, or the time clocks go. Everyone who programs or often sits in front of a screen knows about the phenomena of being out of time, time on the net consists of different speeds, computers, humans, software, bandwidth, the only way to see a continuity of time on the net is to see it as a asynchronous network of synchronized time zones". <*Nettime*> From the Archives: Introduction to Nettime, draft by Pit Schultz for ZKP 3, *Nettime*, April 8, 1998, original from October 9, 1996.

"The desire to be wired" was going to become the central Venice phrase. A desire that the later Nettime list was going to take apart and reconstruct, out of a common desire not to be like *Wired* magazine. Nonetheless, the "Desire to be Wired" was not an 'alien' concept but also commonly felt amongst the early Nettimers. The shared fascination and excitement was there. What is the agenda behind the Will to Wire Up? How does the 'wired desire' get written down into social and economic structure? Which desire does the Internet address? Only few theorists had raised such issues. Psychoanalysts and cultural studies academics were repeatedly making the mistake of mixing up 3D virtual reality models (which were not only offline but also inaccessible for the general audience) with the rapid expanding, slowly performing computer networks. Internet was not about losing ones body in an immersive environment. The potential to network was real, not virtual. The Net was not a simulator for this or that out-of-the-body experience. If it appealed to a sexual desire, it must have been one based on code, not on images — distributed, abstract delusion, not a (photo)graphic illusion. Nineties media theorists were constantly fooled by Hollywood and the game industry—what Peter Lunenfeld calls "media of attractions".[15] This was to become a general problem. Cool offline demo design got easily mixed up with the real existing excitement over the World Wide Web, in all its infancy. Around 1995 the multimedia aspect of the Web was still primitive. The simplicity of the early Web was in fact anything but sexy. In need of constant maintenance, restarting and rebooting, losing packages, with websites under construction, not getting through ("404 not found"), the Net was home for sophisticated thinkers. "The lower the bandwidth, the higher the imagination". References were the historical parallels between the Internet and the establishment of electricity as described in Thomas P. Hughes' *Networks of Power: Electrification in Western Society*, which deals with market shares, mergers, monopolies and the war on electricity standards in the US around the turn of the 20th century (1880-1930). Was the layout of the Internet infrastructure going to be repetition of the electricity episode, resulting in a few monopolies such as Microsoft, AOL and MCI/WorldCom?

The start of the mailinglist

Back in Berlin, Pit Schultz set up a preliminary Nettime list on the server of the Internationale Stadt in Berlin. He wrote the following introduction:

> It should be an temporary experiment to continue the process of a collective construction of a sound and rhythm - the song lines - of something which we hardly worked on, to inform each other about ongoing or future events, local activities, certain commentaries, distributing and filtering texts, manifestos, hotlists, bits and blitzmails related to cultural politics on the Internet. It's also an experiment in collaborative writing and developing strategies of group work. Therefore and because of the different native languages of the participants it's a multilingual forum. Every new subscriber should introduce himself with a brief description of her projects, where she comes from etc. The list is not moderated. Take care.[16]

15. Peter Lunenfeld, *Snap to Grid*, Cambridge (Mass.): The MIT Press, 2000, p. xix. This "user's guide to digital arts, media and cultures" has a chapter on the role of the demo, the never finished prototype "which has become an intrinsic part of artistic practice". The chapter is called "Demo or Die," a common phrase in the IT-ind
16. Pit Schultz, Introduction to the Nettime mailinglist, intro file, October 1995.

With this mail came a proposal for a *Wired* critique, including a prize, called "Why Worried" (which didn't go anywhere). *Wired* wasn't the perfect enemy. As a common denominator, the magazine developed into a boxing ball, the reason to formulate the discontent over the state of arts in cyberculture. Wired, as the discourse leader, was accused of reterritorializing "new song lines and substreams of fresh desire, formatting and decoding the public face of fringe scientists, strange artists, visionary authors, young movements". It channeled a small, emerging culture to wider audiences, and by doing so, built up cultural capital for all those involved". Offending was "the clean and bright candy surfaces of Californian postmodernism. Where is the dirt?"

The outcome of the <net.time> meeting wasn't what you would expect from a Central Committee. Culture in Europe in tohe age of the Internet hype pretty much looked liked a wandering circus, a traveling net band, swelling from city to city. There was a springtime atmosphere, connections were made, some even turning into love affairs, along with passionate debates about Netscape on street corners, with someone you just met. Everyone seemed ready to unroll yet another creative-subversive media place, preferably with a poetic manifesto—and without ideology. This is post-89 Europe, with the Bosnian War coming to a close. What remained are a few phrases and a mailinglist. "One needs ironic sites, impossible cities, useless archives, introverted communication channels, cyber criticism, VR humor, ambiguous keyboards". A mix of demands for citizens access' to the networks and ironical comments to dampen overheated expectations of technology sparking social revolts. "Internet is a possibility to change consumer attitudes by creating places of strategic silence".[17]

The Budapest Debate

Next stop Budapest, mid October '95, where the second Metaforum conference took place. One of the many cultural events, debating new media culture within the Eastern European context, to come.[18] The first Metaforum in 94 had dealt with multi-media, now it was time to talk Internet. Hungary had jumped on the bandwagon. ISPs were kicking off and Internet use started spreading beyond academic and NGO networks. A public access initiative, Koz Hely, was formed. There was curiosity, mixed with suspicion. One of the Metaforum organizers was Diana McCarty: "As a conference, MetaForum was one in its own chain of three, but also directly related to several other international events, meetings and festivals. The atmosphere was incredible, on the one hand, there was the general, public hype, the *Wired* view of the future, and on the other, a whole group of critically minded people was no less euphoric, though for totally different reasons. This was built on in Venice, and reemerged in Budapest. It was like

17. Nils Röller in his Venice report, emailed to Pit Schultz and Geert Lovink, June 12 1995.
18. The conference series Metaforum I-III (1994-96) was organized by János Sugár, Diana McCarty and Geert Lovink and held at the National Art Academy, a mix of Hungarian and international topics and speakers. From the program: "MetaForum II / NO BORDERS / HATÁROK NÉLKÜL / critically examines the role that the internet plays now and what is possible in the future. How and where do geographic borders render cyberspace mythical? How is democracy defined and enforced in the fourth dimension? What role do economics play in the colonization of the last frontier? How is identity altered by new communication technology?" An early net.art debate was the Art Discourse on the Net panel discussion, chaired by Chairman: Miklós Peternák. Participants: Lászlo Tölgyes, Pit Schultz, Heath Bunting, Walter Van Der Cruijsen, Konrad Becker, Matt Fuller, The Thing.

being on the brink of a revolution you believe in. And that generated a huge amount of interest and excitement, both in Hungary (not only Budapest) and the rest of networked world".[19]

The centrepiece of the Budapest meeting was an debate between two US-Americans of the hippie generation, Peter Lamborn Wilson and John Perry Barlow, representing the Luddite- anarcho and the entrepreneurial side of techno libertarianism, united in their interest in everything psychoactive. Peter Lamborn Wilson (aka Hakim Bey) spoke about "Islam and the Internet". Barlow's topic was "Cyberspace and Sovereignty". Diana McCarty: "The whole audience was transfixed in the magic of Peter's talk, even if he was basically tearing apart the notion of virtuality. At least in terms of living it through computers, he created a unique virtual space for the duration of his talk. This was only broken by Barlow's magnificent entrance. They should have arrived together in the morning, but Barlow's flight was delayed due to bad weather and he was just lost for most of the day. When he entered the room, he was so physically present - it just brought the gravity back. I find this hilarious in the sense that Peter was arguing for physicality, and Barlow is somehow on the side of virtuality (in the 95 sense), but they were so opposite in terms of their presence and the substance of their talks".[20] The disembodiment controversy spurred heated debates at the time. Arthur and Marilouise Kroker, listed but not present at Metaforum II, had made "virtual bodies" a topic, but their position was more ambivalent. Contemporary discourse was not ready to answer the pressing questions around the Internet. Was technology going to liberate humankind or bring yet another world war scale disaster? These, and other topics were discussed on the informal Nettime meeting, held on the Monday after the conference weekend.

Nettime didn't start until late October. Pit's setup hadn't worked out so a cc: list was used in between. The actual Nettime mailinglist started on October 31, 1995 with understated material by Matthew Fuller (London), Konrad Becker (Vienna) and Pit posting texts from Hakim Bey and Slavoj Zizek. A regular contributor was Mark Tribe, then living in Berlin, before he set up his own *Rhizome* list out of the Amsterdam desk.nl medialab. John Perry Barlow was the first to reply, responding to the call for "net criticism": "A decentralized medium offers but few choices - and they are very personal ones: jack in, jack out, or jack off. In the end, as Gandhi proposed, 'You must be the change you wish to see in the world.' There's little else you can do". The debate between techno-libertarians and net critics was going to dominate Nettime. It gave the list the reputation being one of few places of exchange between the European and US-American intelligentsia, a role that *Wired* magazine had refused to take. It was en vogue, amongst digerati, to dump on the old continent and its socialist states who's only aim it was to censor the freedom on the Net. In particular *Wired* editor Louis Rosetto was wary of any debate with critical theorists and artists.

19. Quoted from a private email correspondance, May 10, 2001.
20. Ibid.

The Amsterdam-based print magazine Mediamatic could have taken up this task. Its speculative approach, however, made it an unlikely host for online critical debates.[21]

From its genesis, Nettime was to embody the project of "net criticism" in order to counter the unbearable lightness of Wired magazine, which was considered the most influential organ of the virtual class. Pit Schultz: "Everything which Wired wrote was for us Pure Propaganda and provoked the quest for Unofficial Data. As the Pravda of the Net *Wired* forced the emergence of dissident thought".[22] The uncontested hegemony of Wired in the mid nineties cannot be underestimated here. For opinion makers, politicians and young entrepreneurs there wasn't much else with such a positive-seductive appeal. The usual PC-magazines lacked a comprehensive world vision. Old media, such as print and television had no idea anyway. *Wired* was heaven's gate to a new world, a sign on the horizon which fellow passionate believers in the Digital Cause immediately recognized. For many *Wired* came straight from the future, and, while bouncing back, took us with it, thereby sharing the endless accumulation of technological potentialities. "The Internet needs you!" In a text from early 1996 the aim was followed as such: "Our Net Criticism has nothing to do with a monolithic or dialectic dogma, like 'neo-Luddism' or 'digital Marxism'. It is more a behavior than a project, more a parasite then a strategic position, more based on a diffuse corpus of works than an academic knowledge, it is heavily interfered by contradictions and techno-pleasure, and it keeps vivid in this way".[23] Net criticism was an empty signifier, waiting to be filled with wildly paradoxical meaning. As a concept it was supposed to function as a strange attractor. To some extend the term had been random. It could as well have been called "digital studies" (Alex Galloway), "data critique" (Frank Hartmann) or Internet science (Reinhold Grether). The term "criticism" was not supposed to be taken too literally; as long as it blossomed, it carried the promise of an altogether different life.

21. In the early nineties *Mediamatic* Magazine had the potential to become the sophisticated European counterpart of Wired. The founders of *Wired* had left Amsterdam for San Francisco in 1992, dissolving the *Electric Word* magazine. One of its editors, Jules Marshall, had decided to remain in Amsterdam and joined the Mediamatic board. Instead of expanding the magazine, also online, *Mediamatic*-founder Willem Velthoven decided to take up CD- ROM production and later also corporate webdesign, leaving both the paper and online magazine in limbo. Velthoven dismissed me from the editorial board in October 1994 (which I had joined in January 1989). The alliance with the business-geared design conferences Doors of Perception, jointly produced with the Dutch Design Institute under John Thackara, was another indication that a critical net discourse was unlike to come from *Mediamatic*. The Australian magazine *21C* could have stepped in. Both lacked editorial consistency, frequency, global distribution and adequate marketing strategy. Like many cultural magazines at the time, *Mediamatic and 21C* had a weak online presence.
22. *<Nettime>* From the Archives: Introduction to *Nettime*, draft by Pit Schultz for ZKP 3, *Nettime*, April 8 1998; original from October 9, 1996.
23. Geert Lovink/Pit Schultz, text for a lecture at Groningen university, February 11, 1996. Translated quote from the first collaborative text in a series of four, written in German, in 1995-1997, attempting to map Netzkritik (net criticism): "Grundrisse einer Netzkritik," in *Interface 3*, Klaus Peter Dencker (Hrg.), Hans-Bredow-Institut, Hamburg, 1997, pp. 234-245; "Anmerkungen zur Netzkritik," in *Mythos Internet*, Stephan Münker und Alexander Roesler (Hrg.), Suhrkamp Verlag, Frankfurt am Main, 1997, pp. 338-367; "Aus den Schatzkammern der Netzkritik," in: Rudolf Maresch und Niels Werber (Hrsg.), *Kommunikation Medien Macht*, Frankfurt am Main: Suhrkamp Verlag, 1999, pp. 299-328. The fourth text, a lecture during an international media theory conference in Kassel, September 1997, remained unfinished and was not published. URL of the archived essays: http://thing.desk.nl/bilwet/#geert+pit.

Living Net Criticism

Net criticism, the label for Nettime's 'dirty little practice,' was designed as a collective undertaking to deconstruct the utopian *Wired* agenda. Not directly, in word or academic texts, but by doing. There was an immediate danger that net criticism would die a premature death by reducing it to mere text critique. Pit Schultz:

> It is funny to use a medium without trusting it. It is even more funny to use a medium and then criticize it. Some say it is impossible to criticize a system from within. They say you have to have a distance to it to be able to interpret it, but then they don't find an end of interpretation. [24]

The trick with net criticism, this empty signifier, was to reverse the position of complaining outsider into one of an active, subversive production of discourse, software, interfaces, social networks. This was no longer part of a grand leftist project, nor was it micro politics in the margins. Pit Schultz: "If 'communication creates conflict' (Bunting) or 'subjectivity must get produced' (Guattari), it was never a goal of this project to dominate discourse, missionate you, or tell the pure truth". How could one change the course of a late modernist project of a global scale, run by science and technologies giants, increasingly dominated by finance and business interests—and still have fun? "Beyond the dualism of the philoes and phobies, driven by 'the desire not to get wired in such a way' there are still some hidden opportunities to disturb the networks of power with pure pleasure. Desiring machines are not made to function".[25]

"We are only in it for the content". A few months after the start of the list, on the occasion of the second Next Five Minutes conference a reader was hastily put together, called *ZK Proceedings 95 Net Criticism*, 200 pages, in 250 copies, which sold out in a day. It contained a mixed bag of voices from the cyber underground, "almost-manifestoes" from Italy, Germany and Hungary dealing with "access," "scanned philosophies," texts on "the tragic end of net.art" and "the comeback of the Enemy (Telekom, Scientology, Netscape)," most of them essays written for previous gatherings. The introduction calls for "political directness". The need is expressed for a "production of collective subjectivity from within the nets in order to counter its oppressive and alienating effects".

A primary obstacle to a free exchange amongst intellectuals and artists on the Internet is copyright fear. In search for high quality content and debates, authors are faced with concerns that material produced for magazines, newspapers and books is not supposed to be republished on the Net. Yet, mailinglists are operating in a grey zone. Contributions are being forwarded, cc:ed, but not published in the strict sense. A mailinglist is not a website, even though it may have a searchable archive with a web interface. In order to build up a community with interesting participants, writers have to be persuaded to post some old material from their hard drive, pre- publish a not finished essay, or ideally write something exclusively for the list. For "collaborative text filtering" (Nettime's main aim) to happen, people have to overcome copyright concerns. ZKP Proceedings 95 remarks in this respect: "Copyright is not the most urgent issue here, but the build-up of trust between the subscribers. This bond is based on face to face contacts and mutual friendship".

24. Short Notes, from: pit@contrib.de date: December 1995, preface to ZK Proceedings 95, Net Criticism, Amsterdam, January 1996.
25. Ibid.

The creation of a critical discourse is understood to happen in the act of "editing". What does this mean? "The goal is a non-hierarchical selection which does not end in entropic noise but results in a self-organizing editing. Nettime operates as a semi-closed mailinglist based on the principle of responsible data, and the right to trash one another's mbox". Editing is not just another way of saying that lists, with their inherent tendency to overload and abundance of meaning, should be closed in order to pick and chose the desirable content. Editing here is positively loaded, not as an act of mean old censorship, but as an effort to create a common context, getting rid of the liberal "anything goes" mentality. Here lists are not seen a neutral forum where everyone can give his or her opinion. They are tools, potentially powerful common context creators. It is not the randomness but the rarity of the not-understood which facilitates a possible emergence of the new: "In the current content business there is only one language, that of the market. Nettime speaks many tongues, risking that not every text will be understood. Paramount is the goal to preserve the original contexts".[26]

Barlow's Declaration of Independence

The day after the Next Five Minutes conference, a Nettime ZK meeting was held in the then still empty offices of the Society for Old and New Media in Amsterdam.[27] With John-Perry Barlow as the only visible, well-known representative of the "*Wired* ideology" it was inevitable that the debate would be centered around his person. Barlow's surprising presence at the Next Five Minutes conference caused some commotion but did not trigger the perhaps expected debate about the ideological premises of cyberspace.[28] Instead it turned into a euphoric global gathering of media activists, sharing their amazement about the opening of so many new communication spaces. A few weeks later Barlow attended the World Economic Forum and on hearing that the US Senate had just signed the Telecom Reform Act, he sat down and wrote the "Declaration of the Independence of Cyberspace". It opens with the heroic indignation: "Governments of the Industrial World, you weary giants of flesh and steel, I come from Cyberspace, the new home of Mind. On behalf of the future, I ask you of the past to leave us alone. You are not welcome among us. You have no sovereignty where we gather".[29]

26. Three quotes from: Pit Schultz + Geert Lovink, Go Paper, introduction to *ZK Proceedings 95*, Net Criticism, Amsterdam, January 1996.
27. For the list of participants see *Nettime*, 12 Feb 1996, ZK Amsterdam participants, posted by Pit Schultz.
28. David Garcia, one of the N5M organizers and early *Nettime* participant, in a private email correspondence, dated May 19, 2001, recalls: "Barlow offered to come to the event and said that he would do anything from dish washing to door keeping just so long as he could contribute. He was carelessly rebuffed or ignored, and sent progressively more angry mails. I took the initiative to neutralize the situation and sent him a 'great come your welcome' message. But he was given no official place in the program of the conference. Nevertheless he was an energetic contributor. The role he played was very much that of "last of the cold warriors". I remember him sniffing the air melodramatically and declaring that he could detect 'the stench of incipient Marxism'. He hovered about on the fringes of the event dressed in black like an angry bat. I think his role at N5M was a mirror of the role he played on Nettime. Scourge of the Euro lefties. As for the wider relationship between N5M2 and Nettime, paradoxically considering Nettime's European versus America dialectic of those days, many of the key links between Nettime and conference were based around the contribution of American personalities and practice. Peter Lamborn Wilson, Critical Art Ensemble, and, lets face it, Barlow".
29. *Nettime*, February 13, 1996, forwarded by Marleen Stikker.

Debate about the declaration did not pick up immediately. There were holes in the communication, filled up by sudden bursts of online activity from Pit Schultz, who kept on forwarding key texts to create new contexts for an alternative cyber discourse. Nettime was still in the trial and error period. In early February 1996 the list moved to desk.nl, a recently founded content provider for arts and culture in Amsterdam which attracted a lot of artists for a while to work in media lab environment, sharing knowledge with each other, making optimal use of the dedicated line to the Net, sponsored by xs4all.nl, this was a luxury in 1995-96. It is in this period that Heath Bunting started posting his "conflict creating" messages, one of the many beginnings of "net. art". The well-documented emergence of the net.art phenomena and debate ("Netart vs. Art on the Net") is closely tied to the first period of Nettime.[30] It was also Heath Bunting, making fun of Nettime's seriousness, who had graffittied "John Perry Barbrook" on the façade of the Hungarian art academy.

Next stop: Madrid

Frequency of postings increased, and by mid 1996 the list had become fully operational. A next reader, *ZKP 2 Reinventing Net Critique*, produced for the Fifth Cyberconf in Madrid, June 1996, was going to direct and systematize the Nettime project considerably. The aim of the paper and online publication was to "infiltrate the *Wired* discourse machine, trying to modulate myth building processes with external noise, Euro-negativity and illegal knowledge (..), not pluralistic but heterogeneous, not interdisciplinary but intensive, based on near-life-experiences and almost finished work". Efforts were made to compile online discussions into readable threads thereby bringing into being what "collaborative text filtering" could look like. The introduction denies that there is such a thing as 'the position' of net critique. There is no strategy, a 'new order' or unified movement attached to the concept of net criticism. "The net is not the world. There are a lot of battles to win, but there is no holy war". Kritik is defined as a method to "Bind information back to subjectivity and collective strata, to localize desires, to express alienation and the pain of being digital, find narratives which make sense without abusing unquestionable collective myths".[31] As the performance artist Guillermo Gómez-Peña said to Barlow, during a debate at 5CyberConf in Madrid: "Perhaps you feel like a misunderstood hero, like some kind of Kevin Costner, and you feel the natives are ungrateful". Netzkritik, at its best, was an ungrateful gesture.

30. For an introduction to net.art and the role net.artists played within the Nettime contexts, see: Tilman Baumgärtel, *net.art*, Verlag für moderne Kunst, Nürnberg 1999 (in German) and net.art 2.0, Verlag für moderne Kunst, Nürnberg 2001 (German/English), Verena Kuni (Hg.), *Netzkunst*, Jahrbuch 98-99, Institut für moderne Kunst, Nürnberg, 1999. A compilation of the 97 net.art debate on *Nettime* can be found in the free *ZKP4* newspaper, available on the www.*Nettime*.org site. Tilman Baumgärtel put together a remix of his interviews on net.art for the Nettime anthology *Readme!*, "Art on the Internet, The Rough Remix," Brooklyn: *Autonomedia*, 1999, pp. 229-240. Another source are the numerous interviews with net artists conducted by Josephine Bosma, posted on the Nettime list.
31. Toward a portable net critique, Introduction to *ZKP2 @5Cyberconf*, Madrid, June 1996 (English/Spanish), p. 4.

Consciously, Nettime had not been conceived as a European platform. There was no desire to appeal to Brussels for funding, providing Euro politicians with a counter ideology.[32] Eurocrats were anyway not interested in a specific European bottom-up approach. Most of the EU IT- funding disappeared into consortiums of the electronics and telco industries. Remember Phillips' disastrous CD-I, which ran on a TV, failing to compete with the desktop PC CD-ROM standard. The necessity of an open European net culture was not understood in the first place. The task of governments and the EU was to regulate, not to stimulate. Euro citizens were supposed to be consumers, not innovators. The Bangemann Report and the Information Society concepts all had rather backward looking ideas on culture in which historical content, presented as Europe's rich cultural heritage would be brought online, not contemporary forms of expression.[33] As it proved to be next to impossible to compete with transnational corporations for research money, serious collaborative software and interface developments did not get off the ground, at least not within the wider Nettime context. Instead, Nettime was set up as a working dialogue and collaboration between individuals and small institutions from Europe and the United States and, increasingly, elsewhere. The hegemony of the United States was well understood, and not resented, in line with the way in which Michael Hardt and Antonio Negri described the workings of Empire, the book they wrote during the Internet hype years, "well after the Persian War, well before the beginning of the war in Kosovo". Following their terminology we could describe the Internet as an Imperial system, not by definition a tool in the hands of US imperialism. In contrast to imperialism, "Empire establishes no territorial center of power and does not rely on fixed boundaries or barriers. It is a decentralised and deterritorializing apparatus of rule that progressively incorporates the entire global realm within its open, expanding frontiers. Empire manages hybrid identities, flexible hierarchies, and plural exchanges through modulating networks of commands".[34] Many will read this as a definition of the Internet. The "multitude" resistance, as Hardt/Negri indicate, has to be located inside "Empire", inside the computer

32. Other initiatives such as the Syndicate list, founded at the second N5M conference in January 1996 did have a more explicit European agenda (goto: www.v2.nl/Syndicate). Syndicate's intention was to intensify the growing exchange between East- and West-European new media cultures. A more formal structure for this was going to be the European Cultural Backbone, a research exchange program between a limited number of European cultural media labs. In some instances Nettime was listed as a partner in these networks, for example at the P2P
33. For a critical analysis of Europe's Internet policy and anxiety, and a comparison with that of the United States, see: Korinna Patelis, *The Political Economy of the Internet*, PhD., Department of Media and Communications, Goldsmiths College, London, June 2000, pp. 113-141.
34. Michael Hardt & Antonio Negri, *Empire*, Cambridge (Mass.): Harvard University Press, 2000, p. XII. Regrettably, the understanding of Internet-related issues is rather rudimentary. Comparable, and, in my opinion related, to the surprising absence in this study of an analysis of the fall of the Berlin Wall in 1989, the following "transitions" in Eastern Europe and the disintegration of the Soviet Union. In the one passage the Internet is compared with the Roman roads and the 19th century railways and 20th century telephone networks, with the difference that now production is taking place within the computer networks. "The novelty of the new information infrastructure is the fact that it is embedded within and completely immanent to the new production processes". Hardt & Negri describe the information highways as a hybrid of the rhizomatic-democratic and oligopolistic-tree model. "There is already a massive centralization of control through the (de facto or de jure) unification of the major elements of the information and communication power structure. The new communication technologies, which hold out the promise of a new democracy and a new social equality, have in fact created new lines of inequality and exclusion, both within the dominant countries and especially outside them". (p.300)

networks for that matter, "linked to a new world, a world that knows no outside. It knows only an inside, a vital and ineluctable participation in the set of social structures, with no possibility of transcending them". This is not as a representational but as a constituent activity. "Militancy today is a positive, constructive, and innovative activity".[35] The *ZKP 2* intro claims the Nettime "textual interpretation as a kind of heresy against the ruling symbolic orders," with one big difference compared to the older critiques: "Netzkritik operates from within the borders, from inside the system," using "infiltration, guerilla semiotics, humor, excluded knowledge, local ontologies, tactical negativity and certain degree of over-exaggerated subjectivity".

Domain name wars

Another Nettime topic from early on is the economics and politics of domain names, associated with the Name.Space initiative of New York artist/activist Paul Garrin. He was one of the attendees of the Venice meeting. His www.mediafilter.org had been arguably one of the first media activist sites on the World Wide Web. In his manifesto, "The Disappearance of Public Space on the Net" from early 1996 Garrin warns that "the race toward "privatization" is taking place behind closed doors and in corporate boardrooms, well outside the sphere of public debate, and threatens the very existence of free speech over electronic networks. Just as shopping malls are private property, where "freedom of speech" means that the owners of the property have the right to silence those with whom they disagree, often using their own private security personnel (rent-a cops), the private spaces on the Internet will follow the same model".[36] Garrin called to "participate in and support the growing number of independent sites on the World Wide Web. Create sites and link to other independent sites. Take control of the web and create content - independent worldwide distribution is now in our hands". During the Nettime meeting after Next Five Minutes 2 he elaborated these ideas to form a PAN, a "permanent autonomous network" (in contrast to the festive eventism of Hakim Bey's Temporary Autonomous Zone), which would not only share content but also infrastructure. This proposal, which in fact meant starting an alternative telco was perhaps a bit too ambitious. In the course of 1996 Garrin boiled down PAN to one concrete issue, the fight for the liberation of domain name space. The aim was to challenge the monopoly of Network Solutions Inc., the only company entitled to sell .com, .org and .net domain names. In October 1996 Paul Garrin launched Name.Space, an initiative that in the beginning would be closely tied to the Nettime community. "The 'organizational' nature of net names reflect the bureaucratic, militaristic mindset of the centralized agency, InterNIC, now operating as a private, highly profitable monopoly called Network Solutions, Inc".[37] Alternative root name servers had been set up in New York (MediaFilter, Zero Tolerance), Helsinki (muuMediaBase), Amsterdam (desk.nl), Berlin (Internationale Stadt) and Ljubljana (Lois/Ljudmila). By creating as many top level domains (such as .com) as possible, Name.Space aimed "to de-militarize the mindset of the net and open it up to more democratic models. By freeing the constraints of naming conventions imposed by the central authority, the NIC, the artificial shortages created by the command economy of names will disappear, and take along with it the name speculators who bought up thousands of names (for $100 each) in hopes of auctioning them off to the highest bidder".

35. Michael Hardt & Antonio Negri, *Empire*, p. 412.
36. Paul Garrin, The Disappearance of Public Space on the Net, *Nettime*, January 6, 1996.
37. Quotes from: Liberation of NameSpace by MediaFilter, *Nettime*, October 12, 1996. Other related postings in that same period: Your.Name.Here by Douglas Rushkoff (NYT Wire Service), *Nettime*, November 12, 1996, Networking with Spooks by John Dillon, *Nettime*, November 29, 1996, Expanding the Internet Namespace by MediaFilter, *Nettime*, November 29, 1996.

It is impossible here to summarize and discuss all the Nettime postings related to Name.Space and the domain name/ICANN issue. Arguably it is the most frequently—and bitterly debated topic. I will here only touch on some highlights where Name.Space and the domain name issue influenced the course of the Nettime project. Things turned strange early December with a posting of Paul Garrin saying "the Name War on the net began last night with a mysterious caller at 1am, trawling for information, you could say, 'socially engineering' me, about Name.Space". Name.Space got surrounded with paranoia. The network of test servers did not grow further and constantly had to overcome technical troubles which, according to some were the results of the deep conceptual flaws. The unclear status of Name.Space was another reason for its early stagnation. Was it an art project, a proposal developed by the video artist/media activist Garrin, more effective in the symbolic/conceptual space than in a technical sense? There was careful support within the community, but the somewhat paranoia and workaholic solo-artist Garrin didn't quite know how to turn the sympathy into a working consortium of partners which would be ready to push the proposal into a next stage of a business plan, as other Internet startups were about to do around 1996-97. Over the time confusion and irritation grew. Was Name.Space an art project, a collective project or rather a venture, closed controlled by Paul Garrin. Name.Space's main support was in Europe, which was still a few years behind the United States and without (financial) support in the United States Name.Space was destined to get stuck in a void.[38]

Net.art on nettime

By the end of 1996 the diversity of topics and threads had grown. The Budapest Metaforum 3 conference had seen a debate on the political economy of the Net, between Manuel DeLanda and Richard Barbrook, which continued on the list.[39] The attention shifted from *Wired* to the question of content production in general. Regional diversity began to set in, with posting not just from Italy, Germany, Holland, UK, Australia and the United States. The question of the "Englishes" was discussed . Another thread dealt with the *Wired* 5.03 cover story on "push media," an almost imaginary media concept that had to pushed because the Web wasn't going fast enough, not generating any value, not revolutionizing at the highest speed.

Beside frequent net.art postings by Vuk Cosic, Heath Bunting, Alexei Shulgin and Josephine Bosma, the 'net.radio' phenomena came on the radar screen with the temporary closure of the

38. I have been a critical supporter of Garrin's Name.Space until late 1999, interpreting it as a very serious social sculpture in the Beuys tradition, not as a business or technology but as an art project that takes itself bloody serious in its attempt to invade and interrupt the corporatization of the Net. The temporary highjack of *Nettime* by Garrin in October 1998 (see *Nettime* archive) was a real test in loyalty. The final break came in February 2000 with accusations of Garrin sniffing into correspondance between Nettime moderators and a proposed "Reclaim the Net" campaign going nowhere. Garrin's paranoia conspiracy culture bearded bitter fruits. For others the Name.Space disputes and *Nettime*-free had been reasons to uphold affiliation with Name.Space.
39. The Barbrook-DeLanda controversy on the nature of markets took place during the Metaforum 3, for the program see *Nettime*, October 1, 1996. Manuel DeLanda's essay "Markets, Antimarkets and Network Economics" was posted on October 6, 1996, together with Richard Barbrook's text "Hi-Tech Neo-Liberals". A transcript of Richard Barbrook's talk, "Markets as Work" can be found under the date November 14, 1996. The response of Manuel DeLanda was posted on November 17, 1996. On November 21, 1996 DeLanda posted another contribution, "Some Background on the Debate Barbook/DeLanda". See also the transcript of the closing debate of Metaforum 3, The Best Content Money Can Buy, November 7, 1996.

independent Belgrade radio station B92 and its migration to the Net as a first, major case how streaming media (using real audio software) could be used in a tactical way to circumvent censorship.[40] Simultaneously a debate sparked off around a text of the H.G.Wells inspired 'open conspiracy' IT- investor Mark Stahlman, "The English Ideology and *Wired* Magazine". Written in reference to Barbrook/Cameron's "The Californian Ideology," Stahlman traced the intellectual genealogy of Wired's techno-utopianism back to England. "*Wired* is a house-organ for the modern political expression of British radical liberalism and its philosophical partner British radical empiricism". Wired is here characterized as the organ of a new elite behind the "World State" with the aim to establish a "New Dark Age". Mark Stahlman had been one of the speakers in Budapest at Metaforum 3 where he debated his viewpoints with Richard Barbrook and Erik Davis and would become a long-term contributor to Nettime, provoking animated exchanges of arguments.[41]

In retrospect, the year 1997 turned out to become a turning point of the Nettime list community. The end of the utopian chapter of the Internet hype, at least in countries such as the United States, UK, Canada, Australia and Northern Europe was in sight. With the list operational, regular meetings and a growing publication practice, the question was what the actual critical potential of Nettime was going to look like, beyond the already successful task as a cross-cultural debating club on the "cultural politics of the Net". By the end of 1996 the first non-English Nettime list, in Dutch, had been launched, with a German one in the making. A German anthology of critical Internet texts was edited, to be published under the name of Nettime.[42]

The Ljubljana meeting

The opportunity arose to host a Nettime meeting in Ljubljana, the capital of Slovenia, the prosperous part of Former Yugoslavia, not effected by the war, yet within reach, visa-wise, for East-European participants. Different branches of the Open Society Institute, financed by the Hungarian-American philanthropist George Soros, sponsored the three days meeting.[43]

40. Radio B92 Press Release and Drazen Pantic, Time for Justice!, *Nettime*, November 28, 1996. Also: Andreas Broeckmann, Belgrade Radio B92 off the air--on the Net, forwarding a report from Roger Kenbeek and the translated report by Bart Rijs from the Dutch daily De Volkskrant, Revolution in Serbia begins with a Homepage, December 4 1996. An earlier, informal report from Adrienne van Heteren, October 11, 1996, explained the background and activities of B92's Internet department www.opennet.org.
41. Mark Stahlman, The English Ideology and Wired Magazine, posted in three parts, *Nettime*, November 18/21/27, 1996. In response, on November 27, 1996 an email exchange between Mark Stahlman and Erik Davis was published.
42. Nettime (Hrg.), *Netzkritik*, Edition ID-Archiv, Berlin, 1997.
43. During the mid-late nineties discussions concerning George Soros and his network policies took place on both the *Nettime* and Syndicate lists. For example: Mark Stahlman, The Capitalist Threat, NGOs and Soros, *Nettime*, February 5, 1997 (see also other of his later postings), John Horvath, The Soros Network, *Nettime,* February 7, 1997, Ivo Skoric, Uncle Soros, The First Capitalist Dissident, *Nettime*, April 4, 1997, Calin Dan, The Dictatorship of Good Will, *Nettime*, May 10, 1997, Geert Lovink, The Art of Being Independent, On NGOs and the Soros Debate, *Nettime*, May 13, 1997, Inke Arns/Andreas Broeckmann, Small Media Normality in the East, *Nettime*, May 16, 1997, Paul Stubbs on NGOs, *Nettime*, May 23, 1997, Paul Treanor, Why NGOs are wrong, *Nettime*, May 30, 1997. The debate continued, responding to accusations on George Soros' involvement in the Asian currency crisis. See the Blaming Soros, the Burmese currency crisis thread, *Nettime*, July 29, 1997 and onwards.

Through the previous Club Berlin contacts (KunstWerke, Berlin Biennale), another, even bigger possibility popped up to do a project during the Documenta X, the world's biggest contemporary art exhibition, taking place every five years in Kassel, Germany. A still empty architectural environment, full of "urban fluidity," had to be filled up with content. In order to get there, the "hybrid workspace" concept was developed, a temporary media lab set-up, a response to the growing discontent with conferences and short, informal meetings. There was (net)work(ing) to be done, the phase of debating and socializing was getting to a close, at least within this particular stage of critical net culture.

All the options were put together in a letter to the list.[44] The "ZK-plan for 1997" contained a sheer endless list of possible projects and problems the virtual, non-institutionalized Nettime tribe could run into, while increasing it's engagements with the real world of arts and media, money and power. In the plan Nettime was divided in three layers: the social galaxy (meetings), the Gutenberg galaxy (paper publications) and Turing galaxy (online initiatives). Traffic in this period started to grow seriously, with, for example, part one of the Name.Space debate between its founder Paul Garrin and Graham Cook, editor of the Cook Report. Was the domain name terrain still open for decentralized approach or would it fall praise to corporate appropriation? And was the radical opening of the top-level domain names, as Garrin suggested, technically possible anyway? Periods of overheating and noise increase. With 400 participants on an open, unmoderated list Nettime was testing its borders.[45]

In the first mailing on the character of Nettime itself, Pauline van Mourik Broekman and Josephine Bosma describe the list as a social entity, an "island of humanity in a mediated world of the net and its periphery". However, they point at the tension between professional intellectuals (most of them male Anglo-Saxon academics) and "illiterate" media workers.

Without wanting to lose the credibility of net criticism they call for "an awareness of how textual critical authority, maybe invisible to its producer, can simultaneously encourage and suppress the introduction of new voices/communications". This is not only a reference to the inequality between native speaking writers and those for whom English is their second or third language, but also to the growing anxiety between precisely formulated critiques and casual remarks, and even more fundamental: between the beauty of raw code (ascii art) and the usage of text in its conventional semantic meaning (theory).[46] The fragile global mix of critics, artists, academics and other workers on the electronic forefront could easily fall apart.

In preparation for the Nettime meeting a fourth ZKP was produced in Ljubljana, this time not a xerox publication of a few hundred copies but a free tabloid-size newspaper of 64 pages in a cir-

44. Geert Lovink and Pit Schultz , To All Nettime Members, Request for Comments - Call for Collaboration The Central Committee Plan for 1997, Some Small and Big Nettime Reforms, *Nettime*, February 7, 1997.
45. A graphic visualization of the posting statistics can be found in Readme!, filtered by *Nettime*, pp. 22-23. It notes that within the period of December 1995 and October 1998 the average of postings was 2.8 per day, with a one time maximum of 26.
46. Pauline van Mourik Broekman/Josephine Bosma, Het Stuk, *Nettime*, January 27, 1997, also in: *Readme!*, filtered by Nettime, pp. 371-374.

culation of 10,000. ZKP4 contained Nettime material from a good half a year of text production, including new texts specially commissioned for this occasion, as had been the case in the case of previous ZKPs.[47] The main part of the paper piles, content-wise comparable to a medium size book, was distributed at Hybrid Workspace during the long summer of Documenta X and at other conferences such as Ars Electronica.

From 21-23 May 1997 120 Nettimers (out of 400 subscribers) gathered for the "Beauty and the East" event, with a public part consisting of lectures and club events, and the actual Nettime meeting taking place in an old school building somewhat out of town where the Soros-sponsored digital media lab Ljudmila had just started its operations. A patchwork of small grants had made it possible for many participants to come.[48] The atmosphere was one of great excitement about this virtual listserv entity with so many different personalities, backgrounds and intentions on it, capable of gathering IRL (in real life). On the other hand, many members had already met elsewhere, and Beauty and the East was just another stop for the conference hoppers. Not quite so, perhaps. There was something in the air. This was not just a meeting of friends. There was something at stake, namely what Nettime and the wider critical Internet culture was going to be about. Would the fragile coalition between net.artist and theorists last? The debates were raw, sometimes even hostile. There was a sense of mistrust in the air. Would there be enough space for everyone to expand his or her digital desires under the roof called Nettime?

47. The call for contributions, written by Pit Schultz, posted on *Nettime* April 20, 1997 gives a good idea about the rising tensions--and feelings of excitement--where Nettime as a collection of projects was heading. "Instead of stating a long list of what is good and bad, meditating with you about the categorical imperative of spamming, complaining about the social effects of egoland, measuring the productive difference between The Well dialogues and Nettime monologues, seeking for social context as content control, do simply get a life off the screen, seek for the seasonal highs and lows of an 'esprit de la liste', installing a semi-automatic bozo filter, establishing a god's eye of correct jargon, fighting a holy war against ideological ghosts, trying hard to really communicate and come together, trying even harder to follow the subterranean threads or even the main vectors of argumentation, trying to understand the Tao of email or dreaming about pushing the big red moderator button - instead of all these tasks for the electronic Sisyphus, i think that the golden path runs just next to us". The making of *ZKP4* in Ljubljana, in the week before the meeting was accompanied with production problems. The social costs of stressful voluntary work under deadline had reached a peak and the publication series ZKP came to an end. The monumental production of the readme! anthology, one and half years later at De Waag in Amsterdam, with collaborative remote and local editorial and design work going on for weeks and weeks, proved to be even more stressful. Up to this day, readme! has been the last print publication published and/or edited by Nettime.
48. A participants list of Beauty and the East can be found at http://www.ljudmila.org/*Nettime*/all.htm. A more extensive list was posted on *Nettime* by Vuk Cosic, May 19, 1997.The announcement text plus program: http://www.ljudmila.org/*Nettime*/announce.htm. On the same site you can find a sound archive of the radio programs related to Beauty and the East, the "Net Criticism Juke Box": http://www.ljudmila.org/*Nettime*/jukebox.htm. The URL of the photo gallery, made by Marie Ringler is: http://www.t0.or.at/foto/*Nettime*/down2.html. A few reports: Marina Grzinic, An Insider's Report from the Nettime Squad Meeting in Ljubljana, Telepolis http://www.heise.de/tp/english/pop/event_1/4071/1.html, David Hudson (in German), Alptraum Wunscherfüllung, on http://www.spiegel.de/netzwelt/netzkultur/0,1518,13422,00.html, an anonymous report on the Ars Electronica site: www.aec.at/lounge/*Nettime* and Tilman Baumgärtel in *Telepolis* (in German): http://www.heise.de/tp/deutsch/inhalt/konf/3086/1.html

The meeting started with an update of the numerous upcoming projects within the arts context such as Documenta X (Hybrid Workspace) and the plan to do a week long "OpenX" lab at Ars Electronica. A discussion kicked off how the emerging net.art would relate to mainstream art institutions. Would it perhaps be better to drop the net.art label and instead use the broader term digital artisans? But why drop a brand name that was filling so quickly with meaning, generating so much public attention? Was net.art going to limit itself, involuntarily even, to the visual arts system? A repeat of the classic visual arts/applied arts distinction? The proposed term digital artisan had an economic, entrepreneurial connotation whereas net.art, perhaps comparable to mail art and video art, would have the (unlucky?) historical task to talk itself into the museum and arts market, carefully guarded by curators, critics and gallery owners. The creation of a separate net.art genre could lead to a split in which some were and other were not seen as true net.artists, thereby creating yet another star system. But the split was already there. The inevitable net.art meme was already out.

The net.art debate

A week before "Beauty and the East" an anonymous Digital Artisans Manifesto had been posted on Nettime.[49] The artisan label would be an inclusive one, involving designers, programmers and text editors into its definition. "We celebrate the Promethean power of our labour and imagination to shape the virtual world. By hacking, coding, designing and mixing, we build the wired future through our own efforts". The manifesto looked for coalition partners to build a sustainable economic model for the mainly freelance digital work force in an attempt to avoid a situation in which recognition from within the arts world would become the only possible source of income. Soon after Ljubljana, some of the attending net.artists such as Heath Bunting, Vuk Cosic (one of the organizers of Beauty and the East), Jodi, Olia Lialina, Alexei Shulgin and Rachel Baker were to get involved in specific net.art channels such as the *7-11* list. In part, the net.art debate moved on to the *Rhizome* list. A potential clash of two strategies, code and ASCII txt as an aesthetic object versus text as carrier of critical discourse was on the rise.[50] Subversive art strategies were increasingly going to be tested upon the Nettime community itself, putting the level of mutual trust under pressure.

Besides net.art, the other central debate was on "Virtual Europe, mini-state thinking and the construction of a Data East". It dealt with topics such as the rise of NGOs, the myths of civil society, a critique of the Soros Internet program and absent EU policies.[51] Paul Stubbs from Zagreb delivered a lecture on the topic. The discussion soon focused on George Soros and the dependency in the East within the new media arts and culture scenes on the network of institutions, lead by the New York Open Society Institute, in short "Soros". Even this meeting would not have been possible without money from "Uncle George". To what extend was critique possible, thereby risking vital support in a situation of straight-out poverty? And where would alternative

49. Anonymous, The Digital Artisans Manifesto, *Nettime*, May 19, 1997.
50. <AREA SHAPE=RECT COORDS="954,262,1047,293" HREF=" <USEMAP="#xy"><!--NETTIME> </MAP>, Jodi, map, *Nettime*, 20 May 1997. For a summary of the debate in the period leading to the Beauty and the East meeting, see Robert Adrian, net.art on *Nettime*, May 11, 1997.
51. Inke Arns, Beauty and the East, Day Two, threads to prepare the debate, *Nettime*, May 18, 1997.

funding come from?[52] This was not an abstract issue. Participants from a variety of localities such as Novi Sad (Absolutno), Tirana (Edi Muka), Sarajevo, Riga (E-lab) and Belgrade (B-92/Opennet) came up with detailed reports. Concrete proposals were discussed how to solve acute bandwidth problems.

Another topic was on/offline publishing on the question of content and the abolishment of the many-to-many model in favor of the temptation to make money through funky business schemes.[53] At times the meeting had a conference character with lectures of, for example, David Bennahum ("How computers came to be cool") and David Hudson from the *Rewired* list who, with his insider knowledge from the Californian digerati world, already sensed where the "new economy" was heading. In addition to the critical journalism perspective, Peter Lamborn Wilson came up for an evening filling meta-historical analysis of the cyber dreams and money "gone to heaven". Another highlight was the lecture-performance of Critical Art Ensemble on politics of cyber bodies. Later on at night the crowd moved to an eighties underground club, K4.

On day three, with half of the participants left, a practical Nettime meeting was held outside KUD without much result. The prestigious project to bring out a comprehensive anthology was discussed (code word: Nettime bible) as well as the pressing question of moderation. So far the list had not gone out of control and complaints about information overload/noise remained few. But with the current growth rate of both subscribers and postings the end of the innocent phase was in sight and some stage Pit Schultz would "push the red button," as he called switching the majordomo list software into moderation mode. This not only meant that someone would start looking into noise/signal ratios but also that this person, or a group of people who have to be online at least once a day, if not more, an unlikely situation in the nomadic European slacker world. Who was going to take up the responsibility to decide what was right and wrong? What to do with silly one-liners? How to curb the growing amount of announcements? They could only be filtered after someone had "pushed the red button".

The Piran Manifesto

The next day, a Sunday, the caravan went out on a day drive to Piran, a picturesque Venetian port town at the Slovenian Adriatic coast. A smaller group continued to Vienna where a Nettime press conference at the new media access center Public Netbase took place. At this occasion the "Piran Nettime Manifesto" was presented, signed by Nettime, Vienna ad-hoc committee. It read:

> Last week Nettimers frolicked in the real space/time continuum on the Slovenian coast in the town of Piran where the following bulletin were established: • Nettime declares Information War. We denounce pan-capitalism and demand reparations. Cyberspace is where your bankruptcy takes place. • Nettime launches crusade against data barbarism in the virtual holy land. • We celebrate the re-mapping of the Ex-East/Ex-West and the return to geography. • We respect the return to "alt.cultures" and pagan software structures ("It's normal!"). • Deprivatize corporate content, liberate the virtual enclosures and storm the content castles! • Refuse the

52. The full text of Paul Stubbs' lecture: http://www.moneynations.ch/topics/euroland/text/paulblitz.htm.
53. Pit Schultz, Beauty and the East, First Day Debate, *Nettime*, May 19, 1997. The final program was posted on *Nettime*, May 20, 1997.

> institutionalization of net processes. • We reject pornography on the net unless well made. • We are still, until this day, rejecting make-work schemes and libertarian declarations of independence. • NGOs are the future oppressive post-governments of the world. • We support experimental data transfer technology. • Participate in the Nettime retirement plan, zero work by age 40. • The critique of the image is the defense of the imagination. • Nettime could be Dreamtime.[54]

The manifest was meant to give the amorphous structure a direction and provoke a debate about common goals. The Beauty and the East had ended without conclusions. The mixed responses to the Piran Manifesto on the list indicated that Nettime was neither a group nor a movement. It was not going to transcend its character as a list community, despite the efforts to turn it into something more. There was no consensus about this "more," and Ljubljana had proven that there was no desire to come up with a decision making procedure (voting, legal structures, a board, etc.). Power remained delegated to the Central Committee, the ZK, a small and half-way open group of founders that had pushed things this far and had to sort out where to go next. As long as the list was groovy the power issue was not of real concern to most contributors.

It proved hard to push such a heterogeneous mailinglist community into a more traditional—and transparent—form of organization, with a program and internal democracy. The topics discussed in Ljubljana; net.art, Eastern Europe and the political economy of the Net, were there to stay as the main Nettime threads for the years to come. The issues were perhaps even the essence of the whole undertaking, if not Nettime itself. Attempts to push the Nettime agenda beyond its list character were bound to fail.

It was time for potlatch and burnout. A few weeks after Ljubljana the Hybrid Workspace at Documenta X in Kassel opened, providing Nettime with daily content for a good 100 days to come. This temporary media lab aimed to push network culture forward, bringing together 15 groups in a total of 220 participants, each working for a ten days period both on (digital) media projects while presenting their work at the same time to the 600,000 visitors. The German No One is Illegal campaign kicked off here, the Syndicate list did its Deep Europe meeting, there was talk of tactical media, the Berlin group Convex TV built micro radio transmitters, attempts got under way to connect the net.radio initiatives (a topic also discussed in Ljubljana), resulting in the net.radio Xchange list, ran from Riga by the E-lab group. The "We Want Bandwidth!" Campaign mapped access inequalities and economic interest behind the Internet infrastructure boom. The last and largest group was the Old Boys Network, a meeting on cyber feminism, linked to two separate mailinglists for women working with new technologies: faces and OBN.[55]

54. Marie Ringler, The Piran Nettime Manifesto, *Nettime*, May 26, 1997. With responses van John Perry Barlow, Mark Stahlman, Ted Byfield, Matthew Smith, Luchezar Boyadjiev. After the response of Richard Barbrook the thread changed into a discussion on "zero work" and pan-capitalism.
55. Old Boys Network: www.obn.org, info on the faces mailinglist for women in new media: http://faces.vis-med.ac.at.

Series of reports and interviews flooded Nettime. The Ljubljana meeting had a long echo on the list. In terms of content and new connections the meeting had proved successful.[56]

Economics of Net culture

What are the economics of list culture? Even with a web archive, email lists hardly generate traffic. While running at virtually no cost, like most virtual communities building up and maintaining a list is time-consuming work, done by volunteers. However, in the case of Nettime it became clear that scores of media professionals were benefiting from the high-level postings and debates. Within the model of the gift economy the netiquette said that those who take were supposed to give back. But were they? By mid-1997 running Nettime, with its expanding what- to-do list, curbing the highly interested yet out of control traffic had become an almost fulltime job for the core group. With a move towards professionalism out of the question the only option left was to slow down the list expansion. A sustainable model had to be found. One way to go was list diversification into topics such as Eastern Europe, net. art, cyberfeminism, net.radio and specific regional and language-based discussion platforms. What is the 'immanent' strategy in such a case? Celebrating the complexity of the moment was of little use.

The initial drive of Nettime, critiquing *Wired*, was fading out. The multi-media *Wired* enterprise—with its own net.radio station, search engine, publishing arm, online magazine, and plans for a TV satellite channel—was growing obese, and was on the verge of collapse. An IPO had failed twice. On the political front, the fall of Newt Gingrich in September 1997 cut off cyber-libertarianism from direct access to Washington inner circles and resources, returning to its original state of hegemonic sub-culture. With the Internet hype turning from metaphysics to Wall Street, the project of net criticism tried to develop its own theory of political economy, to the dislike of artists and cultural critics who would interpret this move as a step back to Marxism (or economic liberalism). Perhaps because the presumed discontent in economics never openly expressed itself. It was more a sense of unfamiliarity after decades of French postmodernist thinking and Anglo-Saxon Cultural Studies, which had their preoccupation in common with ideology, signs and language. The necessity of getting a better understanding of where the Net was heading had already been expressed on numerous occasions. The traditional distrust in business felt in circles of artists, activists and academics didn't really help. Nettime had a hard time to make the jump and get stuck into the next metamorphosis.

Overload and moderation

During August 1997 the second round of the Name.Space debate between Paul Garrin and Gordon Cook had gone out of control and turned into Nettime's first true flame war, causing a near

56. The producer of Hybrid Workspace was Thorsten Schilling, editors were Geert Lovink and Pit Schultz. The documentation of the Hybrid Workspace project was edited and published (with the support of the Society for Old and New Media) on the www.medialounge.net website/CD-ROM and launched at the Next Five Minutes 3 conference in Amsterdam, March 1999. The URL of the archive: http://www.medialounge.net/lounge/workspace/index.html. More on Hybrid WorkSpace and the temporary media lab concept, see the chapter "The Importance of Meetspace" in this book.

collapse of the list. Pushing the red button looked inevitable. Regulating the flow endangered the 'dirtiness,' an essential element that Pit Schultz explained to *Mute* magazine in the following passage:

> Dirtiness is a concept, especially for the digital realm, which produces its own clean dirtiness, take the sound of digital distortion of a CD compared to analogue distortion of Vinyl. Take all kinds of digital effects imitating the analogue dirtiness, which means in the end, a higher resolution, a recursive, deeper, infinite structure. It means here to affirm the noise aspect, but only to generate a more complex pattern out of it. It does not mean "anything goes" or a self-sufficient ethic of productivity. It is slackerish in a way, slows down, speeds up, doesn't care at certain places, just to come back to the ones which are tactically more effective.... there is a whole empirical science behind it, how to bring the Nettime ship through dark waters... how to compress and expand, how to follow the lines of noise/pattern instead of absence/presence…[57]

The wish to avoid dialogues, without forbidding them came out of a disgust against the formalistic approach of democracy, a Habermasian rationale in which argument and counter argument struggle towards a synthesis in order to end in a numbing consensus. The project aimed at creating differences of opinion, questioning the obvious and voicing dissent. "Nettime is not a list of dialogues of quote and requote, but more of a discursive flow of text, of different types, differentializing, contextualizing each other".[58]

The art of moderation concerns virtual diplomacy of the highest rank. List aesthetics is about the creation of a text-only social sculpture. It is meta-visual process art. The work of finding and shifting texts is, in itself, comparable to editing a magazine or running a publishing house. However, the gatekeeper also has to be a connoisseur of art of conversation. The public controversies amongst participants have an aspect of staging open conspiracies. Lists are contemporary version of salons. There is a 'deep opportunism' in the mediators position, having to negotiate with all players in a confidential manner. This is why lists can't grow too fast, reaching their critical mass before the antagonists get to know each other. Anonymity remains for the lurker. Subscribers must have the feeling of being in an open, yet protected environment in which their contributions are properly valued. They are honored guests and equal members at the same time, not in need of a leader, telling them what to think or post. Moderation is about the "politics of antagonism" (Chantal Mouffe).[59] The online struggle between adversaries accommodates a plurality of differences - breaking down consensus, without blowing up the list itself.

The post-1989 ambience of Nettime (the ideology of not having an ideology) was showing itself off. There was a void between the manic drive of activists and its counter image of the entrepre-

57. Interview with Pit Schultz, by Pauline van Mourik Broekman, available in the *Nettime* section of the Hybrid Workspace archive, http://www.medialounge.net/lounge/workspace/main/projects.html In this interview there are a few more paragraphs dealing with possible alternative approaches towards economics related to *Nettime*. Another text in this section is a first *Nettime* history, written by Diana McCarty for an Italian publication, dd. July 20, 1997.
58. Ibid.
59. See Chantal Mouffe, *The Democratic Paradox*, London: Verso, 2000.

neurial nervousness of Internet startups. The "spirit of resistance without a specific goal to strive for" was the atmosphere David Hudson had found in Ljubljana, a meeting that had seen "little solutions". Nettime did not consist of "goofy leftists" (sniping at *Wired*) as Bruce Sterling had once described the Nettimers.[60] It was much more laid back. Fuzzy. The question was much more, admits all the opportunities, to refrain from the typical Euro-continental default settings that spark off self destruction of something previously created. It was about the art of letting it go. Slowing down during a time of growing expectations. Stepping back, not immediately responding to the built-in relentless requests on the screen. "There is the chance that new media creates channels to redirect the flow of power. That's what Nettime is made for. An experimental place for (re) mixes... Never perfect and always 'in becoming,' but not explicit, not descriptive but performative, and pragmatic".[61]

An ecstatic "summer of content" drew to a close. On August 22 1997 Pit Schultz sent out an alarming message to the list concerning moderation, including a list of technical wishes and project update.[62] The scores of questions raised remained unanswered. Pit's call for more democracy was not followed up by concrete proposals for a preferable democratic structure. The unclear, vague structures of the founding ZK period were to be replaced by a rotating group of moderators. But who would appoint them? The silent majority of the 500 subscribers did not really bother with the moderation issue. Two weeks later, a small Nettime meeting took place during Ars Electronica to discuss practical matters concerning moderation, a separate weekly announcement digest and progress in the making of "the Nettime bible," the ambitious plan to capture the Nettime discourse galaxy in a book. Following from this, a working meeting of an editorial team, which would put together a concept and preliminary table of content for the bible at Hybrid Workspace, took place.[63] By mid September Nettime was effectively closed and filtering of messages started, resulting in the first announcer going out on the list. The "Kassel Ad Hoc Committee" reassured that Nettime would remain an open list. "However, moderator(s) will intervene and delete spams, local announcements, self-aggrandizing advertisements, flames, personal conversations, and any other posts clearly lacking content relevant to the general readership. The moderator(s) will also write any necessary backchannel correspondence". Days later the start of the net.art list 7-11, initiated by Vuk Cosic, was announced.

60. Quoted from the English original of David Hudson's Beauty and the East report (in German), Alptraum Wunscherfüllung,http://www.spiegel.de/netzwelt/netzkultur/0,1518,13422,00.html
61. Pit Schultz, in: *Mute* interview (see above).
62. Pit Schultz, the we of Nettime, *Nettime*, August 22, 1997. This postings also contains postings of David Bennahum, Tapio Makela, Steven Carlson, Patrice Riemens and Tilman Baumgärtel, some expressing their disagreement with the Garrin/Cook flame war, others calling for moderation in the light of the decrease in quality.
63. The Ad Hoc Kassel Committee consisted of Janos Sugar, Matt Fuller, Critical Art Ensemble, Patrice Riemens, The Nettime Brothers and Michael van Eeden. Their first report dealing with the issue of moderation, was posted on Nettime, September 14, 1997. The second report, on the making of the bible, was posted on September 18, 1997.

"Rules: no moderation".[64] A fragile coalition had fallen apart. And Nettime could further expand, in a more controlled manner.

1998: consolidation

A few quiet months followed in which not much happened. After having done the approving of messages on his own, the role of daily moderation was handed over from Pit Schultz to Matthew Fuller and Geert Lovink with Ted Byfield joining later on in 1998. Sandra Fouconnier took up the task of compiling weekly announcer. In order to curb the danger of becoming an academic cultural studies list, an active approach to find other content was proposed: "rants - 25% increase 12.8% more manifestos a full 50% more fiction, software reviews - 23.8% increase nasty weird shit - 100%".[65] A response: "Who needs soap if we've got net art critics and no net art... "[66] Still, no major objections to moderation occurred and the list stabilized. Mid February a small Nettime meeting had taken place at The Thing in New York, arranged by Pit Schultz and Diana McCarty. In the spring, activities intensified to get the book project up and in early June Diana sent an overview of the production schedule, sponsorship and distribution to the list.[67] The bible was to be finished by early November in order to be presented at V2, during their Dutch Electronic Arts Festival. Autonomedia was going to be the publisher, but the editing, design and print were going to be done in The Netherlands in order to keep the deadline. Work on the table of contents was done in July during a session in Amsterdam. Serious editing of the 500-page anthology did not start until

64. Vuk Cosic, 7-11 list, in: !more new announcements, *Nettime*, September 20, 1997. List archive: www.7-11.org. One week later Vuk downloaded and republished the entire Documenta X website, thereby saving its content which ignorant bureaucrats in Kassel had decided to take down because they did not want to pay for the Internet traffic in between the art shows (http://www.ljudmila.org/~vuk/dx). The awareness of the importance of an ungoing presence of works, including website conservation still lacked. Years later "Documenta Done" got exhibited at the Slovenian Pavilion during the 2001 Venice Bienale. The Slovenian pavilion was curated by Aurora Fonda, besides Vuk Cosic, she invited 0100101110101101.ORG and Tadej Pogacar (http://absoluteone.ljudmila.org/). Vuk: "The choice of old stuff is meant to direct the focus on the way of displaying net.art contents in a gallery environment. We still have to see how this will work". (*Nettime*, June 2, 2001). A part of the catalogue was dedicated to Nettime content, "NKPVI - Network Komitee Protocols VI", edited by Vuk Cosic and the Nettime moderators Ted Byfield, Felix Stalder, Andrea Mayr and Scott McPhee, thereby continuing the relation between Nettime and the Venice Biennial--and net.art. Vuk, in the introduction: " I have decided to present one more collection of Nettime postings because of this Venice spiral, and also because of the historically non-negotiable fact that net.art owes its communications spine to it. I sincerely hope that the series of clever and humorous writings in this book will seriously stimulate the curious reader in the way Nettime has stimulated net.art".
65. Matthew Fuller/Geert Lovink, *Nettime* moderation, *Nettime*, February 1, 1998. Moderation was done twice a day, with a morning and evening delivery (GMT). Later on in 1998 Ted Byfield and Felix Stalder took up moderation work. A general re-assessment from Pit Schultz after the rotating moderation system had been introduced can be found in his contribution to Jordan Crandall's Eyebeam list (http://www.thing.net/eyebeam/), forwarded to *Nettime*, media, art, economy? April 7, 1998. The analysis dealt with the urgent question of how a sustainable critical net culture could be financed, taking the burn out of individual members into account, and set within the larger context of the Internet economy. " The paradigm of becoming your own little entrepreneur and organizing your little life like a business got already a dimension which can be called totalitarian, in the same irrational sense one had to become a good communist in socialist areas and times".
66. Stefaan Van Ryssen, *Nettime*, February 3, 1998.
67. Diana McCarty, ZKP5 (AKA The Nettime Bible) coming soon!, *Nettime*, 5 June 1998. A next invitation to send in material: Pit Schultz, ZKP5 - the book - call for content 002, *Nettime*, August 18, 1998.

September. During the summer a smaller version of Hybrid Workspace was held in Manchester, UK, Revolting, a temporary media lab ran by Micz Flor.[68] Questions of scaling and building up small, sustainable networks was what counted in the age of 'techno realism' in which projects of the first hours were already on the way out such the New York art site Ada'web and the Berlin provider Internationale Stadt. The selling of *Wired* to Condé Nast in May 1998 wasn't even noticed on Nettime.

Another debate on Nettime during the summer turned away from the moderation issue and focused on "net criticism," a term which had not yet been discussed. As a concept net criticism was potentially still a strange attractor, but in fact remained empty, stiff, tending towards academism. No comparison to the much more imaginative, controversial net.art label, a particular net attitude that had grown into a school or movement of sorts. The net criticism project, started in 1995, needed an update, a 2.0 version and in a conversation between Nettime moderators this possibility was examined.[69] Frank Hartmann responded with a text on "data critique". "While net-criticism as an activity indicates the limits of the Internet with all its disappointed hopes from the 60's ideology, data-critique deals with the philosophical and social assessments of digital technology". For Hartmann the Net is all about creating cultural context as form, not as content. "While deconstructing illusions, the age of enlightenment produced some illusions of their own. What is needed is not a New Enlightenment through technically enhanced individuals but a renewed epistemological agnosticism of sorts, an anti-dualism".[70]

Facing the next hype around e-commerce Jordan Crandall questioned the position of the vanguard. "I don't think there can be a 2.0 of net criticism without a thoroughgoing overhaul of many of its basic assumptions, beginning with the very nature of what it means to engage in critical work today, in a landscape that has changed drastically even in a period of one year. We are beginning to understand how fraught critical positions are now - how contradictory, how hypocritical, how implicated". Rather than opposing the market altogether from an outside position, as Thomas Frank suggests in One Market Under God,71[71] Crandall refers to Bruno

68. The URL of the Revolting temp media lab: www.yourserver.co.uk/revolting.
69. Net Criticism 2.0, A Fast Conversation of Two Moderators with Ted Byfield and Geert Lovink, written in preparation for the '*Nettime* bible', *Nettime*, July 21, 1998. With responses from Jordan Crandall, Brad Brace, John Hopkins, Andreas Broeckmann and Alex Galloway.
70. Frank Hartmann, Towards a Data Critique, *Nettime*, July 21, 1998. Printed in Readme!, filtered by *Nettime*, Brooklyn: Autonomedia, 1999, pp. 490-496. See also his chapter on net criticism in: Frank Hartmann, *Medienphilosophie*, Wien: WUV-Universitätsverlag, 2000, pp. 318-321 and the interview with Frank Hartmann by Geert Lovink, Beyond the dualism of image and text, *Nettime*, June 14, 2000. Here Hartmann raised the question of why *Nettime* had not gone beyond the mailinglist format. "I think <*Nettime*> is just too full of academic lurkers who are keen not to miss some trendy things. Knowing that a lot of the interesting stuff happens outside academia anyway, why did <*Nettime*> not take the chance to develop a cool web interface, name it something like E- THEORY, and become the virtual center for media theory?"
71. "I believe that the key to reining in markets is to confront them from outside (..). What we must have are not more focus groups or a new space where people can express themselves or etiquette lessons for executives but some countervailing power, some force that resists the imperatives in the name of economic democracy". Thomas Frank, *One Market Under God*, New York: Doubleday, 2000, p. XVII.

Latour's notion that there is no outside, only extension. "The extension is what does the work of critique. One doesn't adopt a position against, or in relation to, some exteriority - rather, one extends the network further. When you extend the network further, you bring in more elements, more processes, and prompt further understanding of its pervasiveness and omni-directionality. It is informing, coloring, detailing - tracing threads and processes, making them visible. Maybe we need to EXTEND the market as a network, rather than resist it, developing ways of speaking through it".[72]

Tensions around nettime.free

During September/October 1998 traffic on Nettime sharply increased with commissioned content for the bible pouring in. On October 10, in the middle of an exhausting editing marathon, the following message showed up:

> Hello All, Welcome to NETTIME.FREE, the renewed, UNMODERATED AND OPEN Revival of the Nettime Community! Once again, there is an OPEN LIST for Nettime, free of any unwanted censorship, hidden agendas, personal tastes, anal-retentive book editors/librarians, respiratory diseases, and other information-hostile elements that have corrupted the initial mission of the Nettime list as established by the founders of Nettime in Venice, June, 1995. No more digestion/indigestion...just free flow of information![73]

Immediate responses to this initiative came from the "net.art" side (Vuk Cosic, Ventsislav Zankov, Valery Grancher) with Sandra Fouconnier expressing her anger about the way in which an inner circle made decisions: "A deep sigh of relief... and many thanks to those who took this initiative". Her proposal is to no longer bring out any printed matter ("Nettime, remember?"). And "Nettime-free shall not organize physical meetings (Ljubljana-style) and shall radically avoid offline decision-making. Why? Because this kind of stuff automatically creates 'inner circles' of people who are more involved than others, and automatically deprives a considerable amount of subscribers from important information.(..) Let's try to get things done with the instruments that are to every subscriber's disposal - in this case: email. Openness vs. less overloaded mailboxes. What do you want?"

Others reacted confused, even furious because they had been subscribed to a new list against their will, a violation of netiquette. David Bennahum: "Nettime.free is hereby renamed Nettime.assholes. I hereby submit this post gratefully to moderation. Oh ye Nettime gods, kill or forward this post as ye see fit. Your will is law, and I accept it gratefully, for a list without law is a list of Nettime.assholes". It turned quickly out that Paul Garrin, due to growing skepticism on the Nettime over Name.Space and the dwindling participation of Nettime-related art servers in his alternative domain name undertaken, had copied the Nettime

72. Jordan Crandall, Net criticism 2.0/network extension, *Nettime*, July 28, 1998.
73. Eon@autono.net, Welcome to Nettime.Free, *Nettime*, October 10, 1998. Quoted responses from Sandra Fouconnier, October 11, 1998, A. Cinque Hicks, October 12, 1998, Stefan Wray, October 12, 1998 and Matthew Fuller, October 13, 1998.

subscribers list (using the then still open "who" command of majordomo) and pasted it into a parallel Nettime mailinglist.[74]

Some agreed with filtering out ascii art messages, the "communication without words," from notorious posters, such as Antiorp/Integer/N.N., Max Herman or Brad Brace. Stefan Wray: "Filtering out Antiorp nonsense is fine with me. I don't have time for jibberish from anonymous sources. If people think this is against free speech, now they can read as much nonsensical Antiorp jibberish as they want on the other Nettime list". The tension between the self- importance of content and self-proclaimed subversive quality of net.art had come on the surface.

Moderate voices condemned Garrin but indicated that something had gone wrong with the moderation, during that period done by me, Ted Byfield and Felix Stalder. Armin Medosch asked: "Can Nettime really afford to keep going in this mode of clandestine inner circle politics, which does not just affect the list but also real world matters where Nettime inner circle freemasons are involved?"[75] The early days of brainstorms concerning *Wired* and net.art had gone. Medosch:

> Where are all the people now, who made the list interesting in the first place and now stay so silent? Is their silence not more discomforting then the loud protest of the list hijackers? Probably the saddest thing is how people get so up in arms about these issues and somehow have lost the passion to debate more broadly political and non-personal stuff.[76]

Former Nettime moderator Matthew Fuller comes up with a list of question and choices Nettime-free is facing. "Perhaps what is needed first is for people wanting a strictly unfiltered mailing list for critical writing on the net and related areas to decide what they actually want, and what relationship, if any, it should have to the current Nettime". Josephine Berry posts a declaration on behalf of "Lurkers Anonymous":

> Lurkers shouldn't be admonished but encouraged. They help form the community within which this all happens and because they give an n-dimensionality to events, which means that poseurs can't be sure of their audience and what they're thinking. Uncertainty is useful, it makes us sharpen our wits and back-up our arguments. It means we never know which conversations are being held where beyond all of Nettime's eight circles. It means that what can't be measured can't be instrumentalized.[77]

74. Pit Schultz, explaining the background: "paul garrin is in a very bad situation since the decision made with network solution and the reorganization of the top level domains getting postponed again to 2003. it is a sad moment for his project and the concept of 'tactical media' in general. he invested a lot of money in lawsuits against Network Solutions and the US Administration itself. maintaining the technical infrastructure needed for Name.Space and his employees is expensive too. yet his last possibility is to sue Network Solutions who is actually having a monopoly on the administration on the biggest top level domains and access to the root files ("".) of the DNS system, to pay him back his investments. His aim was a non-regulated model of DNS where thousands of top level domains would be possible. Clearly he is fighting against the big guys here, and there is little chance he can win this Don Quixote fight. In this moment of extreme frustration *Nettime*-free appears". A brief piece on Nettime free, *Nettime*, October 13, 1998.
75. Armin Medosh, *Nettime*, October 13, 1998.
76. Ibid.
77. Josephine Berry, *Nettime*, October 13, 1998.

While postings of contributions to the Nettime book kept coming, with people unsuccessfully attempting to unsubscribe from Nettime-free, it turned out that Nettime-free was not open in the first place. Several messages did not come through, indicating that Paul Garrin was reading incoming messages first, before they went on "Nettime-free". Nettime's system operator Michael van Eeden:

> I find it very rude of you to put me and 850 other people on a list without asking us. Of course, it is possible to see the list as a Work of Art, but the amount of shit (and most of all your personal propaganda) is getting more and more. I have tried to unsubscribe, it doesn't work. I have tried to send a message about this to the list, it doesn't get through. My conclusion is that you didn't even set up a real mail-list - you're 'playing' majordomo yourself.[78]

After five nerve-racking days, Nettime-free ceased to exist. In an explanation to Nettime Paul Garrin gave his motives for "re-routing" Nettime declaring it "an exercise in electronic disturbance". He apologized to those who felt offended or inconvenienced. Faced with massive discontent over his action the "comedic parody" was subsequently revealed as an exercise in information warfare, a "psychological operation" aiming to "polarize the group" (a goal which Garrin achieved). A. Hicks, in a response to Garrin coming out as an infowar artist: "the whole Nettime.free stunt (if indeed that's even what it was) has been the moral equivalent of shooting someone in the head and saying, 'See, as a friend I just wanted to show you how your enemies might shoot you in the head if you're not ready.'"

The Nettime-free 'experiment,' launched in the midst of a stressful and exhausting exercise in "collaborative text filtering" did test the boundaries of net culture, as did the readme! project, a way too large undertaking (of volunteers) in summarizing and superseding the rich and diverse content and contexts, translating it back into print. The constellation of efforts bringing together Internet exchanges with meetings in real life and independently produced printed matter, all aimed to have an instantaneous, yet cool and laid back impact on net culture at large had proven a hard job. However, Nettime didn't fall asleep, it changed as the Net itself constantly did and also survived the dotcom craze in a healthy manner.

Strenghts and weaknesses

This by no means official Nettime history stops here. I can only briefly summarize what happened in the 1999-2002 period. In early 1999, another test came to independent list culture (and in particular Syndicate and Nettime): the Kosovo conflict. Already over 1998 there had been regular postings on the nature of the Kosovo Liberation Army being "NATO backed terrorists," with reports on atrocities and deportations by the Milosevic army, "cyberwars" and numerous cases of media repression in Serbia and Kosovo. The traffic at the height of the Kosovo war in April 1999 reached 3.8 Mb, double the amount of the 1.85 Mb during September 1998 with Readme! in production. The average monthly postings over the year 2000, despite the continuous growth of the list, remained around 2 Mb. A free newspaper (Bastard) was produced in Zagreb by Arkzin that summarized the controversies and critical work done by artists, activists and theorists from

78. Michael van Eeden, *Nettime*, October 13, 1998.

Europe, the USA and elsewhere such as Japan, Australia and Taiwan, in which Nettime was just one node of many. The contexts and networks had shifted. The NATO- debate and globalization issues ("Seattle") were much larger than net criticism and surpassed Nettime, even though strategies of net activism ("hacktivism") remained of importance.

One of the main weaknesses of Nettime is its inability to go beyond the (majordomo) mailinglist software. In the influential peer review online journal *First Monday* one the Nettime moderators, Felix Stalder (together with Jesse Hirsh) writes about the limitation of the majordomo list software and the problems it caused for Nettime.

> In majordomo, moderation means that all posts go into a queue and the moderators—called 'list- owners,' an unfortunate terminology—decide which posts get put though to the list, and which are deleted. This technological set-up makes the moderation process opaque and centralized. List members cannot see which posts the moderators have not approved. Understandably, in the case of Nettime, this has led to a great deal of discussion about censorship and 'power grabbing' moderators. The discussion was particularly acrimonious in the case of traffic-heavy ASCII-art and spam-art that can either be seen as creative experimentation with the medium, or as destructive flooding of a discursive space. Deleting commercial spam, however, was universally favored.[79]

In order to tackle the ongoing exhausting moderation debate in February 2000 a parallel, unmoderated list was set up, Nettime-bold (also using majordomo). A few hundred subscribers receive the raw inbox of the Nettime moderators, including spam, announcements, one liners and double postings.

At this point in time, late 2002, Nettime is still very much alive, having doubled in size again compared to a few years before. A few more non-English lists were added to growing collection, indicating that English no longer is the majority net language. The moderation issues kept coming back but not with the fierceness as before. Something fundamentally had to happen in order to turn Nettime into more than just an extraordinary mailinglist. However, Nettime remained a "high density content zone" (as described in the Readme! Anthology). The quality of the posting remained on a consistent high level. By mid-2002 Nettime had around 3000 subscribers. But something had happened. Felix Stalder in First Monday:

> Despite its many advantages--ease of use, low technical requirements for participating, direct delivery of the messages into members' inboxes - the format of the email list is clearly limited when it comes to collaborative knowledge creation.[80]

According to Felix Stalder the restrictions of the available listserv software cannot be compensated by setting up a parallel, unmoderated list. "Nettime's solution has not essentially changed the fact that there is a very strict hierarchy between moderators and subscribers. While involvement

79. Felix Stalder (with Jesse Hirsch), Open Source Intelligence, in *First Monday*, Issue 7/6 URL: http://www.firstmonday.dk/issues/issue7_6/stalder/.
80. Ibid.

is flexible (ranging from lurkers to frequent contributors) the responsibility is inflexibly restricted to the two fixed social roles enabled by the software (subscriber and moderator)".

If Nettime wasn't going initiate a thread-based web interface along the www.slashdot.org model, as the activist portalwww.indymedia.org had done, what then? Why would a Net community remain so reluctant? Weblogs had become easy to install. A return to the 1996-97 days of publications and meetings seemed unlikely. From the beginning Nettime was run by self- appointed volunteers. Unwilling to professionalize the project, unable to mobilize new waves of voluntary labour, Nettime settled down in a more or less manageable niche. The rotating system of moderators didn't really work anymore. Inevitably the Nettime moderators team got identified with one person who was doing most of work (Ted Byfield), even tough the team consisted of 4-5 people. Less and less the project itself was being discussed on the list. Limiting itself to the email plus web archive formula, Nettime did not take up new challenges like the open publishing weblogs. Neither did it organize meetings, debates or publications anymore.

Nonetheless, working within the mailinglist restrains, on a no budget basis, the Nettime list family had developed an effective and sustainable way of letting thousands of artists, scholars and activists worldwide exchange their critical data. Its strength is lying in the high-level content and inter-disciplinary exchanges. Nettime as 'living net criticism' successfully managed to build a bridge between the technical and economic aspects of the rapidly mutating Internet and broader political and cultural contexts.

CHAPTER FIVE
DEEP EUROPE AND THE KOSOVO-CONFLICT A HISTORY OF THE V2_EAST/SYNDICATE NETWORK

Introduction

This is a case study about the rise and fall of the European cultural network and mailinglist community Syndicate.[1] In August 2001 the Syndicate list exploded and split in two. Founded in early 1996 as a 'post 1989' East-West exchange network between new media artists, Syndicate had grown into a network of 500 members Europe-wide and beyond. Syndicate organized its own meetings and publications, along with the 'virtual' activities such as the list itself, the website and an electronic newsletter. I will not cover all aspects of its five years' existence. I will deal with three elements of its history. First of all I will outline the formation of the network. Second I will focus on the explosion of Syndicate postings during the 1999 Kosovo crisis. In the last part I will analyse the demise of the list as Syndicate was unable to deal with the issue of moderation. Built-up as an informal new media arts network Syndicate did not survive the polarizations of the debates which it plunged into. Its open architecture was vulnerable to the challenges of hackers, trolls and quasi-automatic bots that eventually brought down the Syndicate as a social network.

The intensity of the list traffic—and the circulating arguments and emotions—during the Kosovo war (March-July 1999) form the core subject of this chapter. The debates over the NATO-bombing of Yugoslavia would turn out to be turning point for the larger new media arts community. No one had ever seen such fierce debates, such bitterness. The live reports and debates should be considered Syndicate's 'finest moment.' While elsewhere on the Net domcom greed raged, there was talk in the press of Kosovo as 'the first Internet war.' It was a time to go beyond normalcy and explore networked extremes. The Syndicate case could be read as an allegory of arts and politics in the outgoing 'roaring nineties,' both embodying and reflecting the technological intensities.

The inner life of a list reveals more than discursive threads and communication patterns. There are sophisticated forms of silence, repressed messages and unanswered remarks. Because of the intimacy of email and the immediacy of open, unmoderated channels, lists foreshadow events to come. As 'antennas of culture' they do more then merely discuss current affairs. Online communities do not just reflect events but have the potential to create their own auto-poetic systems and provoke events. For mainstream media and its professional critics discussion lists are an almost invisible cultural phenomena, yet they play a key part in the life of its participants. Lots

1. This research presented here has drawn heavily on the work of Andreas Broeckmann and Inke Arns who not only put a lot of emphasis in building up the V2_East/Syndicate network but have also written about it in numerous occasions. In particular I would like to mention their Syndicate history, Rise and Decline of the Syndicate: the End of an Imagined Community, *Nettime*, November 14, 2001. The URL of the mail archive where the quoted postings can be accessed: http://www.v2.nl/mail/v2east/. Comments by Ted Byfield, Amy Alexander, Melentie Pandilovski and Trebor Scholz on previous versions of this text have been invaluable. Special thanks goes to Janos Sugar.

of incidents are happening on lists that become visible and emerge later in a different form. The story of Syndicate is a didactic one because the hatred that manifested in a medium, which originally was meant to be collaborative and democratic. It could tell something about emerging extreme cultures, establishing a culture of uncertainty and control, and operating way beyond the rational consensus paradigm.

Formation of the network

Syndicate was the brainchild of Andreas Broeckmann, a German new media critic and curator who worked out of the Rotterdam-based V2 new media arts organization. Andreas founded the initiative not long after the related Nettime and Rhizome mailinglists had started. Nettime had quickly emerged as a broader community, initially based on a vibrant USA-Europe exchange, aimed to establish a critical net discourse with input from theorists, artists and other cultural workers. Rhizome, although founded in Berlin by the American Mark Tribe, starting on a server in Amsterdam (desk.nl), had soon after moved operations to New York from where it would primarily focus on the US new media arts scene.

In the autumn of 1995, Andreas Broeckmann had taken a new initiative called V2_East, which aimed at creating a network of people and institutions that were involved with, or interested in media art in Eastern Europe. "V2_East wants to create an infrastructure that will facilitate co-operation between partners in the East and the West, and it will initiate collaborative media art projects," says one of the early statements. Syndicate was going to be the vehicle for V2_East. The Internet mailinglist started in January 1996 during the second 'tactical media' Next Five Minutes conference, held in both Amsterdam and Rotterdam.[2] Ambivalent feelings towards a regional European identity were obvious.

> Becoming an important tool for fostering ties within the media art community in Europe which makes it increasingly obsolete to think in term of 'East' and 'West', and which will eventually make the V2_East initiative itself redundant.[3]

However, as this chapter will explain, it was not a peaceful synthesis that was going to make Syndicate superfluous but conflict and suspicion amongst its members.

In 1995 it was clear that within the context of new media culture Europe would need its own exchange platform. However, 'Europe' was not an easy category to deal with. Euroscepticism aside, who would dare to define Europe? There was no place for a future- oriented 'European culture' in all the EU plans. In the economic schemes culture was going to be the prime domain of the individual nation states. In the Brussels terminology culture equaled heritage, a thing of the past which would compensate for the pressures of globalization. 'European' new media arts as a label would be disdained as yet another hopeless initiative, backed by corrupt insiders with the sole goal to distribute resources amongst a limited group of arts bureaucrats. The 'network4us' was a genuine danger. European networks of cultural organizations had an inherent tendency towards bureaucratic exclusion, favoring old mates with clearly recognisable nametags, employed by established institutions and brand name corporations. Wherever you went in Europe of the nineties, one would be faced with resistance of established cultural institutions against 'the new'. In order to prevent any doubt about the intentions of the founders it was announced that V2_East/Syndicate was going to be "a no-budget network initiative rather than an institution".[4] As in other cases such as the Nettime, Xchange and Fibreculture networks, the zero money approach would result in speed, autonomy and the common pursuit of happiness.

2. See www.n5m.org.
3. Andreas Broeckmann, *Syndicate Newsletter*, November 1996.

East-West relations

During the early to mid nineties many of the exciting media (arts) initiatives didn't come from the recession plagued West but from the 'wild' East which had only recently opened up. To create a network of new media artists and organizations throughout the fifteen countries in the East would have been next to impossible before 1989. This was the time to do it. But how would an equal East-West network function, especially if it was run out of Western Europe? Conspiracy theories thrived, especially in an environment flooded with money from Wall St. speculator/philanthropist George Soros. Was there a hidden neo-colonialist agenda, with new media arts as its forerunner?[5] Easterners were a hard bunch to organize. For historical reasons there was a preference for informal gatherings over official rhetoric of the next round of salvation, this time called 'new media'. There was an unspoken skepticism about exchanges planned from above—and good intentions in general. 'Community' was a contaminated concept that came dangerously close to 'communism.'[6] On the other hand, this was not the right time to be dogmatic and reject opportunities. The longing for a 'normalization' of East-West relations had been a sincere desire for decades. East-European Syndicalists were faced with the dilemma between going out on your own in the big world of the global networks, getting lost easily, and becoming member of a 'cool' network thaqt would attract some excitement, enough to gain the critical speed to enter into another orbit, liberated from the faithful geography (and inferior passports). The last thing to long for was a cozy collective identity. The Syndicate agenda seemed pragmatic enough to give it a try, even though there was a danger of limiting itself to networking arts bureaucrats.

The Syndicate network had to start off low-key and provide its participants with useful information, concrete assistance and collaboration on an equal basis. Building up such an informal network of trust was not going to be all that easy. Numerous informal exchanges in the background took place to lift Syndicate off the ground. By 1996 the Bosnian War had just ended, with the Chechnya conflict still going on. In most East-European countries a tough neo-liberal 'reform' climate had established itself, backed by a variety of political forces, ranging from pragmatic post-communists, newborn conservatives to hard-line ethno-nationalists. The 1989 euphoria and

4. Ibid.
5. Concerns of a Western led takeover of the East may have been fueled by historical precedents. The stalking horse role played by abstract expressionism during the Cold War and revelations of CIA funding for US exhibitions were more then just wild rumors. Articles reconstructing such cases appeared in *Artforum*, written by Max Kozloff and Eva Cockcroft. See also: Serge Guilbaut, *How New York Stole the Idea of Modern Art*, Chicago: University of Chicago Press, 1983.
6. For instance, an 'activist' during Communist times was a low-rank Party member, spreading propaganda on the work floor, spying on others, always ready for betrayal, if necessary. It was therefore not a surprise that Western 'media activism' in the East was met with a certain disdain.

expectations about a generous Marshall plan for the East had all but faded away. Both the USA and individual European powers such as Great Britain, France and Germany continued with their well known, contradictory Balkan 'realpolitik.' With countless inspiring new works of artists from 'the region' circulating, the overall climate in Eastern Europe was swinging between cautious optimism and the grey reality of growing poverty and mutual distrust (if not ethnic hatred). Former Eastern block countries had not yet entered NATO or the EU.
These were the years of 'transition,' as the Euro-American officials had termed the process in such a clean and neutral manner. Expectations could not be too high.

Comparable to Nettime, meetings were essential in order to build such a post East-West network. Syndicate needed a considerable trust amongst participants if it wanted real outcomes. Trust was never going to be achieved just by email. Not everyone had enough foreign language skills to write online contributions in English. The first Syndicate meeting took place in Rotterdam in September 1996 during V2's own DEAF festival, attended by 30 media artists and activists, journalists and curators from 12 Eastern and Western European countries. More Syndicate meetings followed, mostly attended by a few dozen people. These workshops often took place on the edges of festivals and conferences, during the DEAF Festival in Rotterdam (September 1996), the Video Positive Festival in Liverpool (April 1997), the Beauty and the East Conference in Ljubljana (May 1997), Documenta X in Kassel (August 1997), Ars Electronica in Linz (September 1997), the Ostranenie Festival in Dessau (November 1997), a Syndicate meeting and action during the Shaking Hands, Make Conflicts in Stockholm (April 1998), a special Syndicate event in Tirana (May 1998), discussions during the Skopje Electronic Arts Fair in Skopje (October 1998), and the Kosovo crisis gathering in Budapest (April 1999). In between, there were many smaller meetings and joint projects, presentations and workshops happening. Three readers, edited by Inke Arns, were published on the occasion of some of the meetings in which the most important texts from the mailing list were collected.[7] Comparable to the Nettime mailinglist in the 1995-1998 period, Syndicate in 1996-1999 was a traveling social network, moving from event to workshop to conference, from office to café to club, and further to the next airport, train station and bus terminal. Especially in the few years Syndicate existed as an accumulation of meetings, collaborations and 'peer to peer' exchanges, with the list as a secondary tool for exchange.

Deep Europe

The term 'Deep Europe' with which Syndicate became associated goes back to Syndicate's participation in the 1997 Hybrid Workspace project, a temporary media lab that was part of the Documenta X art exhibition in Kassel/Germany. Syndicate was one of 12 groups that organized its own ten days workshop, partially open to the public. A group of 20 artists, mainly from the former East, held debates, screenings and performances. The highlight was the 'visa department' performance, in which all Syndicalists participated. Here, in the dX exhibition visitors had to stand in a long queue, being interrogated before being able to obtain a Deep Europe visa. The announcement states:

> The new lines that run through Europe are historical, political, cultural, artistic, technological, military. The role of the EU and its institutions, the notion of Mittel (central) Europa, old and new ideologies, messianic NGOs and late-capitalist profiteers contribute to a cultural environment in which we have to define new strategies and new tools, whether as artists, activists, writers or organizers.[8]

The text warns not to load the Deep Europe concept with too much meaning—and that's exactly what happened.

The exact origin of the Deep Europe term, before early 1997, remains unclear. It may have a multitude of sources. I can only provide the reader with my interpretation. Deep Europe was such a precise, timely and productive label exactly because of its ambiguity, being neither geographic (East-West) nor time-related (old-new). Deep Europe was proposed as the opposite of fixed identities. The overlapping realities were there to be explored.[9] Caught in-between regions, disciplines, media and institutions the V2_East/Syndicate network was open for those interested in 'Becoming Europe', working with 'Becoming Media'. Obviously, 'Deep Europe' had an ironical undertone of essential values as opposed to superficial simulations. There was nothing 'deep' about the 20th century tragedy called Europe. Deep Europe would grow out of the tension between the crisis of ethnic nation state and the promising poverty of globalism. I would reconstruct the term as a blend of Continental Europe (a notion, used by English islanders) and the astronomic/science fiction term 'deep space'. It is an unknown, yet to be discovered part of Europe, way beyond the bureaucratic borders drawn by EU, the Schengen agreement, NATO and Russia. Europe in this context had to be understood as an open and inclusive, lively translocal network. It is not the Europe that claims universal ownership over civilization.

7. The three Syndicate publications: 1. *Reader of the V2_East/Syndicate Meeting on Documentation and Archiving Media Art in Eastern, Central and South-Eastern Europe* (Rotterdam: V2_Organisatie/DEAF96, 1996,http://colossus.v2.nl/syndicate/synr0.html. 2. *Deep Europe: The 1996-97 edition*. Selected texts from the V2_East/Syndicate mailing list (143 S.), Berlin, October 1997, http://colossus.v2.nl/syndicate/synr1.html. 3. *Junction Skopje*, selected texts from the V2_East/Syndicate mailing list 1997-98, Syndicate Publication Series 002, Skopje, October 1998, published by SCCA Skopje. http://colossus.v2.nl/syndicate/synr2.html.

8. http://www.medialounge.net/lounge/workspace/deep_europe/. First announcement: Andreas Broeckmann, concept 'Deep Europe', *Syndicate*, May 19, 1997. Reports: Dimitri Pilikin, *Syndicate*, August 2, 1997; Kit Blake, Deep Europe Visa Department, *Syndicate*, August 5, 1997; Andreas Broeckmann, Discussion about a European Media Policy, *Syndicate*, August, 5, 1997; Inke Arns, Report from Deep Europe, *Syndicate*, August 12, 1997; Lisa Haskel, Tunneling to Deep Europe, a letter from my island home, *Syndicate*, August 15, 1997.

9. Andreas Broeckmann: "The war in Yugoslavia and Kosovo is the most current, pressing scenario with which cultural practitioners in Europe are faced. Other scenarios, like the slow-motion disintegration of the Russian empire, the re-emergence of the Baltic region, the hazy reality of Mitteleuropa, the precarious role of Albanian, Hungarian, German, Turkish, Basque, Roma, and other minorities in different parts of the continent, are equally precarious, both potentially productive and destructive. The site of these scenarios is Deep Europe, a continent which has its own mental topography and which is neither East nor West, North nor South, but which is made up of the multi-layeredness of identities: the more overlapping identities, the deeper the region". Changing Faces, or Proto-Balkanian Dis-Identifications, *Syndicate*, July 7, 1999, beta version, written for Stephen Kovats (ed.), *Media Revolution*, Frankfurt am Main/New York: Campus Verlag, 1999.

Deep Europe is a rustbelt of history, a vast, green plane, east of Berlin, Prague and Vienna, stretching out, deep into Russia. It consisted of complex layers of provinces, languages and ethnicities, characterized by overlapping territories and dispersed minorities of different religions. For some Deep Europe might be associated with Eastern Prussia, Thrace, Moldavia, Rumeli, Bessarabia, Hargita, and Gallicia. But these were historical names.[10] Beyond such nostalgic geo-historical associations, filled with bittersweet memories of thriving communities, patriotic destiny and horrendous pogroms, Deep Europe was meant as an alternative, imaginative mental landscape, a post-1989 promise that life could be different. Europe could have a future, beyond its tourist destiny as a theme park. The danger of exotic orientalism could be countered with enlightened nihilism. It should be possible to wake up from the nightmare called history. There had to be another agenda, beyond the (necessary) containment strategy to stop Europeans from fighting wars, colonizing the world, expelling and exterminating 'others'. Rejecting both superficial Western mediocrity and backward Eastern despotism, Deep Europe could be read as a desire to knit webs and tell stories about an unrealized, both real and virtual world. Deep Europe could be one of Italo Calvino's 'invisible cities', a shared imaginative space where artists would be able to freely work with the technological tools of their liking, no longer confined by disciplines and traditions.

For moderator Inke Arns Deep Europe expressed

> a new understanding of Europe, an understanding which leads away from a horizontal/homogeneous/binary concept of territory (e.g. East / West) and—by means of a vertical cut through territorial entities—moves towards a new understanding of the different heterogeneous, deep-level, cultural layers and identities which exist next to each other in Europe.[11]

UK new media curator Lisa Haskel, describing what Deep Europe could be all about:

> Not a political position, a utopia or a manifesto, but rather a digging, excavating, tunneling process toward greater understanding and connection, but which fully recognizes different starting points and possible directions: a collaborative process with a shared desire for making connection. There may be hold-ups and some frustrations, quite a bit of hard work is required, but some machinery can perhaps aid us. The result is a channel for exchange for use by both ourselves and others with common aims and interests.[12]

Concepts such as tunnels, channels and rhizomes are used here to indicate how informal, decentralized networks with their "subterranean connections" (Deleuze/Guattari) cut through existing borders.

10. One of the German contemporary essayists who writes about 'unknown' parts of Eastern Europe is Karl Schloegel; see for instance his book *Promenade in Jalta*, Muenchen: Hanser Verlag, 2001.
11. Inke Arns, Beyond the Surfaces: Media Culture versus Media Art or How we learned to love tunnel metaphors, Syndicate, August 23, 1999, written for Stephen Kovats (ed.), *Media Revolution*, Frankfurt am Main/New York: Campus Verlag, 1999.
12. Lisa Haskel, Tunnelling to Deep Europe. A letter from my Island home, *Syndicate*, August 15, 1997, quoted in Inke Arns, Beyond the Surfaces, *Syndicate*, August 23, 1999.

Syndicate as a Network

Unlike usual Internet lists the first Syndicate years hardly generated debates or responses. The one or two postings a day were mainly festival and project announcements. Inke and Andreas: "Attempts to turn the Syndicate list into a discussion list and encouragements for people to send their personal reports, views, perceptions of what was happening, were met by only limited response".[13] As long as the offline community kept on organizing meetings and collaborations there was nothing wrong with a list focused on the exchange of practical information. But after a few years the newness of sitting together in one room began to wear off. By 1998 Syndicate had reached 300 subscribers and would further grow to 500 by 2000. Typical Syndicate topics would be access, connectivity, collaboration and most of all the exchange of information about upcoming festivals, possible grants and new projects.

In the beginning people on the list knew each other and were in the lucky situation to meet each other every now and then. Syndicate facilitators Inke and Andreas, looking back:

> The meetings and personal contacts off-list were an essential part of the Syndicate network: they grounded the Syndicate in a network of friendly and working relationships, with strong ties and allegiances that spanned across Europe and made many cooperation between artists, initiatives and institutions possible. The Syndicate thus opened multiple channels between artists and cultural producers in Europe and beyond, which is probably its greatest achievement. It connected people and made them aware of each other's practice, creating multiple options for international cooperation projects.[14]

By early 1999 Syndicate had found a better balance between new media art and relevant politics, Eastern Europe and the rest of the world and most important, general announcements and personal postings. Frequent meetings in real life had taken away some of the reluctance to post. The list had reached its critical mass and by 1998 had become livelier. Gatherings had strengthened the inter-personal trust in the initiative. Traffic had gone up. There were around 380 subscribers in March 1999. These were some of the subject lines in early 1999: "YOUR help needed!! - Russian artist under prosecution for his art; EU billions; ABBERATION: Interactive Visual Poem Generator; censorship in Poland; oppera teorettikka internettikka. The 'no border' campaign, which focused on migration issues, had turned out to be an important topic, both on the list and during the Next Five Minutes 3 conference (March 1999) where a small Syndicate had taken place. The topic had been 'borderlessness.' Jennifer De Felice remarked in her report of the meeting:

> I find the 'no border' campaign a little in contradiction to the 'anti-multinational campaign.' I'm not brave enough to make overt statements about the repercussions of a rally for borderlessness but that utopian statement can be misinterpreted as freedom not merely for refugees and immigrants but for those same multi-nationals whose activity we are so adamant about protesting.[15]

13. Inke Arns & Andreas Broeckmann, Rise and Decline of the Syndicate: the End of an Imagined Community, *Nettime*, November 14, 2001.
14. Ibid.
15. Jennifer De Felice, lurking in the minds of individuals, *Syndicate*, March 16, 1999.

NATO Bombings & List Explosions

On March 22, 1999 the Serbian nationalist net artist Andrej Tisma, who had caused earlier controversies on Syndicate, posts: "Message from Serbia, in expectation of NATO bombing. Could be my last sending. But I don't worry. If I die, my web site will remain".[16] It was the first reference to the deteriorating situation in Yugoslavia. Two weeks earlier, at the Amsterdam N5M conference the situation had not been an urgent topic, even though independent media makers from Belgrade, Prestina, Skopje and other towns on the Balkans had been present. Peace talks in Rambouillet between NATO, Yugoslav authorities and the Kosovo-Albanians had failed to produce an agreement.

With mass killings and armed resistance spiraling out of control, Kosovo was well under way becoming the next Bosnia. In the case of Bosnia it had taken Western powers three and a half years to intervene in a serious manner, after years of half-hearted diplomacy, broken cease-fires and limited UN mandates. US bombardment of Bosnian Serb military positions finally brought parties to the Dayton negotiation table. In the Kosovo case, with the spring season close and parties on both sides gearing up for the next big killing spree, NATO took action in a decisive manner, causing a spiral of effects. On March 24 1999"the most serious war in Europe since 1945" (Michael Ignatieff) started. The NATO bombings of Yugoslavia were going to last for 78 days, until the Yugoslav army withdrew from Kosovo in early June 1999.[17]

Already on the first day the independent radio station B92 had been closed and its director, Veran Matic, had been arrested by the Serbian police.[18] The local radio transmission no longer worked, but B92 continued its radio casts via web. No long after the radio signal got retransmitted via satellite. News bulletins in both Serbian and English could be read on the B92 website. In one month the Syndicate group would have its meeting in Belgrade. What was going to happen? Should the meeting take place, be postponed, take place elsewhere? A first sign of life came from Branka in Novi Sad (Serbia), writing a telegram style email:

> One night under pressure /stop/b92 shot down tonight/stop/internet as a tool of surviving horror?!/stop/without strength to completely control emotions (including fear)/stop/first degree alacrity/stop/every political opponent might be proclaimed deserter or enemy/stop/lots of love/stop.[19]

16. Andrej Tisma, U.S.A. Questionaire, *Syndicate*, March 22, 1999.
17. For an overview of the Kosovo conflict, see Ivo Daalder and Michael O'Hanlon, *Winning Ugly,* Washington DC: Brookings Institution Press, 2000; Wesley Clark, *Waging Modern War, Bosnia, Kosovo, and the Future of Combat*, New York: Public Affairs, 2000 ; Independent International Commission on Kosovo, *The Kosovo Report: Conflict, International Response, Lessons Learned,* Oxford: Oxford University Press, 2000.
18. Drazen Pantic, Radio B92 closed, Veran Matic arrested, *Nettime*, March 24, 1999. See also Katarina's email, posted on the same day, for more details about the police raid on the B92 offices.
19. Pticica (Branka), Re: news, *Syndicate*, March 24, 1999.

On that same day, March 24 1999, mailing from Vienna, Micz Flor announced that he had installed a message board where people could leave anonymous messages.[20]

Dejan Sretenovic (Soros Contemporary Arts Center Belgrade) reported, not without sarcasm, that bombs had not yet been dropped, but a bad sign was the arrival of CNN's Christiane Amanpour in Belgrade.

> Believe it or not, life goes normal in Belgrade. There's no panic, no fear, no rush for the goods or visible preparations of any kind for the attack. This paranormal state of normalcy indicates deep apathy and hopelessness of the Serbian people. Anesthesia. There's no general mobilization except for the antiaircraft fire reservists. The federal government has declared the 'state of immediate war danger' last night. But who cares?
> TV Kosava, which editor in chief is Milosevic's daughter, played an American movie last night. TV Pink, the pop culture television station, played historical drama 'The Battle on the Kosovo,' full of pathetic national rhetoric and mythology.[21]

On that fateful day, March 24, Syndicate turned into a unique unfiltered citizens channel, crossing geographic and political borders, which had turned into enemy lines. It had taken three years to build up the community. Its direction had been unclear at times. This proved to be Syndicate's finest hour. Katarina of CybeRex from Belgrade, still on the 24th:

> Already in the afternoon shops were out of bread and there were big lines in front of the bakeries. After the alarm sounds (around 8:30) people started getting out of the buildings with necessary things. Most of them are leaving town and a lot of them just standing on the open - commenting the situation, quarreling… public transportation hardly works, it's impossible to find a taxi. Kid with basketball, youngsters with audio players, and cans of beer - like any other evening in town is also part of the scenery. Telephone lines are overcrowded and out-of-Belgrade calls are impossible. We heard more than 20 targets all over Yugoslavia were bombed.[22]

Two weeks after the Next Five Minutes conference, the organizers spontaneously restructured their temporary office space on the attic of the Amsterdam cultural center De Balie into an international B92 support campaign, Help B92. Besides the N5M group there were a few xs4all employees setting up the global web campaign in a matter of hours. Xs4all, the Dutch Internet provider had been hosting B92 from the very beginning. Quickly the B92 site (www.b92.net)

20. Micz Flor, anonymous postings, *Syndicate*, March 24, 1999.He also set up a mailinglist to be able to post anonymous emails. Pit Schultz sent a critique on the use of anonymous email to *Syndicate* on April 20, 1999. An excerpt: "who needs such an anonymous service in Kosovo these days? Who even has Internet access there? People lost their passports, their homes; contact to their relatives, now they should symbolically give up their names? (..) How would *you* deal with dubious mail personalities not willing to tell their 'true' name if asked?"
21. Dejan Sretenovic, Belgrade report, *Syndicate*, March 24, 1999.
22. Katarina, B92–home–B92, *Syndicate*, March 24, 1999.

got 200.000 visitors a day. B92 increased its news bulletins in English.[23] Help B92 provided technical support for B92's Internet broadcast and started a fundraising campaign. As a result of the support campaign, the Austrian national radio station ORF had begun broadcasting B92 on medium wave, reaching well into Yugoslav territory.

The Albanian art curator Edi Muka writes from Tirana to his colleagues in Belgrade:

> The situation looks really shitty and war tensions started to be felt in Albania too. Today several airlines canceled their flights to Tirana. Two jury members for the international photography exhibit that is going to open on Sunday couldn't make it. I just wanted to share the same support for our friends in Belgrade, since I know very well what it means when there's shooting out of your window, let alone repression without foreign support. But I just wanted to share the same, even more with the hundreds of thousands that are out in the snow, whose only purpose is to escape slaughtering.[24]

This is the first reference to the thousands of Kosovo-Albanians, on the run from the retaliating Yugoslav army and paramilitary forces and NATO bombs. In the communication over the next months messages from the 'Albanian' side were going to be scarce. The Syndicate list would turn out to primarily be an exchange between Serbian artists and those in the Western world.[25]

One day into the event, political postings started to appear on the list. Nikos Vittis, writing from Greece, points at the possible oil in Balkans as the reason for the US- intervention.[26] Andreas Broeckmann, while in Berlin, sums up the Western position:

> The only person responsible for the attacks is Milosevic - this is not a war against the Yugoslav people - the military objective is to stop the killing and humanitarian catastrophe in

23. The Help B92 press release lists the following founding organizations: B92, De Balie, The Digital City, Next 5 Minutes, Press Now (Dutch support campaign for independent media in former Yugoslavia), the net. radio initiative Radioqualia (Australia), De Waag (Society for Old and New Media), Public Netbase (Vienna) and XS4ALL. See: http://helpb92.xs4all.nl/supportgroup_eng.htm and Eric Kluitenberg, Help B92 campaign started tonight, *Syndicate*, March 24, 1999. See also HelpB92 press release, *Syndicate*, March 27, 1999.
24. Edi Muka, message from edi, *Syndicate*, March 25, 1999.
25. I made this argument first in an essay written in May 1999, published in the Arkzin Bastard newspaper (June 1999) which was posted on *Nettime* in August 1999 and reprinted as Kosov@: War In The Age of Internet in Geert Lovink, *Dark Fiber*, The MIT Press, 2002. The essay published here can be read as a continuation and extension of the arguments made in Dark Fiber. Because of security concerns for those posting from Yugoslavia the Syndicate list archive in the March-July 1999 period had been closed. Its reopening in January 2002 enabled me to do this more extensive research. After the Serbian revolution of October 2000, with Milosevic on trial in The Hague and a 'tense peace' in Kosovo, the relative distance in time and space enabled me to come up with a fresh rereading of the Syndicate material.
26. Nikos Vittes, re: Bombings, *Syndicate*, March 25, 1999. See also his posting on March 26 in which he states that the whole region is under US control. Nikos denies that his analysis is ethnically biased. "I don't say that you have to agree but I don't accept the ironic message about disliking the neighbors. I personally come from the Greek Macedonia. I grew up playing in the summer from kids from Serbia and Macedonia".

> Kosovo and to force the Serb leadership to sign the Rambouillet agreement - this agreement cannot be negotiated any further - the attacks will be stopped as soon as the Serb leadership commits itself to signing the Rambouillet agreement - it is not possible to fully exclude civilian and military casualties, but every precaution is taken that civilians and allied personal will not get harmed - the direct aim of the NATO initiative is to disable and ultimately destroy the Yugoslav military capabilities.[27]

Dejan Sretenovic responds, writing from Belgrade:

> It is hard to get reliable information on what's going on since all media give only short news about the air strikes. Local television, Studio B, is the only media giving prompt news about the air strikes. We heard that some military and police targets in the suburbs of Belgrade were hit, but there's no information on the damage or casualties. Most of the private TV stations in Belgrade transmit Radio Television of Serbia programs. And what's on the program? Old partisan movies from the 50s and 60s, patriotic military ads and news each hour. TV Politika played musical videos this morning. But, we are still blind for the things happening in this country. Those with satellite dishes are lucky. Thank God, Internet connections still function.[28]

Next day, March 25, Andreas Broeckmann suggests calling for an international action to press EU governments to grant asylum to conscientious objectors and army defectors. Katarina hears sirens. "The days are sunny and warm. Streets in Belgrade are almost empty. Jewish community organized evacuation (of Jews) to Budapest".[29] From Skopje, Macedonia, Melentie Pandilovski reports anti-American demonstrations ("Lets hope things stay calm").[30] Nina Czegledy writes about similar demonstrations in her hometown, Toronto. The overall picture in these first days is one of concern to stay informed and keep open the communication channels. There are no indications that Syndicalists themselves joined anti-NATO protests. The dominant angle on Syndicate is freedom of speech, thereby tactically avoiding taking sides in the political conflict over the moral and strategic usefulness of the NATO bombardments. Independent media, both in Serbia and on the Net symbolized the future, a way out, away from both NATO's brutal military solutions and the paranoid nationalism of the Milosovic regime. The presumption was that freedom of speech would benefit unheard, moderate voices. Both NATO commanders and Serb nationalists already had their war propaganda channels— and used them accordingly.

Stephen Kovats, in response to Andrej Tisma's "NATO democracy" concept:

> NATO is not a democracy but a military alliance controlled by relatively democratic states in which praise, condemnation, pros and cons, critique and debate about its actions are freely debated, discussed and broadcast. I know that you all know that, but nationalist sarcasm is a part of the problem.[31]

27. Andreas Broeckmann, Berlin news, *Syndicate*, March 25, 1999.
28. Dejan Sretenovic, Belgrade news, *Syndicate*, March 25, 1999.
29. Katarina, Belgrade, *Syndicate*, March 25, 1999.
30. Melentie Pandilovski, Developments in Macedonia, part 1 and 2, *Syndicate*, March 25, 1999.
31. Stephen Kovats, *Syndicate*, March 25, 1999.

In a forwarded message from the Rhizome list an American artist called to the Serbs not to rally behind a demagogue:

> Nobody here hates YOU. This is not about invading your country; it is about protecting those under attack in another country that is being invaded by Milosovic's army. Frankly I think the NATO action is very cautious and gentle. Nobody should welcome bombing, I don't and I don't think many do, even those flying the missions. We have to choose between enabling an expansionist dictator and curtailing ethnic 'cleansing' in full swing in Kosova right now. In fact now more than ever. Let's not repeat the Bosnian fiasco.[32]

Frederic Madre, reporting from Paris, sent in the following observation:

> Yesterday I saw 30 guys on the Champs Elysees burn down an US flag. I stayed, I had some time to lose, if it was a French flag or whatever I would have done the same. They shouted "USA out of Europe" and then "Youth! Revolution!" they were fascists, I knew it from the start. Afterwards they distributed leaflets in which they were trying to be clever as being fascists. Like with big boots full of mud and blood.[33]

Net Activism in Wartime

Syndicate member had one thing in common. Their answer to the Kosovo crisis can be summarized like this: neither Milosevic nor NATO but independent media is the answer. This strategy of media liberty is offered as an alternative to the impossible choice between the fear and anger on the Serbian side and solidarity with the Kosovo-Albanian population, now on the run. As a consequence of this strategy numerous Internet-based support initiatives sprung up in Budapest, Spain, the Californian Bay Area, Portugal, London, even Tokyo and Taipei.[34] Groups were translating texts, putting up web links, producing radio programs on, joining Help B92. Personal accounts arrive from Rome, Adelaide, and Paris. An Open the Borders campaign had started, urging governments to give refugee status to Serbian deserters. The call for media freedom positioned itself as a 'third way' long-term contribution to resolve ethnic hatred. The position could be roughly described as such: We are not pro- or anti-NATO, pro- or anti-Serbian, we live in cyberspace. We come from the future and offer you hope, to drag you out of the nightmare called history. Global communication is not just as a tool for reconciliation—it is part of the solution. In this view new media are not just diffusing tensions in order to impose a manufactured consensus. The digital devices would lead the (online) participants into a new world altogether, a view propagated by cyber-libertarians throughout the nineties.

In the meanwhile, Katarina is filming from the B92 roof. She captures the bombing of Batajnica airport and puts the video file on the Net. Belgrade is covered in total darkness, Slobodan Markovic writes in the early midnight hours:

> There is no street light, no blinking neon banners, no light in houses and apartments. Darkness everywhere... No clouds, no lights, only half-moon is shining over city. Totally amazing, scary and claustrophobic decoration.[35]

32. Ivan Zassoursky, Re: RHIZOME_RAW: Bomb Thread, *Syndicate*, March 26, 1999.
33. Frederic Madre, re: morning report, *Syndicate*, March 26, 1999.
34. See Lisa Haskel's Radio Deep Europe report, *Syndicate*, March 28, 1999.

Within a matter of days the online diaries of Yugoslav citizens had become a literary genre.[36] The UK media art curator Mike Stubbs associates the online exchange with a scene from All Quiet on the Western Front "where one soldier shares a fag or food or something another soldier throws a flower over tat the front—the physical proximity and first 'closeness' of the respective 'enemies'". He asks: "will GSM phones work or will parts of commercial networks get closed down? How secure is this as a communications network?"[37]

Discussion was finally enflamed with a posting from Sarajevo. Enes Zlater (Soros Contemporary Arts Center), responding to the postings from Serbia, remarks that the Belgrade citizens are making too much noise:

> They ARE NOT BOMBED! (military targets are) They are dealing now only with the aspects of fear and propaganda - but there are no bombs on Belgrade, on civilians, there are no snipers, there are no lacks of electricity, water, gas, food, etc. They can make telephone calls, they can send emails... That is not a state of war. I don't like anyone being attacked and bombed, especially bearing in mind the fact that I've gone through a real war for four years.[38]

The independent-media-as-part-of-the-solution argument would be developed over the next three months in a variety of actions, worldwide. However, those who rejected the need to take sides between NATO and those who opposed NATO-bombings were in danger of being ignored, crushed between the two sides. The Internet philosophy of globalism did not provide enough of a political program to be able to operate as a strong enough alternative. Global communication was not enough. The Western, rational (engineer) discourse which presumed people being able to resolve their conflicts through talking (or even better, sending emails), was not equipped to master armed conflicts of this magnitude. When weapons speak, appeals to human rationalism are usually not heard. The usual superiority of the technological discourse is bluntly being overruled, forcing the engineers (and other techno believers) to either take sides and participate or remain silent. The technology agenda proved not a guide in a state of emergency. By 1999 the booming Internet sphere had not entered deep enough in society to make a difference at the moment of truth. In retrospect, the Kosovo conflict turned out to be a bitter reality test for the Syndicate members and net art at large, one year before the dotcom entrepreneurs would have theirs.[39] Slobodan Markovic comes with an emotional response from Belgrade.

35. Slobodan Markovic, Amazing night in Belgrade, *Syndicate*, March 26, 1999.
36. On the Syndicate list there were regular diary-type messages from Branka and Andrej Tisma (Novi Sad), Larisa Blasic, Dejan Sretenovic and Slobodan Markovic (Belgrade), Melentie Pandilovki (Skopje), Marko Peljhan, Vuk Cosic and Michael Benson (Ljubljana), Zvonimir Bakotin (Split), Adele Eisenstein (Budapest), Enes Zlater (Sarajevo). Regular postings outside of 'the region' came from Andreas Broeckmann, Inke Arns, Ivan Zassoursky, Honor Harger, Sally Jae Norman, Frederic Madre, Florian Schneider, Micz Flor, amongst others.
37. Mike Stubbs, re: what is new(s), *Syndicate*, March 26, 1999.
38. Enes Zlater, a message from Sarajevo, *Syndicate*, March 26, 1999.
39. Enes Zlater, a message from Sarajevo, *Syndicate*, March 26, 1999.

> The logic (personification) you are using is TOTALLY wrong: Serbs = Serbia = Yugoslavia = Slobodan Milosevic = criminal(s). This is the same logic NATO and USA are using. That is what I call propaganda. Go on and read some CNN news reports on www.cnn.com: They are talking about 'punishing Slobodan Milosevic', but his residence is not (even close) target of attack.[40]

Branka, writing from Novi Sad: "Every living creature has right to be frightened, never mind where she/he/it lives, attacked by snipers or just by bombardiers".[41] Doubts grew by the day about the effectiveness of the military air bombardment strategy. Annick Bureaud (Paris):

> Today at the French radio they said NATO had bombed and destroyed important Serbian military facilities and headquarters. Fine, but what next? As in the case of Iraq, the military power of Serbia will be down and then, will it give the country democracy, will
> it give the people of Kosovo some peace?[42]

Dejan Sretenovic, a Soros colleague from Enes in Sarajevo, sends an elaborate response.

> I can understand your feelings and anger towards Serbian regime, but I have to remind you that you have sent your message to a wrong address. All these reports from Yugoslavia are written by the people who are not supporters but opponents of the Serbian regime from the very beginning. People who were involved in various kinds of protests against the war in Bosnia. It is not necessary to remind us who is to blame for the Balkan catastrophe, but current situation in Yugoslavia is much more complicated than it was in Bosnia. We are talking about something that does not concern Yugoslavia only, but the whole international community. We are talking about the end of global politics and diplomacy, about UN transformation into a debate club with no influence on international relations, about double human rights standards. You in Sarajevo were, unfortunately, first to face disastrous results of the Western politics towards ex-Yugoslavia. Kosovo may be the last chapter of Balkan drama, but this time evil cannot be located in one spot only. We have a perverse coalition of two evil politics, local and global, which suits both sides at the moment. Both Serbs and Albanians are at the moment victims of such politics and if we try to look for the pure truth we'll discover that it does not exist at all. We have reached the blank spot of all international laws and standards, with no effective control mechanisms and the new rule of global totalitarian mind, which tries to arrange the world according to its own political standards. Does peace and democracy still have to come with bombs?[43]

The very question why countries had to be bombed to turn them into a democracy would circulate in private and public debates for months, if not years to come. It would for instance be raised again two and a half years later, during the bombardments of Afghanistan in late 2001 by Western powers. Both Kosovo and Afghanistan were turned into Western protectorates with

40. Slobodan Markovic, *Syndicate*, March 26, 1999.
41. Pticica, *Syndicate*, March 26, 1999.
42. Annick Bureaud, serbs against peace, *Syndicate*, March 27, 1999.
43. Dejan Sretenovic, re: a message from Sarajevo, *Syndicate*, March 26, 1999.

weak regimes that could not rule without Western military presence and billions of dollars in support.

Andrea Szekeres and Adele Eisenstein propose to move the upcoming meeting from Belgrade to Budapest where C3, the new media center, would act as a host. People from Serbia would be able to attend the meeting (the Hungarian-Serbian border would probably remain open). Western participants would not have to apply for a Yugoslav visa, presuming that they wanted to be bombed… The Syndicate list was exploding, with 50 or so messages a day. Not a soul complained. Other lists and sites also became really busy. Whereas Syndicate would be the channel for messages from 'Deep Europe', Nettime would focus on the general news coverage and debates while Rhizome would have discussions amongst artists. But this division, which sounds good in theory, never really worked. As usual there was a significant amount of cross postings.

After a first wave of emotional solidarity the question soon arose as to what could be done. New media activists and artists should do what they are good at (making media), however the humanitarian aid to the Kosovo-Albanian refugees flooding towards the Macedonian border seemed so much more urgent. The media and propaganda war had to make way for the real urgent needs. On the list Enes in Sarajevo criticized the cuddly atmosphere:

> Let's not just keep on sending senseless messages of solidarity and friendship. I also want to stay friends with you, but not in a way that I sit home eat pop corn, watch a film, take a look at news from time to time and say 'love you my friends in Serbia, it's awful what is happening to you,' or 'let's help them, poor things.'[44]

More reports from nearby Sofia and Athens flocked in. Bombs hit a chemical plant nearby Belgrade. The desperation reached ironical levels with an anonymous posting called "info not bombs (make money not war)," a sarcastic listing of Western alternatives to bombing, indicating how futile and outworn media strategies were in this situation:

> Strong AM, FM, and UHF positioned at rest-Yugoslavian borders transmitters sending MTV, mixed with a new Alternative Independent Serbia Program, sponsored by Bennetton, Nike, Adidas, Siemens. B52 and stealth bombers dropping history books, McDonalds flyers and EU T-shirts.[45]

Moderator Andreas Broeckmann tries to prevent an atmosphere of flame wars. "We must have these arguments, but remember not to take the war here. I am fascinated to see to what a large degree some of us are still tied to the opinions generated by our physical environments," thereby presuming that Internet users are indeed a different species.[46]

Writing from Ljubljana, Slovenia, Marko Peljhan comes with a list of 'what is to be done'. Besides writing letters he suggests: "Try to do everything you deem necessary so that the Serbian war

44. Enes Zlater, another message from Sarajevo, *Syndicate*, March 26, 1999.
45. We at Nettime, info, not bombs (make money not war), *Syndicate*, March 27, 1999.
46. Andreas Broeckmann, some general list-related stuff, *Syndicate*, March 27, 1999.

machine in Kosovo is stopped and that NATO air operations stop as soon as possible. Link these two issues!" Marko's postings on media and military matters were contrasted with reports from Luchezar Bojadjev in Sofia and Melentie Pandilovski in Skopje, only 50 miles from Kosovo, where refugees had started to arrive and the US embassy was fortified. Young male Serbs were mobilized into the Yugoslav army. On the level of discussion certain patterns begin to emerge. The freshness of the uncensored, direct communication via email begins to wear off. A fight over the 'most favorite true victim status' begins to emerge.[47]

While reports from Kosovo about atrocities, deportations and robberies, committed by the Yugoslav army and Serbian para-military forces, appeared on Syndicate these stories remained distant echoes, as forwarded messages from mainstream media and NGO agencies.[48] While Slobodan Markovic has been listening to U2's "War" album all day, running up and down to the shelter, Enes comes up with the unavoidable Hitler comparison, a sign read in the land of lists that the electronic dialogue has reached its limits and is about to collapse.[49] One week into the bombing the full scale of the unfolding events is beginning to dawn on the Syndicalists. There is talk of NATO ground troops and further details about Kosovo-Albanians systematically being expelled, while NATO planes bomb the main bridge over the Danube in Novi Sad.[50] B92 publishes two statements in which the NATO bombardments are being criticized.

> Coverage from Kosovo is now completely impossible. Our principled position on the Kosovo tragedy has been known throughout the world for a long time and it has not changed one iota. We are sad to report that our prediction that NATO bombing could only cause a drastic exacerbation of the humanitarian catastrophe has proved true.[51]

Online Despair

Next day, April 2, B92 got permanently silenced. In the early hours police officers arrived to seal the station's offices, and ordered all staff to cease work and leave the premises immediately. The radio studio, though without local transmitter since March 24, had been in full operation,

47. See for instance the dialogue between Paul Treanor and Michael Benson, *Syndicate*, March 29, 1999.
48. Frequently posted information came from websites such as IWPR'S Balkan Crisis Report, International Crisis Group, Phil Agre's Red Rock Eater News Service, the Kosova Crisis Center and B92.
49. "It might be useless to try and convince our friends from Serbia that they suffer from the same syndrome as the Germans fifty years ago. As Hitler succeeded in convincing Germans that a real Arian is tall, beautiful, blond, with blue eyes – while he himself was short, ugly, black-haired, with brown eyes, why shouldn't Milosevic succeed in explaining Serbs that NATO are criminals and that they (Serbs) are fighting for a just cause". Enes Zlater, a thought from Sarajevo, *Syndicate*, March 30, 1999. See also Paul Treanor on "Hitler near Milosovic", *Syndicate*, March 31, 1999.
50. Branka: "Those of you have visited Novi Sad and who fucking can remember the old bridge, near the fucking oldest bridge which is in Danube, as remembrance of fucking WWII and thousands of Jews, Serbs and others fucking thrown alive in January cold water under the fucking ICE by fucking nazi destroyers? If you can, than fucking keep that fucking memory, THRE IS NO OLD FUCKING BRIDGE ANYMORE, there is no fucking symbol of Novi Sad, there is just tower left and fucking awaiting next bombing to be destroyed. Fucking time for going over the bridge to the office, factory, clinic.... fucking 1st of April". Baza, fucking 1st of april day of fucking joke, *Syndicate*, April 1, 1999. See also the personal account of Andrej Tisma, who also lives in Novi Sad.
51. Keeping the Faith, B92 Statement, *Syndicate*, April 1, 1999.

getting its message out via the Net. The Internet strategy to 'rout around' the Milosevic regime had worked for a good nine days, with the B92 having had 15 million visitors. The radio studio had been taken over by the Milosevic- student league. A Help B92 statement explained: "A court official had accompanied the police. He delivered a decision from the government-controlled Council of Youth to the station's manager of 6 years—Sasa Mirkovic—that he had been dismissed. The council of youth replaced Sasa Mirkovic with Aleksandar Nikacevic, a member of Milosevic's ruling Socialist Party of Serbia, thus bringing B92 under government control".

The final closure of B92 was a serious to blow to tactical media strategy with which so many Syndicate members identified themselves. Independent media as an active solution, beyond narrow Balkan nationalisms and the NATO agenda of capitalist globalism was about to collapse. There was no longer a 'third position' available. Had it really become inevitable to take sides and join the intellectual crowds with their pro/anti NATO spectacle? Desperation slowly grew. Media could perhaps only be a long-term tool for conflict resolution. Doubts were growing that media would 'evaporate' fatal desires, so prominently in 'the region.' The 'civil society' forces were no party in this climate of ethnic conflicts, retaliation and abstract warfare from the skies.

HelpB92, which had grown in a few weeks into a dynamic campaign with global appeal, had to reposition itself. NGO tendencies started to take over from the dynamic net activism approach. Within B92 itself there had always been a productive tension between professional journalism, raving DJs and media activism. These different approaches were mirrored within the HelpB92 strategies. After B92 had been silenced a strict low-key diplomacy had become necessary. With paramilitary forces on the rampage, lives of the well-known B92 staffers were in danger. Communication with the scattered B92 staff had become almost impossible. An odd mix of legitimate concerns over security and undirected paranoia took over from the almost ecstatic first phase of person-to-person communication after March 24. The group of volunteers shrank to a few staff members. Bit by bit the B92 website itself, which had been taken down, was reconstructed in Amsterdam with information dripping in from an unspecified locations in Belgrade. April 1999 was B92's darkest hour. On May 4 the freeB92.net site was launched. In the war period B92 journalists could no longer work freely. They publicly announced that they could no longer guarantee independent newsgathering. The danger had become too big to become crushed by propaganda from whatever side. Atrocities could be committed by anyone: KLA, Serbian paramilitary forces, the Yugoslav army or NATO bombs. In this war situation it was next to impossible to commence independent investigations. Since March 24 it had become very dangerous for (Serbian) journalists to travel to Kosovo. Independent reporting out of Kosovo, already difficult enough before March 1999, had virtually ceased to exist. A free press in a country at war was an impossibility anyway. In the end, the whole media story was a political one. This fact was a hard one to swallow for the cyber generation, which had been dreaming of a 'post political' society in which old conflicts had been pushed aside by networked communication between global citizens.

The HelpB92 campaign also ran into limitations of a different order. Despite the fact that NGOs active in South-East Europe had been using email extensively from early on, going back to 1991/92, there was surprisingly little up-to-date Internet knowledge available. Email

had been used as an internal communication tool. The Internet at large, however, was not understood as medium for ordinary citizens. Tactical net.radio concepts, mobile phone use, even ordinary websites were largely unfamiliar to media NGO decision makers, many of whom were of the baby boom generation. Media, for them, was newspapers, magazines plus radio and, if possible, television. In short, civil society was one of writers and theatre directors doing round tables, not ravers and geeks performing their techno acts. Despite the enormous success of the 'tactical' Internet use, initiatives such as HelpB92, in Amsterdam and elsewhere, were confronted with a lack of understanding amongst (old) media policy brokers and grant bodies. This cultural gap was not going to be closed any time soon.[52]

Back to Slobodan Markovic, reporting on Syndicate.

> Around 4:30 AM, cruise missiles hit Belgrade again. I've been responding email when roaring detonation cut the night over Belgrade. I jumped to my window, when I heard another detonation and windows started lightly to shake. When I looked outside, I saw a great orange mushroom growing over the rooftops. That same orange light illuminated the whole night sky, not just one part. This time the target was a pure civilian object, a heating plant in New Belgrade, the western part of the city, with more than 100.000 citizens.[53]

The 21 year-old computer science student smoothly fits into the 20th century genre that blends aesthetics, technology and war.

> I'm sitting in front of my computer, listening to Radiohead's OK Computer (currently song number 10: No Suprises), trying to write a piece of email while outside I can hear very loud detonations and heavy anti-aircraft gun fire. I feel like I'm in the middle of Terminator 2's intro scene where Linda Hamilton is explaining the war between humans and machines. The sky is burning, the planes are flying over...[54]

Over the next weeks in April the mood on the Syndicate list would change. More and more protest letters from Belgrade were forwarded, trying to make the point that anti-war did not equal pro-Milosevic. The Western logic seemed wrong: "You either accept my opinion or else I will attack you. Democracy cannot be learned by force, Mr. Clinton!"[55]

On the Nettime list US science fiction writer Bruce Sterling answered the moral sentiments of the Serbian online diary writers. Writing to Insomnia:

52. The call of discussion, What to Do? posted by B92's Gordan Paunovic on *Syndicate* (September 4, 1999) only indirectly raises some of the issues mentioned here. The text is limited to a general political analysis about the strategy of the Milosevic opposition after the Kosovo crisis. The thread that followed did discuss the dependency of B92 and other independent media of funds provided by US-American philanthropist George Soros and his network of Open Society NGOs. See also Mihajlo Acimovic's B92 criticism, *Syndicate*, September 30, 1999.
53. Slobodan Markovic, Belgrade is burning again, *Syndicate*, April 4, 1999.
54. Ibid.
55. Open letter from Nade Proeva (Skopje), *Syndicate*, April 6, 1999.

> No matter how exciting it is to write your daily diary, you should be thinking ahead. Stop making melodramatic gestures that are obvious rehearsals of martyrdom and your own death. You should plan to join the Serbs who are going to survive this very dark period in Serbian history.[56]

Bruce Sterling further explains the US military logic:

> American military leaders believe they can disarm and cripple nations like yours with modern strategic bombing. They can target and destroy anti-aircraft, aircraft, traffic systems, communications systems, electricity, telephones, radar, and fuel depots. And, yes, cigarette factories and pretty bridges. They are perfectly capable of bombing you for weeks on end. They could do it for months. Possibly years. This war from the skies should be interpreted as an experiment with the aim 'to see what happens to a living European nation as its infrastructure is methodically blown to pieces.'[57]

The Slovenian psychoanalytic philosopher Slavoj Zizek came with his own reading of the event in which he analyzed the blackmail position:

> When the West fights Milosevic, it is NOT fighting its enemy, one of the last points of resistance against the liberal-democratic New World Order; it is rather fighting its own creature, a monster that grew as the result of the compromises and inconsistencies of the Western politics itself. My answer to the dilemma 'Bomb or not?' is: not yet ENOUGH bombs, and they are TOO LATE.[58]

According to Zizek the lesson is that the alternative between the New World Order and the neo-racist nationalists opposing it is a false one. They are the two sides of the same coin. Zizek:

> The New World Order itself breeds monstrosities that it fights. Which is why the protests against bombing from the reformed Communist parties all around Europe, inclusive of (the German) PDS, are totally misdirected: these false protesters against the NATO bombardment of Serbia are like the caricaturized pseudo-Leftists who oppose the trial against a drug dealer, claiming that his crime is the result of social pathology of the capitalist system. The way to fight the capitalist New World Order is not by supporting local proto-Fascist resistances to it, but to focus on the only serious question today: how to build TRANSNATIONAL political movements and institutions strong enough to seriously constraint the unlimited rule of capital, and to render visible and politically relevant the fact that the local fundamentalist resistances against the New World Order, from Milosevic to le Pen and the extreme Right in Europe, are part of it?[59]

56. Bruce Sterling, Open Letter to Insomnia, *Nettime*, fwd. to *Syndicate*, April 6, 1999. Related is his Open Letter to Slobodan Markovic, *Syndicate*, April 7, 1999.
57. Ibid.
58. Slavoj Zizek, Against the Double Blackmail, *Syndicate*, April 7, 1999 (translation from German, originally published in Die Zeit, March 31, 1999).
59. Ibid.

The view of Zizek was certainly widely read and respected in Syndicate Deep Europe circles. However, the movement Zizek was talking about here did not exist. There was no sympathy, neither with Milosevic nor with the Serbian people that had so far failed to get rid of the corrupt nationalist regime. To portray the Serbians as victims was a bit too easy. However, the Zizekian refusal of the double blackmail (if you are against NATO strikes, you are in favor of Milosevic's proto-Fascist regime of ethnic cleansing, and if you are against Milosevic, you support the global capitalist New World Order) had not translated into much action. More 'tactical' media was not the answer either. The only option left, a weak and 'neutral' humanitariarism, had only worsened the situation during the long year of the previous Bosnian war. Desperation grew over how to both support the Serbian population, living under NATO-bombardment while at the same time assisting the humanitarian aid crisis with hundreds of thousands of Kosovo-Albanians on the run. Who was to blame for this mess? It was war in Europe again—and everyone was in shock.

Meetings and Actions

From April 23-25 the Syndicate meeting, originally scheduled for Belgrade, took place in Budapest, hosted by the C3 new media center. Apart from a general assessment the 35 or so participants from a dozen countries discussed proposals such as a travelling screening program, visa hurdles, a residency program, an emigrant library and a project nicknamed 'The Future State of Balkania'. Most important, the meeting served to diffuse virtual tensions. Kit Blake and Hedwig Turk report to the list:

> Stories exchange in the intro session, and a multi-focus picture emerges, from the distanced telephoto of media coverage, to the zoomed-in terror of eye contact laced with military hate. The meeting theme is default, and the favorite word becomes the 'situation'. What to do.[60]

Apparently consensus over the capabilities of Syndicate influence emerged quickly. What Syndicate members had in common was their involvement in contemporary media, arts and culture:

> Attitudes are realistic, experienced. Most people operate in the media sphere, and the discussion singles out information exchange as the central issue.[61]

Andreas Broeckmann, after returning to his hometown Berlin:

> The whole situation is so heavy, that it is easy to get paralyzed by it. What the meeting in Budapest did for me and, I think, for other people as well, is that by seeing each other, confirming that we are no pure media-zombies but still the same real people, and by talking about our possible room for maneuver, it became clear that while there are lots of things now that we cannot change much about, there are very practical steps which we can take from our position as cultural practitioners.[62]

As no direct help to B92 could be given, focus in Amsterdam changed to Kosovo itself. Press Now, the Dutch support campaign for independent media in Former Yugoslavia, founded in 1993,

60. Kit Blake/Hedwig Turk, Budapest report, *Syndicate*, May 2, 1999.
61. Ibid.
62. Andreas Broeckmann, …but keep the faith!, *Syndicate*, April 26, 1999.

together with what was left of the HelpB92 crew launched the "Open Channels for Kosovo" initiative. "We hope to give a voice to those journalists who are almost silenced, and give the visitor an alternative view on the crisis in the Balkan".[63]

From early on Press Now had been supporting the independent Kosovo-Albanian weekly Koha Ditore and its charismatic editor-in-chief Veton Surroi. One of the first actions of Serbian authorities on March 24 had been the closure of Koha Ditore, an incident in which a guard of the newspaper had been killed. "Open Channels" installed a special telephone system, where journalists from the region can phone in and leave their daily audio reports, reporting on the media and politics. One of the outcomes of Open Channels was financial and technical support for the Radio 21, which had managed to flee from Prestina to Skopje and resumed radio programs via the Internet.[64] Wam Kat, an early computer network activist and relief worker from the 1991-95 wars had taken up his Balkan Sunflower project to assist the tens of thousands of Kosovo-refugees on the Albanian side of the border. All these projects had to start from scratch and were overwhelmed by the scale of the crisis.

Unlike many of the Serbian civilians, Kosovo-Albanian refugees, now scattered all over the world, were not specifically 'wired' to the Internet. Instead those in refugee camps, for instance, used global satellite phones to get in touch with relatives. But their faces on television remained anonymous. They were contingents in the hands of governments and international relief organizations. The Budapest Syndicate meeting can only serve as a representative example here. No Albanian from either Kosovo, Macedonia or Albania was present. They were not consciously excluded. Only few were part of the Syndicate network (mainly from the Edi Muka circle in Tirana) and organizers had not been able to change this very fact overnight. This situation only reflected the online absence of the Albanian side. KLA support sites, for instance, were maintained by Albanian immigrants in countries such as Switzerland and the USA. The 'digital diaspora' had created the false image of a virtual presence on the Net, non-existing in Kosovo itself. Despite numerous messages forwarded from refugee organizations, the Syndicate exchange was unwillingly limited to a dialogue between online Serbs, most of them anti-nationalist Milosevic opponents and those in 'the region' and the West. The Syndicate microcosm reflected the situation on the Internet at large. In crisis situations it proved to be a next to impossible task to hear 'other' voices from those who had been excluded for years. This asynchrony in the debate would become a repetitive pattern in world conflicts in the age of the Internet. McKenzie Wark, expanding his 'vectoral theory' which he presented in his book *Virtual Geography*:

> The speed with which people can respond to each other is a significant factor, making lists a different media to print based text exchanges. But then there's the strange spatial distributions that lists have. This was always going to be a strange intersection with the spatial aspect of state territoriality, and with the way that broadcast and print media usually are shaped by exigencies of state.[65]

63. Press release Open Channels for Kosovo, *Syndicate*, April 18, 1999.
64. See Jo van der Spek, Visit to Radio 21 in Skopje, *Syndicate*, May 14 (and 21), 1999.
65. McKenzie Wark, private email correspondance, February 4, 2002.

Military and Civilian Targets

The time between a post and one that replied to it began to slow down. If there was a good reply to a post within a short space of time, it greatly increased the liklihood of others taking up the debate. This was very much the case in the late March-early April period. By mid May discussion had almost disappeared. What remained were forwards of open letters, essays and announcements of solidarity campaigns. The general news fatigue caused a shift from (fast) debates and flame wars to (long-term) action. To commemorate B92s 10th birthday a global 24 hours netcast was organized, starting in Vienna, ending in California. Its motto: "When reality fails us, we move to the virtual world. But pain is real and it stays with us".[66]

In May the NATO bombing strategy intensified. Besides bridges, factories and military installations, Serbian television and telecommunication infrastructure had been added to the target lists. On May 12 information circulated that the US Government ordered Loral Orion Company to shut down its satellite feeds for Internet customers in Yugoslavia. On May 25 it was announced that the Serbian television signal was to be taken off the Eusat satellite. After nearly two months of heavy diplomatic pressure from NATO, Eutelsat's member states had voted to pull the plug on Serbian television.[67] A May 26 press bulletin stated "NATO military commanders won political approval today to attack some of Yugoslavia's most sensitive sites, including the country's civilian telephone and computer networks, in a bid to cut communications between Belgrade and armed forces in Kosovo, senior NATO sources said".[68]

This situation proved that it was impossible to distinguish between civilian and military targets. Highways, railway stations, airports, telephone switches, bridges, power stations and broadcasting towers, they were all military in essence. Destroying its infrastructure from the air can topple a regime. In order to do this air superiority has to be established first. This has been, in short, the post cold war NATO doctrine. Within this paradigm Serbian indignation was understandable yet futile. Without infrastructure sooner or later the Milosevic regime would comply with Western demands for the simple fact that there is no power possible without modern infrastructure. According to this NATO doctrine power should not be reduced to specific people in charge. Those in power were merely a special effect of society's infrastructure.[69] Drag out the pond and you will have the fishes.

NATO's cold military structuralism outraged Serbs of all political colors. There were people amidst the attacked abstract power structures. Instead of turning against Milosevic, as they

66. Net Aid announcements, *Syndicate*, May 14 and 15, 1999.
67. Steven Pearlstein, "Serb TV Gets Notice It's Cancelled, Satellite Firm Bows To NATO Pressure," *Washington Post Foreign Service*, May 23, 1999, fwd to *Syndicate*, May 25, 1999.
68. Quoted in Slobodan Markovic, Civilian communications again in danger! *Syndicate*, May 28, 1999.
69. NATO spokesperson Jamie Shea: "What we are doing is we are attacking the military facilities of Belgrade. That electricity, those facilities, drive the military machine of Milosevic, that is why they are a target". (Brussels, May 25, 1999), quoted in Slobodan Markovic, My Goodness…, *Syndicate*, May 26, 1999.

eventually would do 18 months later, many Serbs proudly wore 'target' symbols, thereby, willingly or not, backing the sitting regime.[70]

The Moral Responsibility Debate

Once more, for the last time, in early June, the Syndicate discusses the Serbia vs. NATO in a lengthy thread called 'moral responsibility'. However, the debate no longer had a new media angle. The direct exchange had faded away. Instead, the big questions the Kosovo conflict had raised were once more put on the table. Was there such a thing as Serbian collective responsibility? McKenzie Wark:

> A nation that can elect its leaders is morally accountable for the actions of those leaders - every Serb is accountable for what Milosovic does whether that Serb personally opposes or supports Milosevic.71[71]

If there is no collective responsibility, there is no collective identity either, McKenzie Wark suggested. Slobodan Markovic countered: "You cannot take any responsibility for something YOU haven't done. There is no collective responsibility". He expressed the global feelings of the cyber generation: "I don't feel like a part of a nation which must be surrounded with state borders. I feel like an inhabitant of the Planet, but… I don't think that all the Earthlings should speak one language, enjoy one drink, and have one flag and the same customs".[72]

Was there any lesson learned from the Bosnian war? Belgrade postings usually did not mention the Bosnian war. It hadn't been their war, as much as the backward Kosovo province had never been even been on their radar either. Why bother about some misdoings of primitive peasants in the Balkan outbacks? Once upon a time Belgrade had been part of the West. Cosmopolitans had traveled freely to Munich, Rome, Paris and London. Why were they suddenly haunted by the behavior of some criminal farmers in provincial outposts such as Vukovar, Srebrenica, and Prestina? War had always been elsewhere. The consensus beyond all political divides had been: We, the Serbs, were not responsible. Why would modern global citizens suddenly have a collective responsibility for the behavior of some 19th century bandits? Did Serbs have any more responsi-

70. In his war diary Aleksander Gubas wrote the following critique of the 'target' logo: "I don't feel like being target. I don't like to be treated as target, and I think none of us was supposed to be in the situation of being bombed. This has had to be avoided. And not only NATO is to be blamed for this situation - which many people forget, even the greatest enemies of the regime. The other reason is that this mark is invented and promoted by the regime itself, and it's some kind of trademark for demonstrations against NATO, which actually support the regime and ARE organized by the regime. And I don't want to take part in anything like this, and I'm not willing to give this regime my amnesty for its former evil deeds. And last but not least - this target mark has become the new symbol for unification of people's minds. Instead of former communist red star, now we have the target mark. Wearing this mark is the certification that you are patriot, good Serb, loving your country and following The Right Line. I doubt the proclaimed Right Line. I resist any kind of mind unification". Quoted from his *Syndicate* posting, September 14, 1999.
71. McKenzie Wark, re: moral responsibility, *Syndicate*, 18 June 1999. See also his postings from June 18 and June 30, 1999.
72. Slobodan Markovic, re: moral responsibility, *Syndicate*, June 18, 1999.

bility then the Croats or Albanians? The Syndicate list wrapped up a discussion, which had been going on ever since the breakup of Yugoslavia began in 1990. Andrej Tisma: "Kosovo was the first Serbia, where Serbian state exists since 13th century. Before the WW2 Serbs made 60% of the population in Kosovo and now make only 10%. So who is making the ethnical cleansing? Albanians of course, for last 50 years, supported by West".[73] There you go again. This time no one took up the provocations of Tisma. McKenzie Wark, writing from Sydney, Australia: "When we say 'responsibility', this need not mean the same thing as guilt. I certainly am not guilty of killing any blackfellas. But I do think I am responsible for the fact that somebody did". Inke Arns responds from Berlin about her German background:

> For my generation, accepting responsibility for what has happened in the past means that you accept responsibility for the future... Personal, individual responsibility is about alertness ... about being aware that this should happen 'never again.'[74]

At the end of these exhausting months these messages were sent from Sydney and Berlin. It would perhaps take years before 'Belgrade' would express such thoughts.[75] Again McKenzie Wark:

> Just because I am not guilty does not resolve me of responsibility. If I want to belong to the human community, if I want to claim a right to it, then I must also face up to a responsibility. One that is quite minimal really—to hear the other. But also quite a burden, because the other tells me, again and again, about suffering. (..) One thing you get to see, in times like these, is who the people are who understand responsibility, not necessarily as a concept, more as a culture, as just something you do. It's there every day in my inbox, from syndicate and from Nettime and just from friends forwarding me things. The attempt to listen, to hear the other. To witness.[76]

73. Syndicate moderators tolerated Tisma's postings. "Many perceived his tirades against the West and against NATO as pure Serbian propaganda which became unbearable at some point. Later, Tisma came back to the list and continued his criticisms by posting links to anti-NATO web pages he had created. For us, he was always an interesting signpost of Serb nationalist ideology, which it was good to be aware of. And it was good that he showed that people can be artists 'like you and me', and be Serb nationalists at the same time. The Syndicate could handle his presence after he agreed to tune down his rants". Andreas Broeckmann/Inke Arns, Rise and Decline of the Syndicate: the End of an Imagined Community, *Nettime*, November 14, 2001.
74. Inke Arns, re: moral responsibility, *Syndicate*, June 18, 1999.
75. The 'moral responsibility' thread took place on Syndicate in the June 18-30 period with postings from Jennifer de Felice, Michael Benson, Slobodan Markovic, Bruce Sterling, Frederic Madre, McKenzie Wark, Inke Arns, James Stauffer, Sally Jay Norman, Zvonimir Bakotin, amongst others. There is an interesting posting from the Albanian curator Edi Muka, writing from Tirana a few days after the debate (June 22) in which he calls for Serbian intellectuals and artists to take a public stand about the atrocities committed against the Kosovo-Albanian population. "It is important because I want to normally talk to my Serbian colleagues, invite Serbian artists to Tirana, I want Serbian artists to have shows in Prishtina and I don't want to fear for their security. It is important because we must find a common language, because Serbs must not flee Kosova". See also Geert Lovink, Interview with Edi Muka, *Syndicate*, June 1, 1999.
76. McKenzie Wark, Collective Responsibility, *Syndicate*, June 30, 1999.

Syndicate had been one such timely 'witness channel', to use Levinas' biblical term.

The month of June brought the end of the NATO bombings, the pullout of the Yugoslav army from Kosovo (June 12) and the occupation of Russian and NATO forces. NATO had won the war and lost the peace. The general level and interest in East European art had never been as high. In October 1999 the biggest survey show of contemporary Eastern European art would open in Stockholm.[77] The presence of artists from the region at the Venice Biennale, which opened June 10, such as SubReal (Romania), was prominent. Numerous openings, performances and presentations were announced on the list.[78] But the general feeling was neither one of victory or anger. Instead, the Kosovo episode had triggered the shameful memory of Europe with its dubious reputation of 'making history', an inherently violent continent, locked up in identity traps, incapable of sorting out its own troubles. A small Syndicate meeting in Venice, taking place as a part of the Oreste project, turned into a brief social gathering. The urgency, as felt in Budapest, was not there.

Amongst its antagonists the Kosovo conflict remained undigested. The Syndicate network was no exception. People moved on but the issues remained. The Kosovo conflict had drawn the public discourse for good into a new, yet unknown era. Sooner or later the scar would rupture. In retrospect, remarkably little was published in bookform that summarizes the heated debates. Besides Michael Ignatieff's *Virtual War*, Michel Feher's *Powerless by Design* should be mentioned here. Feher focusses on the debates within the Euro-US liberal and radical Left, unravelling the countless paradoxes and contradictions of constantly shifting positions. "Western leaders who had been blamed in 1995 for doing what they finally ceased to do four years later, were criticized in 1999 for not reverting back to their earlier policies".[79] According to Feher, the aim of the NATO bombings had been to undermine the authority of the UN, allowing the Pentagon to show that it could wage a war without U.S. casualties. After so much complicity in Bosnia, violence was no longer linked to 500 or even 1,000 years of ethnic hatred "but to a decade-old regime whose representatives had relentlessly endeavored to rid what they saw as Serbian land of its non-Serbian population". The bouncing positions, reflecting the pitfalls in the emerging Western doctrine, for instance expressed in *The Nation*, a U.S. magazine Feher analyses, can also be found on the Syndicate list.

As so often with foreign policy analyses, Feher's *Powerless by Design* lacks critical understanding of the media. It is as if government advisors and NGO experts and public intellectuals operate in a Platonic sphere, solely devoted to the exchange of arguments. What we in fact witness is a spectacle of manufactured babyboom celebrities, from Chomsky to Friedman, from Sontag to Zizek that simulate a public debate, sanctioned by a small group of senior editors, gatekeeping

77. Bojana Pejic, After the Wall, Venice press conference, *Syndicate*, June 5, 1999.
78. See Irina Cios, Romanian presentation in Venice, *Syndicate*, June 7, 1999; Nebosja Vilic, unofficial presence of Republic of Macedonia at 48th Venice Biennial, *Syndicate*, June 6, 1999; Melentie Pandilovski, Venice Biennial, *Syndicate*, June 3, 1999; Miran Mohar, Transnacionala book in Venice, *Syndicate*, June 3, 1999.
79. Michel Feher, *Powerless by Design*, The Age of the International Community, Durham and London: Duke University Press, 2000, p. 7.

the circulation of a limited pool of syndicated content inside the global corporate media. Within Internet list culture there is a tendency visible to fall back to the level of celebrity content, taken from the website of established media, from *Die Zeit*, *The Guardian* to *The New York Times*. List subscribers are easily satisfied with significant contributions replicated from old channels. Such a regression in list culture also happened to Syndicate after the turbulent exchanges had slowed down in April-May 1999. New media give the opportunity to create dialogue forms of decentralized 'public opinion'. However, Feher, and with him countless other public intellectuals, does not reflect on such a shift in the media landscape.

The Future State of Balkania and other followups

A few projects emerged out of the tensions and clashes, building on the clashes and information overload on cultural channels such as Syndicate. In August 1999 a special issue of the Bastard publication appeared, produced from Zagreb by the Arkzin crew (Boris Buden, Dejan Krzic, Igor Markovic and others) together with Syndicalists such as Honor Harger.[80] The free newspaper, distributed euro wide in a circulation of 8000 attempted to summarize critical discourses and projects related to the Kosovo crisis. In April 2000 the conference and exhibition "Kosovo: Carnival in the Eye of the Storm" was held in Portland, Oregon, curated by Trebor Scholz, where many of the controversies were brought together retrospectively.[81] The conference program included a film program where much of the Kosovo-related documentaries were screened. The project was a response to the significant non-activism in Europe and the US among cultural producers in response to the conflict. Trebor Scholz: "The complexity of histories in the Balkans paralyzed and split left and right and created a confusion that lent itself to 'productive silence', leaving the public discourse to politicians. In the exhibition a large number of Internet pieces were screened next to art of a wide range of media by artists of many generations. The question was, and still is, what can artists DO in response to war?"[82]

The proposal to design a Future State of Balkania, originally developed by Melentie Pandilovski (SCCA, Skopje) had been discussed at the Syndicate Budapest meeting.[83]

Unlike the 'Deep Europe' concept, which had drawn attention from mainly Western Syndicalists, Balkania originated in South-East Europe. The concept was further developed in October 1999, including demo design and both critical and speculative texts at a Syndicate workshop in the Kiasma museum for contemporary arts in Helsinki. A dozen Syndicalists from all over the Balkans (and beyond) came together to design Balkania. From the announcement:

80. Honor Harger, Special edition of Bastard: the war in Yugoslavia, *Syndicate*, August 24, 1999.
81. URL:http://www.molodiez.org/overviewkosovo.html.
82. From a private email correspondance, January 27, 2001. Following projects of Trebor Scholz, related to the same issue were the "Aestheticization of War" symposium in 2001 at PS1 in New York (together with Nomads and Residents), events at the Santa Fe Art Institute and the Weimar Bauhaus University. These events all dealt with the issue of collective and individual responsibility in response to war. Another of his projects in that line was an exhibition/open forum on activist responses to '911' at the Bauhaus (www.molodiez.org/acc/).
83. Melentie Pandilovski, The Balkans to the Balkanians, *Syndicate*, April 3, 1999.

> During a nightly meeting preceding the Dayton agreement, Holbrooke and Milosovic, consuming lots of alcohol, were playing around with an American army computer simulation of the Yugoslavian landscape. Was it the drinks or the technology that created that birds eye sensation in which suddenly an agreement seemed within reach? Parallel to the rise of the Internet, the situation of national states in Europe changed drastically. We witnessed both the ongoing European integration as well as the disintegration of the former Soviet Union and Yugoslavia. Among the many experiments with virtual communities that, particularly, the Internet gave rise to, virtual states are a regular phenomenon, ranging from exercises in political wishful thinking, to refugee republics, to game-like utopias. The virtual state offers possibilities to comment and criticize on real world situations, to fantasize and experiment.[84]

The Cyber-Yugoslavia project had been one of those 'virtual states'. Balkania was not such a literal translation of the idea to build an alternative state inside cyberspace. Instead it set out to spread ideas of regionalized artistic utopias. Melentie Pandilovski continue to work on Balkania at different levels, from 3D VRML competitions to a series of Balkans conferences he organized in Ohrid and Skopje.[85]

By August 1999 the traffic on the Syndicate list was back to normal. Syndicate postings had jumped from 87 in February 1999 to 417 in March, 400 in April, down to 237 in May, 250 in June and were back to previous levels of 157 in July and 118 postings in August. The summer period was marked by move away from the Balkan news items. A small Syndicate gathering took place in Zittau on the German/Polish border where the second camp of the 'No One Is Illegal' campaign took place.[86] Freedom of movement had been a concern of many Syndicalists. A great amount of time was given to prepare conferences, workshops and festivals and spent writing travel grants and arranging visa applications. Other small meetings took place early September during Ars Electronica in Linz (Austria) and in Stockholm during the opening of the After the Wall exhibition (curated by Karen Henry and Bojana Pejic). From this period onwards a paid staff member of V2, Arthur Bueno, was hired to set up a proper Syndicate website, mapping the ever growing network of new media initiatives in Europe.

ASCII-Art & Serbian Revolution

In August 1999, first indications of a change of the atmosphere on the list appeared. From an 'anonymizer' server, stationed in Trontheim, Norway a short email dialogue was forged, meant to create distrust and confusion amongst Syndicate subscribers.[87] A little later, in February/March 2000 the list got several times into a loop, repeatedly sending out dozens of same message. Andreas and Inke about the slow changes taking place in this period:

84. Geert Lovink, Temporary Media Lab, Kiasma/Helsinki, Oct 8 - Nov 14, *Syndicate*, September 7, 1999.
85. See announcement of Understanding the Balkans Conference, *Syndicate*, July 18, 2000. The first conference took place in Ohrid (Macedonia), October 13-16, 2000. The second conference, The Balkans and Globalization was held in Skopje, December 1-2, 2001. URL: http://www.scca.org.mk/utb/index.htm.
86. Lisa Haskel, syndicate/border camp, *Syndicate*, July 24, 1999.
87. Atle Barcley, re: enough (message from the provider), *Syndicate*, August 11, 1999: "According to the source code the (supposed) forged mails (in the name of Geert Lovink and tbyfield) have been sent from Whitemail (http://www.kit.ntnu.no/stud/barcley/whitemail/). Anyone can access, and I have no idea who is using Whitemail".

> Not only that there were no more meetings after 1999, one could also notice that since mid 1999 people felt less and less responsible for the list. Many Syndicalists of the first hour grew more silent (this was partly incited by the hefty discussions during the NATO bombings in Yugoslavia), perhaps more weary, perhaps less naive, many also changed their personal circumstances and got involved in other things (new jobs, new families, new countries ...). At the same time, the number of subscribers kept growing: more and more newbies kept flowing onto the Syndicate list.[88]

By April 2000 postings and net.art from individuals and groups such as propaganda@0100101110101101.org, net_CALLBOY, {brad brace}, Dr. RTMark, iatsu.pavu.com and data[h!]bleede began to increase. Noise levels, with or without meaning, were up. Approaching 500 subscribers and still an open and unfiltered Syndicate was an easy outlet for email art, varying from low-tech ASCII, net poetry, hoaxes to anonymous personal attacks. While announcements had been an important aim for the social network early on, they now began to further increase the feeling of anonymity, which in turn encouraged net.artists to fill up the gap, left behind by the disappearing Kosovo exchange, with more email experiments. In May 2000 the traffic had gone up to over 200 postings. A second Syndicate 'Pyramedia' gathering in Tirana, organized by Edi Muka got postponed at the last minute until further notice. In August the list switched provider and was moved from Linz to Berlin because of technical troubles with the Ars Electronica server, which had hosted Syndicate since early 1996.

In the Kosovo aftermath the political situation in Serbia had grown more desperate with opposition activities and repression from the Milosevic regime both increasing. The radio and TV station Studio B, which had started to relay the 'real B92' signal on a vacant frequency, was forced to close on May 17, 2000. B92, which still had not returned to its studios and equipment, switched to satellite and the Internet to get its signal out. The rise of the radical Otpor student/youth movement in Serbia took place beyond the radar of Syndicalists. During the days of the 'Serbian revolution', early October 2000, when large demonstrations forced the fall of the Milosevic regime, Syndicate would revive as a peer- to-peer communication channel. For a brief moment Slobodan Markovic, Dejan Strenovic and Michael Benson reappeared on the list, but their thoughts were quickly overruled by an ever-rising amount of announcements from the global new media arts sector. Postings no longer triggered response. The last action of the Syndicate network was a spontaneous support campaign for the Albanian curator Edi Muka who had been fired from his post as director of the Pyramid cultural center in Tirana.[89] While throughout 2001 Melentie Pandilovski regularly forwarded news updates from Skopje related to the crisis in Macedonia between Albanian (KLA) fighters and the army, the Syndicate list de facto fell silent over this topic. Also due to the aggressive NATO containment policy the Balkans had been neutralized. One of the effects was that news no longer sparked outrage. Once again ethnic conflicts were perceived as impersonal news items, echoes of some far away region, a distant past.

88. Andreas Broeckmann/Inke Arns, *Syndicate* history, Rise and Decline of the Syndicate: the End of an Imagined Community, *Nettime*, November 14, 2001.
89. The campaign started with the message from Edi Muka in which he announced that he got sacked (*Syndicate*, November 29, 2000). A petition was written, signed by Syndicate members.

In an overview of electronic mailinglists the Serbian filmmaker and diary writer Aleksander Gubas comes in my opinion with an honest and precise description where Syndicate was at in 2001:

> Various hot activists, ASCII artists and other spammers fill your inbox every day. On the other side, Syndicate is a very useful source of the art information from Europe - especially from Eastern Europe, which is the region where I physically belong. Syndicate is an on-line source where the information can be freely available to the members, and at the same time is discreetly monopolized by the art managers who should spread it. Syndicate helped me in deciding to become the manager of my own. Unfortunately, it seems that in the last few months Syndicate somehow lost its informational function, being saturated by political quarrels on the Balkans items. I was also involved in such a quarrel on Syndicate, and I regret it. It was with an artist from Serbia whom I have never met - and I don't want to - although we live only 80 kilometers away from each other. When you're on-line, your compatriot can be more distant to you than somebody from Seattle or Mexico.[90]

To summarize Aleksander's observation: Syndicate was a window to the world, provided useful information about the region but could not be considered a close and homogeneous community.

Machinetalk

In January 2001 "Netochka Nezvanova" (NN), named after Dostojevsky's first full- length novel, began sending hundreds of messages to Syndicate, most often randomly responding to anything posted to the list. NN is a list spammer (or net.artist if you like), also operating under names such as Integer and antiorp. The postings were a mixture of replies, cryptic political analyses, machine talk[91] and personal attacks.[92] NN had been posting to Nettime and other lists before and was a well known phenomena. NN's aim has been to not just dominate a channel but to eventually destroy the online community. Katherine Mieszkowski portrayed NN for the online magazine Salon, mainly focussing on the unknown identity of the artist(s).

> An appearance by Netochka frequently derails a mailing list, devolving it into a flame war about free speech vs. the rights of the community. Soon mailing-list members will be choosing sides: the defenders of freedom of expression at all costs! The fed-up denizens who just want her off the list! And the few who believe they see the brilliance in her indirection, the beauty in her sly, circumspect ways. All talk of anything else is soon abandoned. 'As a

90. Aleksander Gubas, The Flock of Netgulls, a Personal View to the Mailing Lists, *Syndicate*, May 22, 2001.
91. An example: "ue = g!vn d!sz g!ft dont u knou. dze ab!l!t! 2 knou. + through uz mattr kan knou !tzelv. out ov dze uomb ov t!me + dze vaztnesz ov zpasz dzat u!ch = uz - h!drogen. karbon. n!trogen. ox!gen. 16-21 elmntz dze uatr. dze zun!!ght - all hav!ng bkom uz kan bg!n 2 undrztnd uat dze! r + hou dze! kame 2 b". integer@www.god-emil.dk, *Syndicate*, January 18,2001. More on the ideas.
92. A closer look at postings shows that NN vocabulary is rather limited. Someone would either be a "inkompetent male fascist" or a "korporate male fascist". Whereas some contributions contain traces of brilliant poetry, the personal attacks often show signs of repetition..

> community destroyer, she's fantastic,' says Bernstein, the Brooklyn artist. 'She's perhaps one of the Internet's first professional demolition experts. She's a real talent.'[93]

In August 1998 the same person(s) had posted a few messages to Syndicate under the name antiorp but then disappeared after being unsubscribed by one of the moderators, without causing protest.[94] NN used a blend of software and Internet-specific styles of writing such as Europanto[95] and B1FF[96], combined with an agitated Übermensch attitude (perhaps inspired by the Extropians), showing off a machinic-futuristic 'post human' superiority over the all-too-human fellow subscribers and their petty and corrupt intentions.

In a brilliant text analysis, *Mute* magazine editor Josephine Berry unravels the NN/antiorp/Integer grammar. Posting to lists such as 7-11, MAX, Nettime, music-dsp, Syndicate, Xchange and others, antiorp used a special language called Kroperom or KROP3ROM|A9FF. Berry:

> This language, in part, relies on a logic of substitution to reformulate the Roman alphabet's phonetic system by including all the 256 different characters comprising the American Standard Code for Information Interchange (ASCII), the lingua franca of computing. For instance, in the case of a Kroperom word like 'm9nd', the number '9' is incorporated into the word 'mind' such that the 'ine' in 'nine' takes on a phonetic role. But Antiorp's system also extends beyond purely phonetic substitutions. In the example 'm@zk!n3n kunzt m2cht . fr3!' not only do numerals and ASCII characters mix with alphabetic characters within the space of a word, but the unity of the phonetic system is broken by the logic of different character systems so that the reader is forced to employ a combination of strategies to decode the script. The substitution of letters for numerals, the script starts to mimic the functional potential of a programme. In other words, textual self-reflexivity refers here especially to the computational environment.[97]

93. Katharine Mieszlowski, The Most Feared Woman on the Internet, http://www.salon.com/tech/feature/2002/03/01/netochka/index.html
94. a9ff@hell.com,f1f0@m9ndfukc.com andmeter@flicker.dk are some of the other email addresses used by antiorp/NN/integer. An example of an antiorp posting could be the following posting: "== addtl lo.tekk pozer mattr c ub!ku!touz komput!ng + xerox park + !nvert m9ndkonta!nr \\ humanzukc ++ .edu == .krapmattr, humanz = _ komputat!onall+e def!c!ent \+\ sub.opt!mal - ztat!ond at 1 local m!n!ma". *Syndicate*, August 19, 1998.
95. See Diego Mariani, Europanto, fwd. by Ted Byfield, *Nettime*, April 25, 1997.
96. "B1FF /bif/ [Usenet] (alt.`BIFF') /n./ The most famous pseudo, and the prototypical newbie. Articles from B1FF feature all uppercase letters sprinkled liberally with bangs, typos, `cute' misspellings (EVRY BUDY LUVS GOOD OLD BIFF CUZ HE"S A K00L DOOD AN HE RITES REEL AWESUM THINGZ IN CAPITULL LETTRS LIKE THIS!!!), use (and often misuse) of fragments of talk mode abbreviations, a long sig block (sometimes even a doubled sig), and unbounded naiveté. B1FF posts articles using his elder brother's VIC-20. B1FF's location is a mystery, as his articles appear to come from a variety of sites. However, BITNET seems to be the most frequent origin. B1FF was originally created by Joe Talmadge <jat@cup.hp.com>, also the author of the infamous and much-plagiarized 'Flamer's Bible'". http://jargon.net/jargonfile/b/B1FF.html.
97. Josephine Berry, M @ z k ! n 3 n . k u n z t . m2cht . fr3!: Antiorp and the Meaning of Noise, *Nettime*, August 23, 2001.

In a social context the phenomenon was known as 'trolls'. First used on the Usenet group alt.folklore.urban, a troll sends out messages designed to attract predictable responses or flames. The jargon file at tuxedo.org defines the troll as

> an individual who chronically regularly posts specious arguments, flames or personal attacks to a newsgroup, discussion list, or in email for no other purpose than to annoy someone or disrupt a discussion. Trolls are recognizable by the fact that they have no real interest in learning about the topic at hand - they simply want to utter flame bait. Like the ugly creatures they are named after, they exhibit no redeeming characteristics, and as such, they are recognized as a lower form of life on the net.[98]

Trollers lure others into pointless and time consuming discussions, aimed at naïve and vulnerable users. Their aim, as one of the oldest sites on trolling states, maintained by Andrew, is to sit back and laugh at all the idiots that believe anything.[99] As the spare sources state, trolling can often end up in flame wars (online arguments) but isn't necessary the same. What trolls live for is attention. By disrupting ongoing conversations, trolls are testing the boundaries of the very foundations of the "attention economy".[100]

Com2kid, writing on Slashdot, explains the success of trolls in this way:

> If you piss people off, they will respond to you in droves. If you manage to gradually build up an argument and convince your readership that you are correct; well heck, what is left to be said? You win, case closed.[101]

One not infrequently sees the warning "Do not feed the troll" as part of a follow-up to troll postings. But this was exactly what was about to happen on Syndicate. Unlike the short period in 1998, in January 2001 antiorp/NN/integer was going stay. Unfamiliar with the troll phenomenon, Syndicalists jumped on a dialogue with NN, thereby unwittingly becoming complicit to the troll strategy to become the center of the conversation. The strategy to highjack the list and become the central online personality this time worked. Because the core community had eroded the list got entangled in the constant stream of NN/integer postings. Calls appeared to filter the NN/in-

98. http://www.tuxedo.org/~esr/jargon/html/entry/troll.html.
99. Andrew,www.altairiv.demon.co.uk/afaq/posts/trollfaq.html (1996). See also Judith Donath, Identity and deception in the virtual community, In: M.A. Smith and P. Kollock (ed.), *Communities in Cyberspace*, London: Routledge, 1999, pp. 29-59. I found this material in Susan Herring's case study "Searching for Safety Online: 'Trolling' in a Feminist Forum," yet to be published, sent to me by the author.
100. In Michael H. Goldgraber's essay, The Attention Economy and the Net, there is no explicit mention of the possibility to 'highjack' an online community (http://www.firstmonday.dk/issues/issue2_4/goldhaber/). As in the case of publicity, it might be impossible to distinguish between 'good' and 'bad' attention. Unwillingly paid attention seems not to fit in the consensual models of electronic democracy in which reasonable actors appear to exchange rational arguments, puzzled by the irrational Other.
101. Com2Kid onwww.slashdot.org, re: Blogs are lame, June 6, 2002.

teger postings whereas others tried to challenge the troll.[102] Others such as Diana McCarty were taking the liberal stand and efended the democracy of the delete button: "It takes 1-2 minutes of your time and you can file or delete and forget. Noise is sometimes music and sometimes incredibly intelligent".[103] For months virtually all attention from now on went to the 'integer' troll.

A dialogue between Eleni Laperi (Tirana), Edi Muka (Tirana) and Melentie Pandilovski (Skopje) about the Albanian-Macedonian tensions went under.[104] With a silent majority, a growing amount of protest postings, a handful of fans and a growing amount of 'machine talk' artists, Syndicate became stalled. Because of the lack of internal electronic democracy (there were no voting systems in place on lists such as Syndicate) there was no way to find out what subscribers wanted to do. It took another seven months till Syndicate exploded over the integer case. In June the debates intensified after Károly Tóth had proposed to remove integer.1[105]

One of the arguments with which integer postings were defended was the alien (female) 'subhuman' robotic nature of integer, which should rouse understanding and pity. Friddy Nietzche for instance writes: "Our beloved NN (we feel a certain sweet compatibility towards her, as one collective bio tech organism towards another) is a being of another universe; her arrogance programmed in and conceptual, deprived of petty human motivations".[106]

Hijacking Lists

A similar debate had taken place on the Nettime mailinglist in August-October 1998 when antiorp was sending hundreds of messages. There was an essential difference, though. Nettime was a closed list and antiorp could not freely bother the subscribers. Nettime moderators were only letting a few messages through, every now and then. It was in particular the New York-based Nettime moderator Ted Byfield who took it on to deal with the mail flooding. In response to the filtering Frederic Madre posted three rules: "1) hypermedia critics must do it the hypermedia way, or die. 2) forget 2.0: 0.0 is the right direction 3) moderation has to go".[107] Despite criticism of some, Nettime remained closed and could therefore not be hijacked. In early October 1998 antiorp was unsubscribed. Ted Byfield explained about the amount of work to maintain a (closed) list:

> Filtering out the spam, dealing with the misdirected subscriptions and unsubscriptions, passing mail to the announcer, cleaning up mail (quoted-printable cruft, ascii junk, bad formatting), and then stripping down multiple levels of headers that are generated by majordomo. It's not unusual for this to take a few hours a day.[108]

102. An example would be Darko Fritz: "oh, I love women media activists in uniforms ... please please spam me. spank me. oh yes. more. Ev en more. spam me. (..) what a pity that there is no moderator here so you can masturbate only with no resistance to a father figure, as in good old years. what unforgettable incest scenes ... and everyone can watch ..". *Syndicate*, February 1, 2001.
103. Diana McCarty, re: another small syndicalist, *Syndicate*, February 3, 2001.
104. Eleni Laperi, about Macedonian crisis, *Syndicate*, March 28, 2001; Edi Muka, hi from edi, *Syndicate*, March 31, 2001; Melentie Pandilovski, re: hi from edi, *Syndicate*, April 2, 2001.
105. Károly Tóth, spams by integer, June 12, 2001, writing to the list owner: "I have at least 284 messages (monologs) (ca 4 MB) in my mailbox written by the mysterious "integer". Please: be the tide to go against. It would be: a small step for a man (male, corporate) and a big leap for mankind (social, org)".
106. Friddy Nietzche, regarding integer, *Syndicate*, June 15, 2001.
107. See two digests, *Nettime*, August 12 & 18, 1998. These digests largely contain of representative antiorp postings.

At that time antiorp sent around ten messages a day to Nettime. Ted Byfield:

> If antiorp had been willing to listen or give me the benefit of the doubt when I asked it to slow down, or had recognized that getting its own mail bounced back might bear some theoretical relation to its own activities, then I wouldn't have unsubscribed it. But, instead, it went crying to the info.cops, playing fast and loose with the facts, and taking up my own and other moderators' time in order to radicalize the situation to 'prove' that everyone except for poor little antiorp is an unenlightened fascist censor.[109]

An article by Austin Bunn in the online magazine *Salon*, published in March 1999, describes the antiorp vs. Nettime case and mentions similar incidents such as the Jack Kerouac fan list beat-l ("exploding like a civil war"), Mediafilter's highjack of Nettime and Mark Stahlman's raving on the Technorealism list.

> Take a close look at the wreckage and talk to survivors, and it's evident that mailing-list flare-ups are the handiwork of agent provocateurs determined to pump the bellows. They want to take your attention hostage and jam your mailbox with their agenda. At best, they're a kind of online performance artist trying to expose some elusive truth; but at their worst, they're rogues waging list-serv terrorism.[110]

What are these loose cannons after, Bunn, asks. "And, perhaps more urgent, is there any defense against them?" Abandon ship and sign off? Install bozo filters? It's like trying to reason with someone who has a weapon. Bunn, contemplating: "Often these provocateurs have something essential to contribute, but the sheer wattage of their energies endangers the connection they're trying to create.

Californian net artist, programmer and former Syndicalist Amy Alexander thinks the trouble of 2001 on Syndicate had little to do with either subscribers or administrators. It was the very structure of lists that was outdated.

> Anyway you slice it, NN is a collective troll. Trolls are all over the net—and have been for years. Trolls as well as lamers, drifters and lurkers are all part of the assumed user- base. There

108. Ted Byfield, re: gated communities, *Nettime*, October 10, 1998, in response to the protest of net.art critic Josephine Bosma against the removal of antiorp from Nettime (and Syndicate), demanding an open list. "It might be good for both us and antiorp to live in peace. Why throw away such a talent and keep so much overestimated academic bullshit?" (gated communities, Nettime and Xchange, October 9, 1998). An answer of xchange list administrator Jaanis Garancs, *Xchange*, October 9, 1998. The Xchange list had its antiorp debate in that same period.
109. Ibid.
110. Austin Bunn, Molotovs and mailinglists, *Salon*, March 3, 1999. URL: http://www.salon.com/21st/feature/1999/03/03feature2.html.

> are known ways to deal with them. A troll is not the Achilles heel that can knock down a list. It's 2001 and you just can't have a diverse net community operate with a structure like it's 1985.[111]

Unlike the early days the motivation of participants could differ wildly. The Net had opened itself up in a radical way, allowing all sorts of people to express themselves. What was needed was new forms of collective security and filtering software. The majordomo mailinglist software from the early days was no longer capable to deal with the new techno-social realities on the Net. In the midst of the fire the recycle artist Steev Hise posted a cgi script, intended so as to act like NN, a parody perl program that allows you to input what you want to say, and it spits it out in the NN machine talk. This strategy, fighting fire with fire was actually intended to fight fire with laughter. The software was to bring some levity to the situation by pointing out and deconstructing the predictability of NN's texts in an amusing way. But the Syndicate was already beyond repair. Neither rationalism nor irony or humor could take away the bitterness that had grown.

Faced with the conflict between a desire to be noticed and the fear of being humiliated by taking sides in this conflict, most of the Syndicalists remained silent. The community lacked an armor to defend itself and lost interest in the Syndicate project altogether. The fear of being labeled, as a totalitarian advocate of censorship was omnipresent and prevented participants from acting at this crucial hour. Laissez fair liberalism showed its brutal face. The choice was an impossible one. There was going to be violence in one way or the other: either a hand full posters would be excluded or the community would go under in a self-destructive manner. After seven months of integer presence and several thousand postings, not just by integer but also by mez, Frederic Madre, Andrej Tisma, du, pavu.com etc. (and their opponents), Syndicate had passed the point in which the issues could have been resolved through consensus. Suggestions such as mail filtering which could solve the problems, came too late. The whole idea of an online media arts community which had to be 'cleansed' of 'unwanted elements' by voluntary filtering at the receiving end of individual subscribers seemed a veto against the original idea of an egalitarian exchange of information and collaboration. Only few Syndicalists filtered their mail, the majority remained fully exposed to the hundreds of NN postings.

While there had been some resistance on Syndicate against the ongoing flood of integer postings in the months of June and July, the protests began to take momentum in early August. Julie Blankenship: "The life is being sucked out of the list by NN's constant posts and the responses

111. Amy Alexander in a private email, December 26, 2001. Amy wrote to the Syndicate list: "the people who had been successfully (for their own purposes) filtering were reading a different list than everyone else, and tended to be surprised that other people were so upset about the volume of NN mail. Some people suggested, "filter - don't censor!" and other people responded with "how do you filter?" or "I can filter but only on the client side so it ties up my bandwidth". it seemed there were have and have-nots of filtering, and though that might sound like some sort of geek minutiae, really it comes down to access to control of reception - which I'd argue on a listserv is at least as important as access to control of broadcast. If the information coming in is too tangled or cumbersome, then it can't be read effectively. " (*Syndicate*, August 22, 2001). More info on trolls: http://www.cs.ruu.nl/wais/html/na-dir/net-abuse-faq/troll-faq.html (posted by Derek Holzer, *Nettime*, March 3, 2002).

they generate. I don't enjoy watching it die".[112] Igor Markovic from Zagreb who had been challenging the integer troll for some time, wrote back that Syndicate was pretty much dead anyway, even if you would filter out integer and all the announcements.[113] Some insisted integer would have gone away if no attention were paid to the troll. Saul Ostrow: "I do believe (for it has been my experience elsewhere) that such vermin as these will migrate away if they come to be ignored—they live on negative attention and the desire of others to reason with them—I personally, readily use my delete key at the mere sight of this tag".[114] Others, such as Diana McCarty, described integer as "playful anarchy". "I thought of the NN posts as a bit like street theatre... whereas antiorp was more like a mime, NN sort of used the list as a public space for interventions".[115]

The Dead of a Community

On August 7 2001, after hundreds of NN postings and an exhausting debate Inke Arns unsubscribed NN/integer, causing protest from a loud minority, while receiving praise from others. The mood on the list was deeply divided. Inke and Andreas seemed to have hoped that the Syndicate community, as a living entity, would defend itself against the ongoing integer humiliations. Inke Arns: "If you don't take care of your list, and voice your opinion, the list will be taken care of by others. And you won't necessarily like it".[116] According to Inke the suggestion that Syndicate was a utopian network with distributed responsibility has been proven an illusion. "Regarding WORK the Syndicate mailing list is definitely NOT a non-hierarchic 'society' of equal members. How many times have I called for more support concerning the administration of the list? How few answers did I receive?" Andreas Broeckmann defended the removal:

> I don't like filters. I like this list because it makes sense for me to listen to all the different voices. I don't want to censor what comes through. At the same time, I ask for some sort of respect for my position as somebody who is also on this list. This implies not being shouted at all the time. It more importantly implies not being spat on and insulted for writing this message. It implies not seeing messages that call me a criminal.[117]

Annick Bureaud (Paris) also detested filtering and defended unsubscribing integer.

> "What I really disliked with NN postings was the flood. Once in a while, why not, but minimum 10 per day, as in the last week, come on! This is just a highjack of the list. S/he knew the rules, s/he didn't play by it. Too bad".[118]

112. Julie Blankenship, re: [ot] [!nt] \n2+0\, *Syndicate*, August 7, 2001.
113. Igor Markovic, re: [ot] [!nt] \n2+0\, *Syndicate*, August 7, 2001.
114. Saul Ostrow, re: concerning the Mosquitoe Integer, *Syndicate*, August 8, 2001.
115. Diana McCarty, Re: Syndicate's love-hate relationship with NN, *Syndicate*, August 10, 2001.
116. Inke Arns, re: what happened, *Syndicate*, August 14, 2001.
117. Andreas Broeckmann, re: Jaka Zeleznikar: NN - what happened? *Syndicate*, August 13, 2001. The essence of the Syndicate project is well summarized in a posting by Eric Kluitenberg, A short comment on the identity of the Syndicate list, *Syndicate*, August 13, 2001 ("In the last year or so I saw the essence of the list get lost in a cloud of confused autistic ascii experiments that had really nothing to do with the initial character of the list".). See also Patrick Lichty, Bans & Free Speech, *Syndicate*, August 14, 2001.
118. Annick Bureaud, re: what happened, *Syndicate*, August 14, 2001.

Instead of a relief over the disappearance of integer, the mood on the list only got tenser with Andrej Tisma crying censorship, complaining about a conspiracy of Soros swastika people. Or Brad Brace, who equated NN with the martyr Mata Hari. At the 'moment supreme' the Australian net.artist][mez][started systematically forwarding integer messages, stacked with personal attacks.[119] This was the sign for Andreas and Inke to step down. They had enough of all the hate mails. The moderators made sure that the handing over of the list was done "in a proper and friendly manner". While a small group, mainly net.artists, kept on arguing, defending the anti-censorship case, in a matter of days Syndicate fell apart.[120] The rhizomes, tunnels and channels had insufficient defense mechanisms against those intending to highjack the "subterranean connections".

NN's strategy of disruption had proven successful. By mid August 2001 the Syndicate list had effectively spit in two. The group that defended integer stayed behind on and moved the list (and the name) to a server in Norway.[121] In early September "Spectre," the follow up of Syndicate was announced. Spectre had been prepared on a cc: list during the turbulent weeks in August went it had become clear to Inke, Andreas and a few others who had left the list in protest that Syndicate no longer could be saved. The Spectre announcement included the following 'netiquette' rules: "No HTML, no attachments, messages < 40K; meaningful discussions require mutual respect;

119.][mez][, explaining her decision to forward integer messages: "y* I'm sending NN's replies to the list.....as NN has been uns*bbed without a list consensus, I'll continue 2 4ward her replies as I assume a rite-of-reply should be allowed under the paradigm the Syndicate list has adopted". : "][mez][" 4warding of NN's mails, *Syndicate*, August 16, 2001. In the same period a similar conflict between mez and the Australian mailinglist moderator Julianne Pierce took place. Even though the recode list was already in decline, it was the net.art versus spam controversy that eventually led to the closure of recode on January 30, 2002 (see *Nettime,* January 31, 2002). Mez documented a variety of emails concerning this case at the following website: http://www.hotkey.net.au/~netwurker/recodebacle.htm.
120. In retrospect, Honor Harger (London) reflects about the cynical NN/integer/antiorp strategies and the 'nato' software used during the list raids. "I find it deeply the ironic that an entrepreneur so well known for revoking licenses to use her software (nato) when she encounters even the smallest criticisms of her programming - effectively censoring nato users - would react with such petulance when she herself is asked to minimize the 'noise' of her postings. Considering the NN_construct is so intolerant of others views on her work and ideas, I find it rather galling that so many have tried to defend her in the name of 'free speech'. This is something laughably alien to the NN_construct's philosophy of doing business, and it is unfortunate that Syndicate has collapsed based on this issue. Not that this would be of any interest to the NN_construct, who has little concern for this discussion space, absolutely no awareness of the network which has formed around this list for the past 5 years, and no care if her incessant flood of posts destroys the character of this list. This is simply one of the many spaces for the NN_construct to advertise her commercial products, and to raise her profile as a practitioner. I find it very sad that her promotional tactics have been so effective in redirecting the course of the list". Re: future, *Syndicate*, August 18, 2001.
121. Those who took the name Syndicate with them to restart the list elsewhere were, amongst others, yaNN@x-arn.org, Claudia Westermann, Clemens Thomas, Atle Barkley, Frederic Madre and Jaka Zeleznikar. The administration team changed and since August 27 2001 the Syndicate mailing list and web space was hosted by Atelier Nord in Norway. The homepage of the renewed Syndicate provided information about mail filters and how to use them. "Sometimes it might seem to be necessary to set mail filters, in order to avoid getting your in-box stuffed with mails, that are not of interest to you. " (http://anart.no/~syndicate/subpages/filter.html).

self-advertise with care!"[122] Soon Spectre had 250 subscribers and continued the Syndicate focus on announcements related to new media culture. Spectre would no longer explicitly focus on the East-West dynamics but still referred to the Deep Europe concept.

> "Deep Europe is not a particular territory, but is based on an attitude and experience of layered identities and histories - ubiquitous in Europe, yet in no way restricted by its topographical borders". As was the case with the original Syndicate "many people on this list know each other personally". The aim of Spectre was going to be "to facilitate real-life meetings and favors real face-to-face (screen-to-screen) cooperation, test-bed experiences and environments to provoke querying of issues of cultural identity/identification and difference (translatable as well as untranslatable or irreducible)".[123]

After innocence

It was up to history if these initiatives would have the same vitality and timeliness as Syndicate once had. Spectre would turn out to be an announcement list with hardly any debate whereas the Norwegian initiative, that carried on the Syndicate name, mainly consisted of net.art/ascii art devotees.

Syndicate was a, relatively speaking, late initiative. It blossomed as a pragmatist 'second wave' project, a belayed response to the cyberculture euphoria of the early-mid nineties and the 1989 political turmoil in Europe. Because it was situated in a different historical period, Syndicate missed both the euphoria of the aftermath of the fall of the communist regimes and the radical, speculative excitement of the early nineties, sparked by the rise of new media. Even one or two years make a substantial difference. While performing actions, staging debates and building networks is it important to act timely. Syndicate could no longer easily tap into such energies. The V2_East Syndicate initiative had indeed expressed unease over the traditional network practices of established NGOs and cultural organizations. It had the electronic means (mailinglist and website) to build more open, decentralized and diffuse networks, and proved its potential during the Kosovo crisis. When the East-West network was in place, around 1997/1998, it found itself in an environment of consolidation and growing suspicion. There was a hangover of the utopian techno promises of the free marketers and well-intended Western agendas of cultural officials, wining and dining with their Eastern counterparts. Syndicate itself had not expressed such tendencies but also proved unable to mobilize the simmering discontent.

Throughout its existence, Syndicate had the feel of a somewhat safe project, struggling with the obsolete East-West dichotomy it had imposed upon itself in order to transcend it. Unconsciously, the project had been built on the Cold War strategy of cultural subversion of power without naming its adversaries. With old school Communist officials having mutated, and EU/NATO not

122. Andreas Broeckmann, new mailing list: SPECTRE: info, *Spectre*, September 14, 2001. It also stated: "Requests for subscription have to be approved by hosts. Subscriptions may be terminated or suspended in the case of persistent violation of netiquette. Should this happen, the list will be informed. The list archives are publicly available, so SPECTRE can also be consulted and followed by people who are not subscribed". URL of the Spectre list archive: http://coredump.buug.de/pipermail/spectre/.
123. Andreas Broeckmann, new mailing list: SPECTRE: info, *Spectre*, September 14, 2001.

yet fully in charge, it was unclear which powers had to be questioned. Dutch sociologist Johan Sjerpstra, in a private email exchange, looking back on Syndicate's role:

> Lacking a critical apparatus to analyze the role of culture and the arts in the former East, Syndicate remained 'positive' in its aims and attitude, demanding open borders and higher budgets. Its pedagogical approach obviously wasn't very much appreciated on the recipients' side. Being a (potentially interesting) international artist group, Syndicate lacked consistency to push its agenda (if there was any). Beyond the communication paradigm (not a particular Eastern approach anyway) there wasn't much else. No authority was explicitly questioned. The common denominator, working with (networked) computers in an arts environment, did not translate into a specific group aesthetics.[124]

Indeed, Syndicate did not end up as a movement, school, style or tendency. Still, this inability was a general problem and not only affected Syndicate. The impoverished new media arts sector, clustered around the Syndicate node remained on a boutique level. Identity-wise Syndicate was neither 'cool' nor did it create inspiring and controversial expressions of dissent. Its value has to be located in the network itself.

The 1998-99 period around the Kosovo crisis were Syndicate's heydays. While elsewhere on the Net dotcommania dominated the Internet agenda, the Syndicate network, symbolic of the new media arts sector as a whole, tried—and failed—to claim the moral superiority over war and ethnic tensions on the one, and corporate greed on the other hand. Yet, there was no cultural high ground to escape to. The twist of mid 2001 can only be read as a hostile attack on an already weakened body, covered up by lies and a massive abuse of democratic tolerance. The unspoken consensus of mediated communication, based on tolerance, democracy and credibility fell apart, torn apart by fussy controversies. NN/Antiorp/integer's (efficient) usage of anti-globalization rhetoric ("corporate fascists") with its roots in Stalinism and totalitarianism, managed to overthrow an already minimal sense of belonging. It used populist anti-capitalist sentiments, also to be found in the rhetoric of authoritarian rulers from early 30's Hitler to Malaysia's Mahatir during the 1997 Asian monetary crisis. The techno-organic rhetoric ("I am human plant"), anti- English sentiments and a quasi crypto-orthography pointed to a failed parody of content, overruled by a manic backlash and driven by the desire for self destruction (the troll being the Internet appearance of the suicide bomber). During 2001 Syndicate transformed into a nonsense communication community for a few insiders, a small circle of friends squatting in the past, mimicking a community, only capable to parasite on the past of a dead project. Spectre, the follow-up list of Syndicate proofed to have no relevance, caught in the pragmatics of a redundant, no-nonsense list. Johan Sjerpstra:

> During mid 2001, when the new type of aggressive rhetoric appeared, the Syndicate founders/owners left the list without too much hesitation. They seemed to have lost their interest. Maybe their motivation was revenge, but for what? The broad membership could not handle the attack and basically no one wanted to defend the list. The new owners, which took over in August 2001, had no better agenda either. They repeated the old East/West dichotomy plus the info exchange function, but this is no longer of importance because there are a lot of well organized sites.[125]

124. Johan Sjerpstra, in a private email to the author, February 25, 2002.

No genuine information appeared on Syndicate, most of the art info was forwarded from other sources. The main traffic has become small talk, internal, nonsensical, repetitive, redundant textual content, very often with simple ('small is beautiful') messages, often not more then a URL reference. Johan Sjerpstra again:

> The minimal emails can be a seen as a new movement in the quickly changing net/web art scene, like a counter reaction to the earlier socially engaged and/or conceptual type of net/web art. We could call it a sort of Dadaist answer to the to seriousness and tech orientation of the late 90ies. The significant difference with Dada is that instead of humor they use an aggressive and threatening (hacking) tone. Hate speak, targeted at those they dislike—a sign of an emerging new extremity.[126]

The Syndicate list-takeover showed how an aggressive strategy of information warfare could overcome tolerance as a form of weakness. The incident marked the end of the romantic concept of open, unmoderated exchange. This tendency of conscious extreme strategies are present and even if they represent a only small percentage of users, within a growing Internet they are capable of penetrating existing structures with virtually no resistance. As mediocre viruses are capable to bring down millions of computers, so can the net artist dramatically increase its impact by using aggressive memes. There is no moral for mediated usage yet. Such a networked moral can only be situated within a living dialogue.

The fall of Syndicate marks the rise of information warfare. The 'war zone' is no longer a distinct battlefield but stretches out deep into society. It does not only affect the physical civil infrastructure but also has penetrated the civilian mindset. The strategies of tension, disinformation and uncertainty are now common practices amongst and between social groups. In the case of Syndicate, the East-West communication model turned into a dangerous, manipulative, unreliable network of abuse. This turning point, which may be have happened earlier for some online communities, and later for others, both reflects and further accelerates the collapse of the dream of the Net as a utopian, parallel world. Like photography in the age of its digital manipulation, the Internet had lost its credibility. For the Syndicate members it meant that free and open email communication was no longer innocent.

125. Ibid.
126. Johan Sjerpstra, in a private email to the author, March 3, 2002.

CHAPTER SIX
PRINCIPLES OF STREAMING SOVEREIGNTY
A HISTORY OF THE XCHANGE NETWORK

Introduction

Xchange is a network of non-profit organizations and individuals which all have been involved in 'streaming media' since the birth of this technology in 1996-1997.[1] This chapter focuses on the principles of streaming media,[2] usually described as audio and/or video, 'streamed' from a dedicated Internet server, either live or on-demand. Besides live webcasts, streaming projects build up online archives and databases. Unlike similar cultural networks and lists, the 'cloud' of streaming initiatives that I describe in this chapter has not evolved much since its genesis. As a subculture of experimentation the Xchange practitioners survived waves of commercialization, insisting on the original drive to seek new media models that go beyond traditional broadcasting. The Xchange

list has had a consistently moderate traffic and, with a few exceptions, has refrained from intellectual theorization of the field. Unlike Nettime, the Xchange list did not have controversies over the issue of list moderation. And unlike Syndicate, Xchange successfully managed to ignore trolls and ASCII artists, begging for attention. This is why I decided not to tell the Xchange history in a chronological manner. Instead I have chosen to highlight patterns in the activities and discourse of the network and focus on practical limitations for streaming media networks in terms of available and affordable Internet capacity.

Xchange issues such as bandwidth, standards and models for decentralized webcasting have been remarkably stable over the five years of its existence. The immense popularity of MP3 file swapping on Napster (around 2000) and other peer-to-peer (P2P) networks such as Gnutella and Kazaa largely took place in a parallel universe, so it seemed. Despite the worldwide growth of users that by now have installed media players on their PCs and increasingly also PDAs and other wearable devices, this has not lead to radical shifts inside the independent arm of the streaming media industry. Streaming has remained very much a desktop PC experience. Despite the steady roll out of broadband and cable modem connections since the late nineties, independent non-profit streaming media did not witness a breakthrough comparable to the boom of e-mail, chat rooms, webcams or MP3 swapping. Partially in response to the broadband stagnation, the cen-

1. This chapter has been based on researching the few thousand or so postings to the Xchange list from December 1997 to July 2002, related websites of Xchange members and relevant publications. I would like to thank Joanne Richardson, Rasa Smite, Pit Schultz and Adam Hyde for their valuable comments.
2. A random 'googled' definition of streaming media states: "Streaming media is a way to enhance World Wide Web sites by integrating video and audio with a site's text-based content. Unlike downloading a video or audio file separately and then playing it back later, streaming media plays when a Web page (with the embedded streaming video or audio) downloads on a user's browser. To include streaming video or audio, the server hosting the Web site must support the application. To play streaming media embedded in a Web page, the user must have a helper application such as a viewer or plug-in. Viewers are typically offered free to users". http://members.tripod.com/Lori_Sylvia/stream.htm

tral thesis of this chapter is to interpret 'minor' collaborations as 'sovereign media'. I will explain my use of these terms further below. But first I will present my version of the first five years of streaming media from the perspective of the Xchange network.

Beginnings

All beginnings are arbitrary. One starting point for streaming media could be the release in April 1995 of the first version of the RealAudio player by a company called Progressive Networks (later Real Networks), founded by former Microsoft employee Robert Glaser in Seattle. Early versions of the audio compression software provided only on-demand audio.[3] The first live broadcast was a radio coverage of a basketball game: the Seattle Mariners vs. The New York Yankees on September 5th 1995. The RealAudio player (later RealPlayer) was freely distributed to users who, at that time, were typically connected to the Internet via low-bandwidth modems. The player supported connection rates as low as 14.4 Kbps, which delivered audio quality comparable to the sound of a decent AM radio. In October 1996 the first stable version of the RealAudio server software could be purchased, enabling users not just to receive live audio signals but also to stream out into the Internet at large. From that time on everyone could practically start his or her radio station on the Net.

Another beginning could be Belgrade radio station B92's switch from air to Internet on December 3, 1996 after Slobodan Milosevic had closed down the oppositional radio station. As discussed in the previous chapter, for three days B92 could only be heard via the Internet, a crucial life line, provided by B92's in-house Internet provider, Opennet, set up by the mathematician Drazen Pantic who had heard of streaming media well before Progressive Networks launched its first player. Drazen, who is now based in New York, tells me the story of early streaming software, from 'multicast' to the very first versions of the Real player.

> Early experiments of Carl Malamud and the multicast group, before 1996, were promising, but still out of conceptual and infra-structural reach of many. I received all announcements of the multicast group, including the announcement of their legendary live broadcast from the US Congress. Back then one really had to be connected to what you could consider broadband in order to be able to receive a live stream. When Progressive Network came out with their producer/server/player bundle it attracted a lot of attention. But early releases (up to version 3) were just not usable. Even though compression software (called codecs) got better and basic stream could be delivered even to an ordinary 28.8 Kbps modem. However, the quality, delays and reliability remained bad for quite a while. A really interesting and progressive approach was that Real launched the version of their bundle for Linux as well as for Win and Mac. That fact kept many people focused on what Progressive Networks was doing.[4]

3. A technical explanation: "Uncompressed CD-quality WAV and AIFF files are too large to stream over the Internet for playback in real time. Instead, lighter-weight compressed formats such as MP3 and RealAudio are employed for streaming network audio. These formats use what are called "lossy" compression schemes, reducing file sizes by eliminating certain inaudible data from the original files without too significantly degrading playback sound quality. MP3 and RealAudio are excellent streaming formats, achieving performance factors great enough to allow real-time encoding/decoding over current network bandwidth conditions while delivering satisfying audio quality". From: http://linux.oreillynet.com/pub/a/linux/2001/03/23/streaming_media.html?page=2.
4. Email interview, conducted for this research, January 17, 2002.

As Drazen goes on to explain, early streaming media networks were all about the 'art of compression'. The smaller the files were, the more people would be able to participate and the less the Internet at large would be congested. But what was the lowest possible sound quality listeners would still accept? How many dropouts could one bear, having to re-open the connection to the streaming server, somewhere on the other side of the world, time and again?

But let's go back to Belgrade. The closure of B92 came as a response to massive student protests of late 1996. For weeks, hundreds of thousands of demonstrators protested the government's annulment of municipal elections won by Milosevic's opponents in Belgrade and 14 of Serbia's largest cities. Drazen:

> When Milosevic banned Radio B92 in early December 1996, it was just one of those unimaginable synchronic situations that happen every once in a while. We immediately started distributing news clips in Real Audio format. We neither had the expertise, the bandwidth nor the software for live transmission on the Net. But XS4ALL and Progressive Networks jointly helped with bandwidth and server software. We got server capable of 400 simultaneous connections donated by Progressive Networks, installed at XS4ALL.[5]

Within a day or two there was a live real audio stream from Belgrade with the B92 program. That same stream is still up and has worked all the way, except for a few understandable interruptions during the Kosovo conflict in 1999, to the present day.

Principles of Streaming

I have to leave out the rich pre-history of streaming media here.[6] This chapter only focuses on the post-1996 period and takes the emergence of the Xchange network as an example of an independent and 'tactical' Internet culture, emerging in the aftermath of the mid nineties wave, led by Wired Magazine, developing parallel to the dotcom hype (1998-2000). RealAudio technology had made it possible to join a global network for the price of a local telephone call—and that made all the difference. The Xchange network was founded in late 1997 by three members of E-lab in Riga (Latvia), Rasa Smite, Raitis Smits and Janis Garancs who started an online audio project with the same name in July 1997. The three had participated and organized in the maelstrom of conferences, festivals and workshops during the European 'short summer of the Internet' in 1996/97. This all led to the launch of Xchange.

5. Ibid.
6. There had been early-networked sound arts experiments, in the early-mid nineties, before the Internet, using BBS systems and direct telephone connections. Heidi Grundmann of Kunstradio (ORF) in Vienna had been one of the pioneers. More can be found in the interview with Heidi Grundmann, conducted by Josephine Bosma, *Nettime*, July 15, 1997. URL: http://www.kunstradio.at/. We could also mention Gerfried Stocker and his Horizontal Radio project in June 1995 that connected 36 radio stations for a 24-hour program in which listeners were able to control the audio mix via a web interface. URL: http://gewi.kfunigraz.ac.at/~gerfried/horrad/.

Xchange could be seen as an example of a leading new media culture initiative coming out of Central and Eastern Europe that had started to flourish after the fall of the Berlin Wall.[7] As a mailinglist and website Xchange was meant for "alternative, non-commercial Internet broadcasters and individual audio content providers," aimed at setting up a "net.audio network community".[8] The list would provide its members with announcements of new radio links and timetables for collaborative, live webcasts and texts, related to net.audio and radio. From December 1997 till this day E-lab's Ozone group has been doing live web sessions every Tuesday, bringing interviews, net.radio experiments, live music and mix-jam sessions, sometimes together with other net.radio servers, elsewhere on planet earth. Ozone invites local musicians, poets and writers to present their work to the global online net.radio community.[9] There is an IRC chat room open, an important tool for net.radiocasters, to find out who's tuned in (passive listening), who's picking up the stream for rebroadcasting purposes, or has some content on offer to download. With the latter the Ozone group in Riga might then go to the URL and rebroadcast the signal, thereby integrating the 'incoming' sound into the already running Ozone program.

In her 1997 welcome statement Rasa Smite, member of E-lab in Riga and co-founder of Xchange, mapped out the terrain Xchange was going to cover.[10] She stated that net.radio is a blend of different radio initiatives, with some having a community/pirate radio background, whereas others exclusively explore webcasting without any link to terrestrial broadcasting. Net.radio is not one, it is many. It is the blend that makes the culture, not Internet technology as such. Some streaming initiatives like to serve both local (FM) and global (Internet) audiences. Then there are those doing live transmission during events such as festivals, parties and conferences. Others cast out of clubs. Whereas the Budapest-based Pararadio was webcasting for a specific (local) Hungarian audience, others aimed at the global Internet population. In a posting to the Xchange list Slovenian net.radio pioneer Borut Savski summed up the different elements of free webcasting: [11]

- (Live) real time text
- Audio and video transmission
- Worldwide accessibility and international concepts
- Synchronized broadcasting from multiple sources on the same platform (site)
- Atomized (international) production groups gathering to their own liking

7. We could mention here the first and second "Art+Communication" festivals, organized by E-lab in Riga (November 1996 and 1997); a workshop during second Interstanding conference in Tallinn (November 1997); the radio workshop during Hybrid Workspace/Documenta X (organized by Kunstradio, Vienna) and the weekly radio shows from Kassel; network (hosting) activities of Radio Internationale Stadt (Berlin) and Xs4all (Amsterdam).
8. Introduction, *Xchange*, December 2, 1997. URL of the list archive: www. xchange.re- lab.net\m\index. html.
9. During the first live session, on December 2, 1997 Peteris Kimelis was interviewed about his work 3 frequencies. "He has made a sound just from 3 frequencies -> 3000Hz , 5000Hz , 8000Hz. These are natural frequencies of the human ear but what you actually hear is beeeep and it's hard to listen to this sound for a long time". Raitis, *Xchange*, December 3, 1997. The Xchange live web sessions are archived at http://ozone.re-lab.net/sessions.html.
10. More on Pararadio in the interview, conducted by Josephine Bosma, *Xchange*, December 11, 1997.
11. List adapted from Borut Savski's posting to *Xchange*, December 15, 1997.

- A very differentiated (again international) audience
- Creation of no-copyright platforms of independent productions
- Information banks (texts, interviews, music, archived live production)
- Individualized ways of access to archived text; sound and vision files
- No cost difference between local and international; no repressive legislation (so far).

Over the coming years the Xchange network would practice—and embody—these different elements. They define the Xchange network, keeping it separate from the commercial currents. In the mid nineties non-profit net.radio pioneers enjoyed an incredible freedom. The spirit was very much like pirate radio, an element the Amsterdam critic Josephine Bosma brought into the network through her writings, interviews and responses, posted to the list.[12] Xchange at this point could be described as a global network of audionauts, exploring the virtual frontiers in a festive manner. Authorities had no clue, nor did mainstream media or the corporate world. Intellectual property rights were a non-issue for the early non-profit streamers. Even though some net.radio station would occasionally play mainstream pop CDs, for the most part they webcasted independently produced music and sound scapes. Out there on the Net they found a freedom to be left alone, perform experiments with the new medium while connecting it to local radio, picking up the sounds in techno clubs and tiny sound studios, sending soundscapes out into the cyber plains. Rasa Smite formulated the aims as such:

> Xchange is an attempt to provide a context for streaming audio activities. Xchange network aims to develop a collaborative support platform for 'minoritarian' streaming initiatives and audio content producers, a place to publish, share, inform, mutually support, co-produce and communicate.[13]

By 2002 Xchange reached around 450 subscribers and (almost) all of them are audio content providers—contributors, who are participating in building the community.

12. For instance Josephine Bosma, Interview with Pararadio, *Xchange*, December 11, 1997; net, 'radio' & physical space: E-lab/RE-lab/Xchange/OZOne, *Nettime*, January 7, 1998; From net.art to net.radio and back again, written for the 1998 Ars Electronica catalogue, posted on *Xchange*, July 11, 1998.
13. Rasa Smite in an email interview for this research, January 13, 2002. Here some of the participating Xchange individuals and initiatives: Heath Bunting (UK/Banff), Convex tv (Berlin), ORF Kunstradio (Vienna), Borut Savski (Radio Student, Ljubljana), E-lab/Radio Ozone (Riga), Interface/Eezee E. (London), Silke (Tacheles, Berlin), Luka Frelih (Ljubljana), Isa Suarez (London), DFM (Amsterdam), Zina Kaye/Hydrogen Jukebox (Sydney), Damian Castaldi (Sydney), Guy van Belle (.be), Monika Glahn and Ulf Freyhoff (Berlin), Radioqualia (Adelaide/Amsterdam), Sabine Breitsameter/AudioHyperspace (Germany), Gio and James from Backspace Radio (London), Mike Riemel (Berlin), Kulturserver (Berlin), Frank Fremerey (Germany), Radio Lada (Italy), Klubradio (Berlin), DFM (Amsterdam), The Thing netcast (New York), Rachel Baker (irational.org), XRL (Berlin), Radio Helsinki (Graz), Matthew Smith (Linz), Herbert A. Meyer (Freies Radio Kassel), Radio FRO (Linz), Fakeshop (New York), Radio Free Kansas, l'audible (Sydney), John Hopkins (.fi), Steve Bradley (WMBC Baltimore), Orang Orang/Radio Internationale Stadt (Berlin), Hoeksteen (Amsterdam), Tamas Szakal (contour.net), Radio Lilliput (Milan), Hubert from Technologix, Radiostudio.org/PingFM.org (Weimar), boombox.net, TwenFM (Berlin), Pierre de Jaeger (Brussels), pavu.com (France), Derek Holzer (Amsterdam), Radio Jeleni (Prague), superchannel.org (UK), machfeld.net.

Webcasting, not broadcasting

Despite the open and pluralist approach, there was one issue on everyone's mind: what makes streaming media so different from broadcasting media? Rasa Smite:

> Everything! It is not just because audio is streamed via the Internet, thereby reaching a global audience. Streaming also gives you a certain freedom. The distributed and decentralized structure of network radio is very encouraging. It offered inexperienced artists possibilities to participate, to be involved and 'to network' - equally for everyone on the net, and in particular for those in far remote places, individuals and micro-scale initiatives. These alternative net.broadcasters' initiatives became very active in exploiting the communication potential of streaming audio and were those who succeeded to develop social dynamic of the networked media.[14]

This point of view is not just an idealistic statement. Small streaming media initiatives active within Xchange have actually been operating in the way as Rasa Smite describes them. Their practice however came with a cost—if you want to describe it like that in the first place—of little or no audience. There was only a tiny audience for net.radio, despite the rapid growth of the Internet user base, a reality most initiatives had no problem with. From very early on economics defined the size of the net.radio projects. Non-profit projects simple could not afford the equipment and traffic costs if they attracted thousands of online listeners. Only a tiny fraction of Internet users had enough computing power, storage capacity and bandwidth to fully enjoy streaming technologies. On top of that, the general interest in radio was usually limited anyway. Only those on a stable and open connection, with flat rate prices, would potentially be interested in tapping into streaming media. Berlin-based net critic, Nettime co-founder and streaming activist Pit Schultz:

> The economies of streaming have to be put into consideration when the rather vague concepts are taken in. Narrowcasting is explainable when you look at the bandwidth costs. An average urban pirate station has more listeners than the biggest trance- streaming pipes on the net, just for economic and technical reasons.[15]

After the dotcom shakeout and the 2001 telco crisis the streaming economy shrank, reaching almost the same level as the non-profit culture in 2002. Again Pit Schultz:

> It all comes down who is going to pay the traffic bills. Our Klubradio used about 1.5 terabyte over May 2002 and that is not even much compared to large streaming sites such as live365. A regular provider would ask about 4000 Euro a month for this type of streaming traffic. Who is willing to pay that kind of money? Canalweb, our provider in Paris, closed down, like the other ones we previously used. After Canalweb disappeared we went down from 4000 to 1000 visitors a day. Our server capacity shrunk from 2000 concurrent users to 25. We used about 1.5 terabyte traffic last month which in theory would have costed us 9000 Euros.[16]

14. Email exchange with Rasa Smite, January 13, 2002.
15. Pit Schultz in an email, June 13, 2002.
16. Ibid.

Unlike academic IT-research independent, non-commercial bandwidth is not available for the cultural sector. The only way to earn money with streaming media is to install web banners and popups or ask users to pay for the content. Broadband might in theory be available. Yet, large backbone providers (such as KPNQuest) have gone bankrupt because the content industry will not start streaming before 'digital rights management' and tougher copyright laws are in place. Bandwidth prices might only fall once the decentralized peer-to-peer networks have been tamed.[17] Only then the streaming media industry will have a chance to consolidate. This might take years, even a decade, despite urgent calls from the technology sector for a new 'killer-app' that would create a new wave of global demand for IT-products and drag everyone out of the 2001-2002 economic malaise. Digital rights fees, imposed in 2002 in the USA, resulted in the closure of a number of online radio stations. Whereas users broadband users in the US doubled in the 2001-2002, the overall number of Internet users for the first time leveled off.[18] Online payment systems for (music) royalties might be another long-term solution. However, that might not work unless such a distributed system is a grassroots initiative. Standards pushed by the (U.S.) media entertainment industry will most certainly face resistance from its young consumer constituency.

Online streaming media, accessible via MediaPlayer or RealPlayer (and other) applications, were different from MP3 files that could be downloaded and then played offline. As a response to the inherent limitations of the medium, streaming media developed an ambivalent attitude towards high tech and the overly optimistic forecasts of telecoms. Whereas the rollout of fibreoptics was welcomed, the daily online reality lagged behind the television advertisements promising frictionless speed. The future had become a commodity, a merchandised myth, unrelated to actual experiences. In a response to the ugly baroque interfaces and the obesity of 3D files, taking a lifetime to download, the aesthetics of many independent Internet initiatives shifted to low-tech ASCII art with its green on black minimalist screen culture. Streaming took an odd position in

17. On June 25 2002 U.S. Representative Howard L. Berman proposed a bill aimed at the 'unbridled' piracy taking place over decentralized peer-to-peer file-sharing networks by introducing legislation that lets copyright holders employ tools to prevent illegal trading. Berman said that copyright holders have a disadvantage against P-to-P pirates under existing legislation. "While P-to-P technology is free to innovate new and more efficient methods of distribution that further exacerbate the piracy problem, copyright owners are not equally free to craft technological responses". Berman's proposed bill comes on the heels of a slew of legislative efforts to curb piracy in the digital realm. Another bill, proposed by Senator Ernest Hollings, seeks to incorporate digital rights management technologies in all consumer electronic devices. Source: PC World, June 26, 2002.
18. Source: Arbitron/Edison Media Research: Internet 9, "The Media and Entertainment World of Online Consumers," July 2002. URL: http://www.edisonresearch.com/I9_FinalSummary.pdf. By mid 2002 seven in ten US-Americans had access to the Internet. Early 2001 13% of those with Internet access had a broadband connection.As of July 2002, this number had grown to 28%. The inquiry only asked if users has has streaming media experiences. Users are defined here as consumers of media products, not as potential producers of content and social networks.

the bandwidth dilemma.[19] In need of seamless capacity, streaming initiatives t the same time tried to prove that smarter encryption software would make a more efficient use of scarce and expensive bandwidth.

This leaves us with the question as to what net.radio could be, described in a more strategic sense, beyond the understandable absence of a mass audience. Responding to a posting of the Amsterdam net art critic Josephine Bosma on the Xchange list, Pit Schultz sums up a few 'vectors of wishful possibilities':

- connecting old and new media (net.audio connected to real.radio).
- random access: producing live and also for the archive (audio on demand).
- stretched time: producing with geographically dispersed small groups from 'home studios'.
- public content: non-profit production with free copyright within experimental DJ performances.
- global sprawl: representing and mixing regional styles with global ones.
- sound-scapes: deconstruction of the song via remixing, sampling, overdubbing, cutting.
- free press: direct information without censorship, small news channels, talk shows, net-chat.[20]

Within this range of possibilities, archiving was an exciting new option for radio that so far did not have the content-on-demand option. Once the program was aired it was gone, unless you or one of your friends had taped it—vanished into the frequency nirvana. The only possibility was that, in theory, civilisations in neighboring galaxies might pick up the program, store it, archive the content and properly metatag it. Or you could get into to the time machine and go back in time to push the record button. Such ideas have been on the minds of many radio makers. They would all agree: computer storage option combined with streaming media has changed the very nature of radio. Rasa Smite:

> Some net radios do serious archiving of live sessions. Some of us have experienced that sometimes there has been more listeners of recorded 'last session' than during the 'real' live broadcast. But many others don't pay attention to archiving (too boring?), doubts sometimes appear in-between the necessity of archiving and view-point that live-shows are more exciting than recordings.[21]

19. The bandwidth dilemma for individual artists between high or low tech was based on the growing paradox between promises and technical capacities and actual availability of affordable high-speed connections. George Gilder in August 2000: "Since the commercial advent of wave division multiplexing in 1996, bandwidth has been increasing at least four times as fast as Moore's Law, if not faster, and promises to continue to do so for at least the next several years". (http://www.forbes.com/asap/00/0821/097.htm). The reality however was one of rising costs and a stagnation in Internet usage due to telcos withholding clients from the 'dark fibre' (unused capacity) for profit reasons. See: Geert Lovink, The Bandwidth Dilemma, posted on nettime, March 26, 2001 (originally published in German and English in the Telepolis online magazine www.heise.de/tp).
20. Pit Schultz, re: A Stimulus to Make the Most Productive Use of Radio, *Xchange*, May 19, 1998.
21. Rasa Smite, *Xchange*, December 9, 1997

Radio-on-demand has a great future. Now that information could be stored, spread all over the Net, how were listeners supposed to find it? One would not easily find a live cast via a search engine. Announcements through lists and websites worked fine but reached a limit audience. The decentralized virtue was also the problem of the network. How could content be grouped, in an archive, accessible through a web portal, using a central interface, without putting a claim of ownership and control? The fact that files remained on their own servers, leaving the possibility to link, made databases unreliable in the long run as URLs changed. As time passed, the Xchange list started to specialize itself as an announcement list for live webcasts. Instead of having theoretical debates about net radio, the list developed slowly according to the users' needs. Many net radio initiatives were looking for a place to announce their (live) webcasts or get pointers to net radio sessions of others. As an online 'radio guide' the Xchange list was used by hundreds of streaming initiatives and events that offered a live stream.

Meetings and Webcasts

Comparable to other list-based networks the growth of Xchange was accelerated through a series of meetings and collective net casts, within a short amount of time, where members would meet in real life. The Berlin net.radio days (June 1998) should be mentioned as an exciting early event of the newly formed network, directly followed by the Art Servers Unlimited gathering of independent Internet art initiatives in London, July 1998.[22] Also in July 1998 live webcasts came from the Polar Circuit workshop, out of Tornio in Finland's north. Perhaps the largest and longest project of Xchange happened soon after, in September 1998, when a group of around 20 Xchange members gathered in Linz, Austria where they performed Open-X, a live webcast that lasted 56 hours. The webjam included a long list of remote participants.[23] In November 1998 members gathered in Riga for the Xchange Unlimited Festival.[24] The next meeting took place during the third Next Five Minutes Festival in Amsterdam (March 1999) where a special section was devoted to streaming media.

The biggest festival/conference organized by (and for) the Xchange network was the Net Congestion event (October 2000), which can be considered a smaller version of the Next Five Minutes tactical media festival, organized by (approximately) the same Amsterdam crew, taking place simultaneously in the two neighboring cultural centres De Balie and Paradiso.[25] Topics of the panels included: the network is the narrative, bandwidth aesthetics, the hybrid media show, target. audience=0, web documentaries, tactical streams, protocols and alternatives, the art of making money and "the doom scenario" about congestion and the impact of streaming on the Internet infrastructure. The festival statement struggled with the notion of electronic avant-garde, hav-

22. Report of the Art Servers Unlimited meeting can be found in *Acoustic Space 2*, Riga: E-lab, 1999, pp. 14-24.
23. http://xchange.re-lab.net/56k and www.openx.aec.at/xchange/. See also report in Acoustic Space 2, Riga: E-lab, 1999. p. 34-40 and Zina Kaye, Xchange, September 7, 1998 which includes the names of the participants and a program.
24. For the program of the webjam see Rasa Smite's posting on *Xchange*, November 29, 1998.
25. First international streaming media festival Net.congestion, Amsterdam, October 6-8 2000, http://net.congestion.org. The website contains an archive of the all the panels. The initial concept was developed by Adam Hyde. The first announcement was posted on May 3 2000 by Honor Harger.

ing lost its grip on the medium it pretended to direct. The contrast between the (by 2000) 80 million copies of the RealPlayer in circulation and the quasi self-chosen isolation of streaming artists was growing by the day. Why hadn't Xchange grown at a somewhat similar pace? Why had streaming remained such an unknown phenomena, even amongst the hand full of new media artists? As a solution to this discontent, a "visionary scenario" was offered in which "the artist has become toolmaker, directly effecting the production and distribution of streaming media".[26]

What was being cast? Only a minority of the streaming initiatives labelled their content explicitly with music genres such as techno, rap, reggae, drum 'n' bass or industrial. More commonly Xchange streams are 'mapping' ambient environments rather than transmitting messages. Unlike the DJ star system, known from clubs, regular radio stations and recording labels, most streaming DJs have a low profile or remain anonymous. The dominant presentation form is the live mix, fusing music, spoken word and sound.[27] Often MP3 files or streams from the Net are used. As previously mentioned, Xchange had its own co-streaming sessions, every Tuesday. Raitis Smits explains:

> Everyone can join with his or her RealAudio live stream. The simplest way is to mix your sound source with another. Each of the participants is doing one part of the live session (for example, one is streaming voice, another background music).[28]

A chat channel (IRC) is running in parallel where the streaming participants exchange their experiences and announce what's coming up.[29] A complicating factor is the considerable time delay of each stream of 5-10 seconds. This technical complication requires a sense of discipline and anticipation amongst the participants.

Playing with Loops

According to Raitis, another technique that uses delay is the loop. As Raitis describes it, you take a stream, re-encode it and send it to the next participant. The sound is going round and round, creating multiple layers. Eventually the stream turns into noise.[30]
Another, frequently used technique is sampling. Daniel Molnar:

> Our generation was the first one growing up in an information overflow, that's why we are into sampling. I could cite Gibson short stories, but let it be enough if I say holistic worldview.

26. Conceptual Background, *Net.congestion reader*, Amsterdam: De Balie, 2000, p. 4.
27. More on the philosophy of mixing: Geert Lovink, "An Inventory of Amsterdam Free Radio Techniques," in Neil Straus (Ed.), *Radiotexte,* Brooklyn: Semiotexte, 1992.
28. Raitis Smits, "Xchange Open Channel: Co-broadcast Experiments in the Net," in Nettime (ed.), *Readme!*, Brooklyn, Autonomedia, 1999, p. 349-350.
29. An IRC chat at the #xchange channel, dated March 31 1998, has been printed in the *Readme!* Nettime reader, Brooklyn: Autonomedia, 1999, p. 343-350. An example of the city-to-city cast: "Listen to RA radio aura today 8PM(GST): http://active.llaky.fi/aura/aura.ram, music/sounds/and/ambience by >scott scott >radio Banff >pk >martins ratniks >sera furneaux >matti adolfsen.. sydney((o))tornio((o)) stockholm((o))banff((o))scotland((o))riga". Xchange, August 27, 1998.
30. As described in Raitis Smits, Xchange Open Channel: Co-broadcast Experiments in the Net, in: nettime (ed.), *Readme!*, Brooklyn, Autonomedia, 1999, p. 349-350.

> I'm just trying to sample the world, I ain't try to synthesize any part of it, I'm just stealing the interesting pieces and putting them together.[31]

It is these techniques that are used in the collaboration of live audio networks such as Xchange. Software and critical discourse are important as well, but the actual streaming from and to each other's servers should be regarded as the essence of streaming art.

In 1998 the Ozone group in Riga started with a series of "mobility" experiments, to find out how streaming could escape the static situation of the PC annex radio station, glued to the desk. Rasa:

> It was all about "how low can you go". We tested how narrow bandwidth and what minimum equipment was needed to be able to stream. A 'mobile' streaming studio - RealServer 5 was set up on a laptop. It was used in June 1998 during the net.radio days in Berlin for both encoding and running the server on the same machine using Dual ISDN Internet connection. We also did live streams from clubs, encoding via simple telephone line with 28.8 kbps modem.[32]

Later versions of the encoding software were unsuccessful at streaming through the simple telephone line. They often produced buzz noise. Obviously the software was already made for higher bandwidth and could not longer compress audio for telephone lines and 28.8 modems. Ozone also did a transmission from the train from Riga to Ventspils as a part of Soros Contemporary Arts Exhibition, Ventspils Tranzit Terminal. Rasa:

> We didn't try to encode signal via mobile phone (it had too narrow bandwidth, around 9 kbps). Instead we used mobiles to transmit audio signal (sound, talks, music) from the train to the Ozone studio in E-lab in Riga, where it was received by another mobile phone. There it got encoded into RealAudio signal for further distribution on the Internet.[33]

Not all initiatives covered here have been miniscule by default. The choice to remain invisible was open to each and every streaming group or individual. Fashionable 'underground' music genres such as techno, hip-hop, jungle and drum 'n' bass immediately drew online crowds, as did already existing radio stations. By late 1997 the mailinglist of the London streaming site Interface (started in January 1997) had 1400 members and reported 3 million hits on their site, a considerable number at the time, mainly coming from the club scene. When Josephine Bosma remarks that only institutions have enough bandwidth to listen to net.radio, Interface member Eezee answered: "We at Interface have an average of 10,000 to 12,000 listeners on a daily basis now".[34] In con-

31. Daniel Molnar, *Xchange*, January 4, 1998.
32. Email exchange with Rasa Smite, January 13, 2002.
33. URLs for the Pulkvedis club event in May 1998, with participation of D:U:M:B - hardcore techno Djs un Vjs from Rotterdam: http://ozone.re-lab.net/archive/dumb.ram and http://ozone.re- lab.net/archive/dumb2.ram. URL of the train transmission: http://ozone.re-lab.net/archive/vtt/train.ram. Information provided by Rasa Smite via email, June 4, 2002.
34. Josephine Bosma and Eezee E, *Xchange*, August 17, 1998.

trast, art-type, mostly state-funded 'electronic music' usually attracted small and fairly specialized 'high brow' audiences. A third category, beyond the pop versus avant-garde opposition were the autonomous audionauts, web casting in the great digital nirvana, freed of any consciousness of an online Other. In the independent streaming scene all three models were to be found: commercial pop culture, experimental sound art and the autonomous 'sovereign' webcasters.

Narrowcasts and Archives

The aim of the Xchange participants was to set up temporary exchanges of streams, not to rebroadcast (syndicated) radio content. This contrasts with most broadcasting officials, who were convinced that streaming media were ideal supplements to the conventional distribution channels such as radio, music, television and film. The usual debate around commercialism is remarkably absent on Xchange. The clash between the not-so-secret aspirations of some to become big versus the determination of others to stay small, as an insurance policy not to sell out is not being played out. The Japanese media theorist and experimental 'mini FM' radio maker Tetsuo Kogawa writes: "The point is not the stronger power of transmitter. As long as it is alternative (later + native), it must be different from usual broadcasting. Forgetting 'broad'-casting, we insist on 'narrow'- casting. In my understanding, the more creative or positive function of the Web is to be not 'casting' but <weaving>. Unfortunately, the Internet is used as a new type of casting, though".[35]

The issue of archiving is closely tied to audience development. By its very nature online archives are universally available. Sydney-based net.radio artist Zina Kaye explains: "If you missed a live stream one could go to the archive and listen to it for a whole week. The streaming media database Orang in Berlin (Thomax Kaulmann) offered their services to Xchange members to store radio shows and audio files, stored under categories, chosen by the individual members". The Laudible server in Sydney wrote a piece of code that referenced the Orang database in order to give it a customized interface that showed Australian and New Zealand content. For the sound artists that participated it meant that they could show their work in a global context and in a local context as well through the Laudible interface. Backspace in London then cloned a copy of Orang to make a Backspace Orang version, which only periodically 'synched' with the mother database in Germany. Zina: "In essence, what Thomax said was, if you want to have your own Orang clone, then take it. This demonstrated the spirit of the collaboration within streaming media. This prevented problems with copyright because artists felt that the poor sound quality of RealPlayer file wasn't going to compete with their record sales".[36]

The community aspect of Xchange remained small and pragmatic. In this context, Tetsuo Kogawa's one-watt transmitter could be seen as a good example of the Xchange approach.

> The coverage is proper for a community within walking distance and the technique to build up is cheap and easy. In my workshop I built a set of it within an hour. In my workshop, I built a transmitter, showed something of radio art and invite audience to the process: radio party. More aggressively than in Europe, the community culture in Japan have been destroyed. That's why we have few community radio stations in Japan. But this situation might be good for the web radio because the 'listeners' are separated and have no physical/geographical 'community' anymore. The web may rejoin them on the cyberspace at least for the time that the web radio works.[37]

35. Tetsuo Kogawa, "The Other Aspects of Radio, Acoustic Space 3," Riga: E-Lab, 2000, pp. 26-28. Also: "Minima Memoranda," *Next Five Minutes 3 Workbook*, Amsterdam: De Balie Uitgeverij, 1999, pp. 103-104.
36. Interview with Zina Kaye, Sydney, May 31, 2002.

The 'one watt' metaphor can easily be transported onto new media. What makes the Net so unique is not its ability to become one big meta market but the possibility of millions of exchange nodes to grow, an aspect that is yet to be fully understood.

Localization

The Canadian Radio 90 is a good example of localization. It is a local radio with an easy- to-use public interface to streaming media. The UK net artist and activist Heath Bunting founded the project. Zina Kaye explains the background of the Radio 90 concept:

> Heath wrote a web-based scheduler that steers the content of Radio 90. Xchange members would input the time of their shows and they would be heard via a one-watt transmitter, installed at the Banff Center for the Arts in Canada. The people of Banff no longer needed to have a computer in order to access streams that typically had no name or brand or advertising. No doubt the Radio 90 scheduler gave streaming media initiatives more listeners.[38]

A FM-transmitter, installed under the roof the Amsterdam Society for Old and New Media has been rebroadcasting net.radio streams in the Nieuwmarkt district on an irregular basis, for instance the signal of B92 when it was taken off the air in April-May 1999.

Another aspect of the Xchange-style streaming culture is the link with 'real' space, in most cases clubs. The project Extended Life Radio from Berlin emphasizes the link with locality.

> Physical space is most important for us, and it doesn't need to be connected to the net. The connection via Internet of two or more physical spaces gives the possibility to synchronize those spaces at least partly and for a certain time. It's an image, located in real time and real space, for and about information, experience, network, and communication. Translation. Inside and outside. Crossing and melting borders. For any activity in public space it's very important to create a certain atmosphere, an 'interface', which reflects what it is about. It's about this translation of (in this case) sound, which comes out of a machine without any-body or human traces, into something you can experience and which creates an atmosphere.[39]

Klubradio, also in Berlin, is based on the very idea that people can, worldwide, tap into the groovy underground clubs and listen to live DJs. With a good connection and a bit of luck they could for instance plug the stream into an ordinary amplifier and have their own Berlin techno party. This is all done with little or no cost, without complicated satellite connections or the interference of event agencies, telecoms or record companies.

37. *Xchange*, February 25, 1998.
38. Interview with Zina Kaye, Sydney, May 31, 2002.
39. Extended Life Radio, *Xchange*, February 12, 1998.

Xchange is one amongst many 'adagio' networks. Instead of picking up speed, riding on the techno storms, fired up by innovation and commerce, the emphasis is shifting to slowly performed works that stretch out time and space. The unknown and yet to be defined 'otherness' of streaming technology implies an outsiders' position. "Cyberspace is our land" (slogan of Station Rose, a Frankfurt-based webcasting artist group). Analogous to 'off the radar' free radio and club mixes that loop for hours and hours, streaming events reach out into the vast darkness of cyberspace. The streams promise to open up other dimensions of time and consciousness. Not interested in the size and mood of its audience, streaming media initiatives focus on full interactivity amongst equal partners. Rasa:

> People who see the Internet as a space for self-expression are a minority. The majority are not aware of the potential of this 'new land.' If the dominating attitude is consuming instead of contributing and building, then sooner or later, after the 'gold-rush' is over, people will find those 'new lands' empty.[40]

There is no need to fake involvement or simulate a (virtual) community for commercial purposes, as the London Interface had to do in order to get cash from Sony and other sponsers. Would it be the 'tragedy of the digital commons' that only small, zero budget initiatives such as Xchange should be considered 'sustainable'?

According to the Xchange philosophy old school broadcasting was associated with top- down 'propaganda' for one particular viewpoint or ideology. Streaming networks on the other hand were wary of the Truth. There is reluctance towards 'screaming' content. Ex B92 Internet coordinator Drazen Pantic:

> A model I am enthusiastic about might be described as non-propagandistic P2P journalism in which an open IT architecture goes along with news dissemination and sharing resources. Situations like that manage to involve collective intelligence of number of spatially distributed people. I deliberately mention term 'non-propagandistic' because many of the recent interesting experiments with P2P journalism (like Slashdot or OSDN) are propagandistic in their essence and have a narrow focus.[41]

Similar to the B92 slogan "Don't believe anyone, not even us" streaming media 'demilitarize' top-down attempts to push ideas (including techno-libertarianism and its ideology of freedom). Sampling methods are used to neutralize and 'cool down' biased messages. Information as such needs to be broken down and opened up, not uncritically disseminated. Media distort, and it was seen as a task for new media producers to further raise the noise levels, to increase overall awareness of the inherent artificial distortion of media. Instead of reclaiming the Truth, a 'small' truth is practiced.

The different aspects of streaming listed here spring out of technological circumstances: lack of bandwidth combined with a chaos of standards. Streaming initiatives have learned to redefine

40. Rasa Smite in an email interview for this research, January 13, 2002.
41. Email interview with Drazen Pantic, January 17, 2002.

these limitations as virtues. Instead of establishing a culture of complaint, attempts have been made to utilize the 'micro' status of streaming media in the best possible ways. Centralized experiments such as Web TV have so far failed. Berlin-based activist-artist Micz Flor has worked on net radio projects in the UK, Central and Eastern Europe and Asia. He explains:

> We are all still waiting for the new front end, the browser of the next generation, where all these media outlets come together at the screen and speakers and what else of the user, listener, or whatever you would want to call the next generation receiver. The ideal client 'solution' is not there yet. And that's a good thing. So far, not even multi-national lobbies such as Microsoft or AOL managed to prune the Internet into the shape they would dream of. In fact, every attempt to shape the multitude of formats, players and codecs has only put strength to alternative solutions. Peer-to-peer distribution channels, such as Gnutella is one example, alternative audio video formats such as Ogg or DivX are another.[42]

In the end it was all a play with the limits of the new technologies. Lack of bandwidth was countered with plenty of imagination. Still, some of the borders were very real. In some instances streaming could become unpleasantly expensive. Matthew Smith, in 1998 working for the Ars Electronica Center and the Austrian broadcaster ORF discusses the cost of streaming and argues for the use of existing media. He writes to the Xchange list:

> More than trying to find 'new' ways of providing content in a setting such as the Internet, just for the one reason that it is not very efficient to clog up the net with high-bandwidth audio. The logistics of the net are not made for it, and who can really afford the necessary bandwidth to be able to serve 1000 high-quality RealAudio streams, even after shelling out US $5000 for server software and about the same amount for a server. I don't believe that anything in that price class is for free, meaning distribution - to place your content on a setup like that will eventually cost the same as buying time on a 'classic' broadcast medium.[43]

Xchange initiatives often used demo RealAudio software with a limited capacity (way under 1000 streams) or got software donated from the Real Corporation itself. The same could be said of the potentially high bills of Internet access providers. Without sponsorship and voluntary limits to the used capacity, streaming networks such as Xchange could not have flourished. Necessarily, experimentation would have made way for pop-style dotcom business models. As this did not happen because of self-imposed limits, Xchange partners still exist, whereas most of their dotcom partners do not. In particular, those who were betting on a possible Web TV revolution have been badly burnt.

42. For the entire interview with Micz Flor by Geert Lovink, see *Nettime*, Tactics of Streaming, April 26, 2002.
43. Matthew Smith, re: G2, *Xchange*, June 2, 1998.

One of the problems Xchange successfully tackled was the question of how to find net.radio streams without having to set up a centralized portal.[44] The Xchange homepage offered links. Heath Bunting of the Radio 90 project in Banff, Canada came up with a program schedule. Radioqualia (Adelaide, Australia) developed a similar idea and called it Frequency Clock, a global mini FM network. The founders explained their project on the Xchange list in the following way.

> A geographically dispersed independent network of net.radio stations, broadcasting on autonomously owned FM transmitters, could strengthen challenges to centralised institutions that are predominantly associated with FM radio, encouraging a rethinking of existing broadcast paradigms, and the incorporation of more open systems for determining content. In such models there is space to develop radically open-ended systems of content management, allowing for abatement of centralized program administration.[45]

In November 2002 Radioqualia, which had now moved to Amsterdam/London, released the 1.0 version of its Frequency Clock Free Media System. It is a shared resource for building streaming channels; open source software that features a programme database, a timetabling system and a customised streaming media player. In the age of broadband and cable modems the 'always on' mode is an important feature for streaming media. With the 'timetabler' users can timetable audio or video programs from the database into specific time slots within their schedule, creating a continuous and ongoing channel, or alternatively, a channel that broadcasts only at special times. Producers can also instruct the timetabling system to play 'default' audio or video, when a time slot has nothing scheduled. This means that audiences will always have something to see or hear when visiting a channel.[46]

The Network is not the Organization

On November 10 1999, at the height of dotcommania, Adam Hyde and Zina Kaye posted a proposal to the list to upgrade the Xchange website into a dynamic portal.

> Right now, we are at a stage where as a group we have the advantage, because we have been around for a long time and have a good relationship with each other. But the entertainment industry is catching up with us, and we will lose our lead and maybe our unique identity if we don't quickly distinguish ourselves from other mainstream streaming portal websites.[47]

44. A portal is a late nineties term for a website that brings together web resources for ordinary users on a central page. A portal would usually have a design that imitates the layout of newspaper front page. On the left and right there are small menu bars for links. In the centre there are the headlines for the main stories. A definition of a portal, found with the Google search engine reads: "A portal an entry point or starting site for the World-Wide Web, combining a mixture of content and services and attempting to provide a personalized 'home base' for its audience with features like customizable start pages to guide users easily through the Web, filterable e-mail, a wide variety of chat rooms and message boards, personalized news and sports headlines options, gaming channels, shopping capabilities, advanced search engines and personal homepage construction kits". URL: http://www.auburn.edu/helpdesk/glossary/portal.html.
45. Radioqualia, *Xchange*, October 13, 1998. URL: http://www.radioqualia.va.com.au.
46. See: Radioqualia, streaming media software for arts released, *Nettime*, November 7, 2002.

Three years after its founding the Riga-based E-lab was still the only one who really took care of the Xchange activities. The website had not changed much and was nothing more than a link list to the participating net radio sites.

This proposal came at a time when projects such as the Frequency Clock (Radioqualia), World Service (of irational.org), Radio Internationale Stadt and TM Selector, all in their own way, begun to offer streaming radio guides. Riga however lacked the resources to bring the network to another level and turn Xchange into a lively portal or weblog. It proved hard, if not impossible, for a network with modest affinity amongst its participants to set up a decentralized working group to delegate both technical and content-related tasks. The issue here was the true limits of non-profit (e-mail based) networks. Lacking a formal (legal) organization, being neither a NGO nor a dotcom, Xchange seemed to get stuck on the mailinglist level. Nonetheless, a few months later http://xchange.x-i.net was launched, but the portal initiative never really took off.[48] Xchange remained an announcement list with occasional short dialogues.[49]

Xchange chose not to formalize the network and turn it into an NGO or lobby group. Instead individual members moved their focus towards the development of software. Instead of institutionalization, the emphasis shifted towards collectively building the material the Net is made of, namely software. According to Adam Hyde (Radioqualia) there were Jaromil (dyne.org), August Black (Kunstradio), Thomax Kaulmann (RIS, OVA, OMA), Pit Schultz (Bootlab), Micz Flor (LowLive), Drazen Pantic (Open Source Streaming Alliance), Alexander Baratsits (Radio Fro) and Heath Bunting (World Service), all heavily interested in streaming software either as developers, researchers, organisers, or commentators.[50] The number of actual software developers within Xchange has so far remained relatively small. Streaming media is not a traditional area for hackers and geeks—the proprietary nature of (mainly Real) software may be one reason for their absence. A cultural explanation could be the fact that music and video could only be dealt with on a higher application level. This boils down to the central question: why would you want to use the Net to rebroadcast old media material? Streaming therefore was left to new media artists plus some non-tech cultural types (read: those who remain on the easy-to-use desktop level and do

47. An Open Letter from Adam and Zina, *Xchange*, November 10, 1999. See also Adam Hyde report of Streaming Media Europe Conference, November 22 1999 which contains interesting comparisons between Xchange and commercial streaming portals. "During the conference it quickly became apparent to me that the Xchange community is very advanced in its use and thinking about streaming media. In fact many of the ideas I heard coming from business people working with streaming media did not (generally) reflect that same quality of ideas and breadth of understanding about the medium that I know to exist in Xchange. I found this very surprising and exhilarating as I personally was beginning to think that we (Xchange) were being left behind by industry".
48. Rasa Smite, Next steps for the Xchange Website, *Xchange*, February 20, 2000.
49. An exception which should be mentioned here is Xchange's involvement into streaming projects related to the Kosovo conflict (1999), sparked by the closure of independent Belgrade radio station and streaming pioneer B92 (see chapter five of this thesis on the Syndicate list).
50. This part of the essay draws heavily on an email exchange with Adam Hyde, held in May 2002. The quotes are from the same exchange.

not produce code). This could offer a possible explanation as to why there has been such a delay in the development of open source streaming media software, compared to, for instance, the much better performing Linux operating system and, for instance, the Apache server software.

Then there are those involved in Xchange who battle the technocracy by training others to use streaming software such as Rachel Baker, Lisa Haskel, Walter van der Cruijsen, Mr. Snow, and Superchannel. As programmer and organizer of streaming art projects Adam Hyde (Radioqualia) explains:

> These individual networkers within Xchange are very involved in issues surrounding software, these issues may not surface in discourse through the list (it's not a very 'threaded' list) but certainly individuals within Xchange do their own work individually or collaboratively and then post the results.[51]

Adam mentions the example of Dynebolic, a bootable CD, which is a stripped down Linux operating system fitted with all the tools one needs for streaming.

> This is an extremely interesting and important development but its primary development circle has been within a more appropriate context (the coding world). However, the developers are members of Xchange and the results of this development, the announcement of its existence, certainly gets posted to Xchange and various 'Xchangers' have used it and are very interested in it.[52]

The politics of proprietary code as applied to streaming (e.g. proprietary codecs) is a well-known issue within Xchange but is not a focus for debate. Some members post news articles or links about these topics but the topic is then not turned into a thread. Adam Hyde:

> I think this is a very embryonic debate everywhere. The whole MP3 phenomenon as highlighted by Napster did not settle into debates on how the Frauenhofer Institute and Thompson (who own the MP3 standard) could close down anyone using an unlicensed MP3 algorithm, instead the hot ticket was how wonderful peer-to-peer technologies are. Proprietary media technologies (MP4/Ogg Vorbis/DivX) are just about to heat up and then it will be interesting to see if this groundswell will prompt Xchange into more political discourse.[53]

After the introduction of Microsoft's MediaPlayer, Real gradually lost ground, though not as severe as the demise of Netscape compared to the near monopoly of Microsoft Explorer. Apple's QuickTime is a viable third player, mainly installed Apple's own machines.[54] Besides these three

51. Email interview with Adam Hyde, May 20, 2002.
52. Ibid.
53. Email interview with Adam Hyde, May 20, 2002.
54. Here some streaming media players statistics, compiled by Nielsen/NetRatings. For April, 2002, RealMedia reached 17 million at-home viewers, compared with Windows Media at 15.1 million and QuickTime at 7.3 million. At work, Windows Media drew about 12.2 million unique viewers, compared with RealMedia at 11.6 million and QuickTime at 5 million. Nielsen/NetRatings' last multimedia report, for December 2001, showed that RealNetworks reached some 32 million at-home users and 16.3 million at work; Windows Media hit 14.6 million at home and 9.9 million at work; while QuickTime reached about 7.4 million people at home and 5.5 million people at work. Source: http://news.com.com/2100-1023-938423.html?tag=rn.

proprietary multimedia players the role of open source players is so far next to zero.[55]

Open Source Streaming

In mid 2001 the "Open Streaming Alliance" (OSA) was announced. If Xchange had failed to set up a common portal/weblog or proper NGO, perhaps it could at least contribute to streaming software and test alternative network architectures. The shift in emphasis, driven by initiatives such as Radioqualia, from collaborative webcasting towards software was already visible in the Net Congestion conference in Amsterdam (October 2000). In a mail Drazen Pantic mentions scalability (of capacity) and platform independence as the two main aims of the alliance. From the beginning the proprietary nature of Real software had been a problem. There was little to say about the rise of Microsoft's Media player. The monopolistic marketing policies of Bill Gates were well known. But how about alleged alternatives such as Real and QuickTime? By 2000 open source streaming software started to become available but wasn't widely used. Although Linux had gained a strong position in the server sector, desktop open source software had not (yet) managed to reach average consumers—not even avant-garde early adopter Xchange artists. OSA planned to enable free and open source tools for encoding and serving QuickTime, Real Media and Mbone streams, producing streaming content in one run, through just one encoding process, which obviously saves time, equipment and resources. Drazen Pantic:

> Corporate software vendors try to monopolize streaming media standards, using proprietary and closed code for encoders, players and servers. Real Media for example, has started its operation with a noble idea to help independent broadcasters, but in the course of corporate battle—mostly with Microsoft—they sealed their code and became an opponent of creativity and innovation themselves. Closed code, and especially proprietary codecs alienate content from the producers and enable control over distribution.[56]

Simultaneously progress was made on the archiving front. With its motto "You don't have to know everything, you just have to know the reference" the Berlin-based Orang Orang (Thomax Kaulmann and Frank Kunkel) launched its Open Meta Archive software. This open source "context management system," was able to "categorize and publish rich media documents including text, photo, audio and video in RealMedia, QuickTime and MP3. It includes SQL support, XML export, newsgroups, and, of course, automatic generation of static HTML pages". Finally a variety of multimedia content could be stored into one database.[57] The future of community networks promised to be 'hardwired,' or to be more precise, 'softcoded' into software that would define the decentralized (peer to peer) network architecture. The openness of software and the capability to use a variety of standards was going to be decisive.

Despite its low profile, the Xchange network could not escape the sea change of the general atmosphere. The Internet was no longer dominated by an egalitarian atmosphere amongst pioneers. In December 2001 the entire multimedia archive Orang Orang, used by many Xchange

55. Linux Media Player' (linmp), a solo project so far, has been in development since late 2001. See: http://sourceforge.net/projects/linmp/.
56. Email interview with Drazen Pantic, January 17, 2002.
57. Pit Schultz, OMA alpha release party, *Xchange*, June 21 2001.

members to store their streaming files, got deleted by a hacker after several harmful intrusions. "There is nothing like 100% security. Sadly, this digital vandalism hits a site which always supported a community of free exchange and free access".[58] According to Pit Schultz the result of such hacks is that:

> small providers or self-run co-locations, public access sites of universities and libraries move from a policy of the free digital commons to a strategy of paranoid enclosure, while the security experts and service industry prospers. In their midst former hackers who still perform their sport like innocent boy-scouts praised by the net culture discourse as role models.[59]

The cyber attack was a rude wake-up call for a 'minor' online community that for five years had successfully operated in the shadow of turbulent Internet events.

Internal contradictions were undermining the independence of Xchange. Zina Kaye:

> After the meltdown of Orang, Laudible offered its support to Orang. Thomax quickly emailed back, saying, 'I just need you not to transfer your files to mp3.com.' For me, that sums up the Xchange attitude. A significant number of artists who had put their audio files in Orange had already begun to circulate their work in the better quality MP3 format, thereby affecting their record sales. In the past they had acknowledged that copyright was not an issue with the 'bad' RealAudio files. But now, with MP3 fidelity, they had created a problem for themselves. How were they going to make a living? Using the high quality MP3 standard niche players were effectively undermining their own niche markets. Mass content has taken over the position of niche markets—unless you go over to shouting.[60]

MP3 delivered a remarkable sound quality, sufficiently good for people to decide not go to their record store and buy the CD. In the early days streaming music, full of noise and disruptions, had not interfered with the marketing strategies of record labels. Low quality streaming, as Xchange members practised, was supposed to empower both the recording artists and the online audience. With the victory of MP3 that delicate balance was now in danger.

Xchange and Riga

Informal networks such as Xchange may be indifferent towards commercial interests, yet at the same time they are unable to act as spokesperson for the interests of their members, for instance in negotiations about broadband content and the financing of Internet traffic. Xchange suffered from the traditional stereotype of organization being 'bad' because it results in bureaucracy. In this case the lack of organization stalled the list. There was no moderation group who took care of the direction of the list. Because of the total reliance on the contributions of the individual members, the Xchange list eventually entered a state of mild regression (that pragmatists are perfectly happy with). The lack of organization resulted in an implicit expectation that 'Riga' would take care of everything. Although Xchange had no official legal status, it was unofficially part of

58. Pit Schultz, orang.orang.org is getting reconstructed, *Xchange*, December 31, 2001.
59. Pit Schultz, digital hooliganism, *Nettime*, March 16, 2002.
60. Interview with Zina Kaye, Sydney, May 31, 2002.

the E-lab NGO. If 'Riga' would not take initiatives to improve the site or the lists, no one else did. As a result, like Syndicate, Xchange ended up as a somewhat tame announcement list, rarely containing any personal messages, let alone debates.

The atmosphere on the Xchange list itself had not always been that friendly and could be described as somewhat hostile at times. What is often seen as the 'coziness' of assembling in cyberspace was missing here. Postings were written in a particularly cold style. By 1998 everyone knew all too well what the pitfalls of a list community could be. The short summer of the Internet was over. This was the age of infowar, trolls and hacktivism. There was hardly any room left for naivety. In October 1998 organizer Rasa posted a message to Xchange reflecting the growing unease.

> There is confusion about what exactly we were/still are/ looking for. We are complaining and blaming and provoking each other or whatever (really funny, isn't it). We are dreaming about open spaces, but are we paying attention enough to the importance of personal relationships—understanding and respecting each other?[61]

As a response to growing tensions and the lack of real outcomes besides limited collaborations, the Riga group began to lose its interest in the list and started to focus on the badly needed improvements of its own situation, both in terms of space and resources.
Over the years the Riga E-lab group had been slowly shifting its (narrow) net.radio focus towards broader issues of 'acoustic spaces'. Looking back, Rasa Smite says she would no longer limit net.radio to just streaming media. According to her net.radio first of all means networked audio communications—and that is, potentially, an infinite field.

> Internet radio can, for instance, provide access to publicly not accessible technologies such as secret military objects, or follow developments in the field of satellite networks. One could think about acoustic GPS space or combine wired and wireless, global and insular technologies.[62]

Acoustic Space Lab, a project initiated by E-lab, aimed to obtain new experiences, beyond the usual webcasts; looking at what other shapes a net audio network could take.[63] The project took place in August 2001 at the Irbene Radio Telescope in the Latvian forest, utilising a former Soviet antenna with a diameter of 32 meters. It was a co-operation between VIRAC (Ventspils International Radio Astronomy Center) scientists and an international team of 30 sound artists, net and community radio activists and radio amateurs, who were experimenting with the antenna, recording sounds and data from planetary observations, communication satellites and the surrounding environment.[64]

61. Rasa Smite, Xchange, October 17, 1998.
62. Email exchange with Rasa Smite, January 13, 2002.
63. Derek Holzer, Call for Inputs: Acoustic Space Labs!!, Xchange, June 28, July 2, August 3 2001 and emails from other Xchange members in that same period. For a report see Mukul, *The Wire*, September 2001, posted on *Xchange*, September 3, 2001.
64. Rasa Smite, email interview, January 13, 2002.

Since 1998 there had been talk of a centre for digital culture in Riga. So far E-Lab had undertaken all its activities from a tiny roof attic room, surrounded by artists' studios, in a grey government building, housing a variety of cultural institutions. The view, overlooking the Daugava river is magnificent, but there is hardly adequate work spaces for the expanding group and the ever-growing amount of PCs. Besides local initiatives, the Riga group had quickly focused on building up links within the Baltic/Scandinavian region of North-East Europe. In May 2000 The Riga Centre for New Media Culture RIXC was founded.[65] The proposed media space will be located in the former sculpture studio building, which needs serious reconstruction. In March 2002 an international architects workshop took place, with the aim to develop conceptual guidelines for the design of RIXC.[66] The next project will be a festival, devoted to "media architecture and the interconnection of post-modern urban geographies and information networks. Its aim will be to investigate how social dynamics from 'virtual' networks can be applied to physical conditions and can facilitate the expansion of public space".[67]

Beyond Remediation

After presenting this version of the history of the Xchange network I would like to bring together some elements of an independent streaming network philosophy. If the Internet was going be truly new, which all visionaries claimed it to be, then streaming media were going to be a prime example of how to supersede the old, one-to-many models of broadcasting media. From their infancy, the net.radio initiatives featured here tried to prove that decentralized networks were not just a weird idea but also a viable practice. The hyped-up dotcom cycle from startup to sell out was not inevitable. The 'clouds' of webcasters and online audio archives, ready to be accessed, took up the challenge to prove that Marshall McLuhan and contemporary 'remediation' theorists such as Bolter and Grusin were not always right.[68] According to Bolter and Grusin "remediation is a defining characteristic of the new digital media". (p.45) "Each act of mediation depends on other forms of mediation. Media are continually commenting on, reproducing and replacing each other, and this process is integral to media. Media need each other in order to function as media at all". (p. 55)

Bolter and Grusin's remediation concept is common sense within media theory. Remediation may be the default option but at least temporarily, in the shadow of corporate capitalism, it should possible to unfold other practices—for instance, that is the claim critical Internet culture is making. McLuhan's law, which holds that the content of a new medium is—by definition—sourced from previous media, is inherently not false but can easily become a self-fulfilling prophecy. New media

65. RIXC is the joint effort of a number of independent local cultural groups based in Riga, Liepaja and other cities of Latvia, working in the fields of new media, art, film, music, youth culture and the social field. The founders of RIXC are E-lab, the film and TV production studio Locomotive and the Baltic Centre, an NGO for alternative education and social projects. URL: http://rixc.lv.
66. For the list of participants and the results of the workshop, see: http://rixc.lv/architecture.
67. Quoted from a document concerning the development of RIXC, email from Rasa Smite, July 8, 2002.
68. Jay David Bolter/Richard Grusin, *Remediation, Understanding New Media*, Cambridge (Mass.): The MIT Press, 1999. "Remediation is a defining characteristic of the new digital media". (p.45) "Each act of mediation depends on other forms of mediation. Media are continually commenting on, reproducing and replacing each other, and this process is integral to media. Media need each other in order to function as media at all". (p.55).

open possibilities for other forms of narration and aesthetics. They are not just tools to tell the same old story over and over again. It is up to new media practitioners to seize the opportunities and discover the language of new media, liberated from depressing laws of techno-determinism. If content and interfaces are mere special effects of the hardware and software, then why bother in the first place?

Rebroadcasting existing audio, be it live or pre-recorded, is not what (independent) streaming is primarily about. And, unlike Bolter and Gursin state, streaming media networks do not express "our desire for immediacy". (p. 35). They embody the desire to network, to link and stream. Instead of celebrating the short-lived 'live' effect (full of delays), long-term collaborations are much more characteristic. The aim of streaming networks is not necessarily a higher resolution of images or a better sound quality. Networks in general do not attempt to gain higher levels of 'reality' (in the sense of immediacy), as Bolter and Grusin's theory of new media claim. The issue is rather: does the technology, in this case streaming software, enable users access to information and each other? Streaming media do not claim to refer to the 'real' in the first place. They explore new conditions and do not intend to rebuild the old world into the virtual. Bolter and Grusin limit new media to the 'MP3' level of non-interactive customers, solely interested in downloading their favorite 'remediated' Metallica songs, uninterested in contributing to the peer-to-peer networks they use.

Drazen Pantic reads the remediation issue as a misunderstanding.

> Conceptually, streaming media is rarely understood as media per se, but instead as an extension or replacement of the corresponding classical media. So, streaming video is taken as poor man's TV while streaming audio for a while was considered as a replacement for radio. Neither of those either-or alternatives are actually realistic—both streaming video and audio are different media than their corresponding counterparts, with its own code and structural media rules. But, this conceptual misconception has caused people to expect easy plug & play delivery and seamless broadcast quality delivery through ordinary telephone lines.[69]

In *Minima Memoranda*, a short but rich collection of aphorisms, Tetsuo Kogawa investigates possible meanings of the streaming concept. Instead of using the obvious reference to water and nature (panta rhei), Kogawa investigates the line metaphor in a phenomenological manner.

> Lines relate to binding, weaving and streaming. They can bind audiences into a tightly integrated 'network,' a marionette-like circuit. However, lines are not always tight but loose. Loose lines weave webs. In the weaving-weaved web, the signal does not cast itself but streams by itself. Casting is a one-way process while streaming is interactive: streaming in and back.[70]

Streaming resists remediation in its very definition. We can only speak of streaming media when there are open feedback channels.

69. Email interview with Drazen Pantic, January 17, 2002.
70. Tetsuo Kogawa, Minima Memoranda, in *Next Five Minutes 3 Workbook*, Amsterdam, 1999, p. 104.

Minor media

Even though links have been made between Xchange as a 'minor medium' and Deleuze and Guattari's concept of 'minor literature,'[71] some would hate to see their network explicitly linked to these Paris philosophers. Whereas some find useful concepts in the use of works of 'D&G,' others detest the academic fashion and theory hype that surrounds the wornout labels such as 'rhizome.' That's the danger of theory operating within the zone of popular (media) culture. Despite such reservations I will look into the minor media concept as a part of my search for independent streaming media concepts. It was the German theorist and curator Andreas Broeckmann who placed Guattari and Deleuze's 'minor literature' into the new media context. Minor literature, he writes, is a "literature of a minority that makes use of a major language, a literature which deterritorialises that language and interconnects meanings of the most disparate levels, inseparably mixing and implicating poetic, psychological, social and political issues with each other".[72] The strategies of 'being minor' Andreas Broeckmann mentions are intensification, re-functionalisation, estrangement and transgression. In the context of media art, for Broeckmann 'becoming media' is "a strategy of turning major technologies into minor machines".[73]

However, the usefulness of such statements within down-to-earth circles such as Xchange remains more undiscussed than disputed. Whereas pragmatists hate to see such academism overruling actual practices, others see a limited role for theory as one amongst many alternative ways of story telling. But what does it mean, in terms of social capital, to label your network project 'rhizome'? Are 'minor media' really proud to see themselves as such, despite the positive-productive meaning Deleuze and Guattari give to the term? Who wants to be (a) minor? The strategy of independence may be a choice, but often techno-cultural networks do thrive for more power and resources. At least the term "heterogeneous practices" sounds less pedantic. There is a wide consensus that networks such as Xchange are indeed based on mutual respect for difference, grown out of a process of 'resingularisation' to become ever more different.[74] Creating a nice and safe new media ghetto can become a one-way street. If size doesn't matter, there should be no difference between becoming major or minor (media).

Nonetheless, in the case of Xchange media freedom has been created by the lucky circumstance that the mainstream ignored what was happening. If, for instance, there was a parallel between radio in the twenties and streaming media in the nineties, was the eventual outcome (state-sponsored corporate domination) likely to be the same? No, there was no such defeatism. This is the point at which historical parallels and history as such could backfire on those who act. Networks were sparks of change. They either ignited a process or remained a spark in the dark. Even though the streamers had little illusions about their actual power, the utopian promise was alive and well. Dancing nodes such as Xchange seemed possible. Another, possible world was

71. See: Gilles Deleuze & Félix Guattari, *Kafka: Towards a Minor Literature*, Minneapolis/London: University of Minneapolis Press, 1986.
72. Andreas Broeckmann, "Minor Media – Heterogenic Machines," in *Acoustic Space 2*, Riga: E-Lab, 1999, p. 78. URL: http://english.uq.edu.au/mc/9909/minor.html.
73. Ibid.
74. Felix Guattari, quoted in Andreas Broeckmann, "Minor Media – Heterogenic Machines," in *Acoustic Space 2*, Riga: E-Lab, 1999, p. 82.

embodied in both software and a lively decentralized network practice which were supposed to spread like cultural viruses. If nothing worked out, at least the participants had a good time while turning their back against the system inside a self-created "temporary autonomous zone".[75] That zone can be big and fill up the entire universe—at least for one day.

The 'minor' practices of Xchange questioned the eternal recurrence of the same (content). The cynical circle from underground outlaw via fashion to sellout and mainstream market player could be avoided. While technology was a precondition for independent streaming networks, it was not describing the form that 'the social' would take. The technology was challenged not to determine the streaming politics and aesthetics. The content of new media is not by definition yesterday's papers. Both content and form of new media can be radically different from previous media structures as long as the network participants are aware of the media laws and are willing to negate and transcend them. This may not sound revolutionary but if a growing network of passionate media and art makers take the 'newness' of digital media seriously, a lot can happen.

According to Erik Davis, DJ and author of *TechGnosis*, Internet radio is not part of the regulated and commodified spectrum. Comparable in this respect to early radio, Internet radio is a "space of openness, of indetermination, of the affects of the unknown".[76]

Internet radio cannot be merely radio received via the Internet. Rather than emphasizing the convergence of media, for developers' communities it is more interesting to search for the radical and unconditional 'autopoeisis' of new media. In this case: what is the unique quality of streaming and how can the self-referential dynamics be strengthened? How can the proclaimed autonomy of cyberspace be defended against vested interests of film, radio, television and the recording industry?

For the Xchange network and numerous other streaming media initiatives (including commercial ones) the proclaimed victory over old media comes with the prize of voluntary marginalization. The media industry has been betting on a combination of technological convergence plus syndication of content inside conglomerates. The answer to this concentration of power in a few hands has been radical fragmentation. "Faced with the ubiquity of a zillion portals, channels, live-streams and file formats all screaming for attention, what's a net audio selector to do? Go niche. Go überniche".[77] Instead of fighting the mainstream or claiming territory within the established channels, using 'pop' strategies, a multitude of parallel worlds were created.

The thesis under debate here touches the very nature of new media: its claim to be different from previous communication tools. I am explicitly presenting an 'idealistic' viewpoint here (centered

75. Reference to Hakim Bey, *Temporary Autonomous Zone*, Brooklyn: Autonomedia, 1991. In the early nineties the anarchist T.A.Z. concept became part of the cyber-libertarian Wired generation vocabulary. Some claimed, the entire Internet to be an autonomous zone. More accurately this could be said of certain virtual communities such as Xchange.
76. Erik Davis, Acoustic Cyberspace, *Xchange*, December 29, 1997. Also in: Acoustic Space 1, E-Lab, Riga, 1998, p. 23.
77. TMs in TM.SELECTOR#2, a connoisseurs guide to net listening (October 2001).

around an idea). Streaming media have the technical possibility to question the iron necessity of the return of the 'one to many' broadcasting models because everyone who is interested has the possibility to install a streaming server and start webcasting. This ability to both stream out and receive streams has the potential to fragment the 'mass' audiences into dispersed user/producer groups. The technical peer-to-peer approach (as opposed to the centralized client-server model) may be obvious for some but its consequences are far reaching. In contrast to broadcasting we may define streaming media as channels that make audio and visual material available on the Internet. That may sound pretty dry and straightforward.

With the porn industry as its avant-garde, national and commercial radio and television almost immediately started to dominate streaming media with their repackaged content. Whereas during dotcommania as some companies tried to define 'web specific content' many lost their jobs and many internal Internet departments were either closed or lost major parts of its staff after the dotcom bust. Remediation of existing material is a threat to independent streaming cultures as it reduces the new medium to a secondary rebroadcaster of already existing content. It is therefore of strategic importance to further investigate streaming models that go beyond repackaging content of others such as radio, television, film and the recording industry. This could also imply a critique of real existing peer-to-peer networks, as its users hardly create and upload their own material and mainly download mainstream content.

Only a limited number of sites webcast live from a location such as a club or event. The depressing reality is that nearly all of the streaming content remains one-to-many rebroadcasted material. The additional function of streaming technologies for mainstream media organizations then would be the ability to access material after its original broadcast hour (the on-demand feature). The value of streaming for existing media organizations has to be found in the storage and retrieval capacity of the Internet—and not so much in the 'live' aspect. Independent streaming, on the other hand, stresses the importance of networked webcasting and, most notably, does not retransmit existing radio signals. These initiatives provide the Net with new, yet unknown content and forms of subjectivity. Becoming minor, in this context can be described as the already mentioned strategy of "turning major technologies into minor machines".[78] Against the mass media a heterogeneous network of networks could flourish. This is not mere theory. The listener as producer submerges into an immersive space, designer a unique, personal mix of up and downstream data. Audiospace theorist Erik Davis: "Electro-

78. Andreas Broeckmann, "Minor Media – Heterogenic Machines," in *Acoustic Space 2*, Riga: E-Lab, 1999, p. 78. Staying close to Felix Guattari's terminology, Broeckmann features the Exchange network as an example of 'heterogenesis' and 'molecular revolution.' "Xchange is a distributed group, a connective, that builds creative cooperation in live-audio streaming on the communication channels that connect them. They explore the Net as a soundscape with particular qualities regarding data transmission, delay, feedback, and open, distributed collaborations. Moreover, they connect the network with a variety of other fields. Instead of defining an 'authentic' place of their artistic work, they play in the transversal post-medial zone of media labs in different countries, mailing lists, netcasting and FM broadcasting, clubs, magazines, stickers, etc., in which 'real' spaces and media continuously overlap and fuse". See also Andreas Broeckmann, "Konnektive entwerfen! Minoritaere Medien und vernetzte Kunstpraxis," in Stefan Muenker/Alexander Roesler (Ed.), *Praxis Internet*, Frankfurt am Main: Suhrkamp, 2002 (posted on the *Rohrpost* list, May 15, 2002).

acoustic spaces aren't simply a genre of music or a backdrop of good VR—they are interfaces with the machine".[79]

No More Audiences Anymore

In his text "Media without an Audience" Dutch media theorist and organizer of the streaming media festival "net.congestion" Eric Kluitenberg argues that the networked environment should be seen as a social space. "The active sender and the passive audience/receiver have been replaced by a multitude of unguided transmissions that lack a designated receiver". [80] Beyond the broadcast hegemony Eric Kluitenberg traces the emergence of 'intimate media' that have a high degree of feedback. Media without an audience were first described in a 1992 text about 'sovereign media' written by the Adilkno group (of which I am a member).[81] Eric Kluitenberg further developed the idea, as did Joanne Richardson. Kluitenberg makes historical references to Bertold Brecht's 1932 radio theory[82] and George Bataille's text "The Accursed Share" in which Bataille writes: "life beyond utility is the domain of sovereignty".[83] According to Eric Kluitenberg sovereign media should be understood as media beyond use. "They should not be understood as 'useless' but rather as 'without use.' Sovereign media have emancipated themselves from the demands of functionality or usefulness to exist in their own right".[84] Eric Kluitenberg lists the Xchange network several times as an example of sovereign or intimate media.

The concept of sovereign media shows similarities with Andreas Broeckmann's reading of Deleuze and Guattari's idea of minor literature. Both emphasize the productive aspect of mediation. The difference, however, is that sovereign media are no longer feeling the constraint to make references to the mainstream 'majority'. The act of declaring sovereignty over one's own mediacastings leaves behind dialectical polarities such as big/small, major/minor, broad/narrow, alternative/mainstream, pop/elite. Instead sovereign media have long stated their declaration of independence and are not even indirectly focused on the 'average user,' 'normal people' or 'the Johnsons.' The only function of mass media is to produce raw material, data garbage that sovereign media makers then freely use and re-interpret in their cutups. Remixing is not remediation.

Mixes and cutup create entire new art works and should not be reduced to the nature of this or that source material. Quite the opposite. During the making of a mix there are no attempts made

79. Erik Davis, Acoustic Cyberspace, *Xchange*, December 29, 1997. Also in: Acoustic Space 1, E-Lab, Riga, 1998, p. 24.
80. Eric Kluitenberg, "Media without an Audience," *in Acoustic Space 3*, Riga, 2000, p. 7.
81. Bilwet, *Media archief*, Amsterdam: Ravijn, 1992. English translation: Adilkno, *Media Archive*, Brooklyn: Autonomedia, 1998, p. 12-15. This essay has been updated and commented in 2001: Geert Lovink & Joanne Richardson , Notes on Sovereign Media, *Nettime*, November 14, 2001, published on the Web in the Subsol magazine: http://subsol.c3.hu.
82. Bertolt Brecht, "Der Rundfunk als Kommunikationsapparat. Rede über die Funktion des Rundfunks" (1932), in *Bertolt Brecht Werke*, Schriften I (1914-1933), Band 21, Frankfurt am Main: Suhrkamp Verlag, 1992, p. 552-557.
83. Quoted in Eric Kluitenberg, "Media without an Audience," *Acoustic Space 3*, Riga, 2000, p. 7, posted on the *Xchange* list October 19, 2000. George Bataille, *The Accursed Share*, Cambridge (Mass.): The MIT Press, 1991.
84. Kluitenberg, p. 7.

to reach the higher plains of 'immediacy.' Instead of transplanting content from one platform to the next, sovereign media are getting serious about deconstruction. All meaning, all images and sounds, have to be taken apart. Sovereign media no longer need the support or solidarity of a public (that the minority concept still appeals to). They have emancipated themselves from any potential imaginary audience. Often live Internet radio has few or no listeners. But this in no way bothers the streaming artists. That is true media freedom.

Tetsuo Kogawa speaks in this context of 'polymorphous radio' or 'polymedia'. For him communication is a "structural coupling". "The separation between transmitter and receiver is merely a political operation. Technologically, there is no separation between them".[85] In the same context we find a text by Lev Manovich in which he theorizes 'micro-media,' pointing at the growing importance of tiny wearable devices. The terms vary but the overall direction is the same. If streaming networks are serious about their intention to overcome the broadcast paradigm they will have to free themselves from the public as a database filled with subjects. Adilkno: "Sovereign media do not approach their audience as a moldable market segment but offer it the 'royal space' the other deserves".[86] Certainly there is a historical connection between the democratization (availability) of media and the miniaturization of technology (portability). It is now time to reflect on the unavoidable trend of becoming micro. Does the proliferation of media technologies imply a solution of the 'media question'? Often scarcity leads to speculation. Absence fuels the imagination. Will the universal ubiquity of networked devices foster a diverse climate of digital creativity and discontent or rather unleash a culture of indifference?

Towards a Theory of Humble Networks

Different from the dotcom promises of unlimited market growth, networks such as Xchange have high scalability awareness. It is tempting to talk down decentralist media as followers of E.F. Schumacher (Small is Beautiful), so popular within Third World ngroups and ecological movements, back in the seventies.[87] There are indeed many similarities between community networks such as Xchange and the Schumacher school of economics. Because ecology had become so mainstream and out of fashion in the nineties such a reference remains uninvestigated here. The conservative backlash philosophy of the Neil Postman media ecology school maybe one of the reasons why new media and ecology so far have had an unlucky love affair. Internet is not a scare resource, unlike gas or oil.

Think Big was the dominant *Leitmotiv* of the cyber age. The liberating spirit of mega was usually associated with the 'tiger' economies of South-East Asia (that is, before their 1997 economic meltdown).[88] In Wired Magazine Bruce Sterling wrote a hymn to the "overwhelming urge to be tall".

85. Tetsuo Kogawa, "Other Aspects of Radio, From Mini FM to Polymorphous Radio," in *Acoustic Space 3*, Riga, 2000, p. 27. See also: Tetsuo Kogawa, "Minima Memoranda," *Next Five Minutes 3 Workbook*, Amsterdam, 1999, p. 103-104.
86. Adilkno, *Media Archive*, Brooklyn: Autonomedia, 1998, p. 14.
87. E.F. Schumacher, *Small is Beautiful*, London: HarperCollins, 1989.
88. See Jee Greenwald, Thinking Big, Wired 5.08, August 1997 about Malaysia's Multimedia Super Corridor. After the 1997 monetary crisis and Wall Street's 2000 NASDAQ big equals good ideas became less prominent.

> My beat is Jules Verne's idea of Big, the Prestigious Big - mega projects that exist because they exceed humanity's previous limits and break all the expected scales. Prestige mega projects are not big simply for functional reasons. They are not about the economic bottom line. Mega projects are about the top line - the transcendent, the beautiful, and the sublime. They are built for the purpose of inspiring sheer, heart-thumping awe - not unmixed with lip-gnawing envy from the competition. Mega is a very special conceptual world, a territory of fierce engineering ambition, of madly brash technical self-assertion. Mega is a realm that abolishes the squalid everyday limits of lesser beings.[89]

At the same time Dutch architect Rem Koolhaas made the rounds with slide shows and exhibitions featuring the growth without planning in Lagos (Nigeria) and the southern Chinese mega cities—designed overnight with the help of ordinary PCs. For Koolhaas the 'XL' strategy has been a liberating move, away from unpretentious petit bourgeois politics and its bureaucratic regulatory regimes. The bold bigness of generic cities, their transurbanism, mass engineered towers, reflect the urgency—and desire—for an anonymous mutated modernity.[90] In a swift move the metaphorical bulldozers destroyed dusty microcosms of decades. The techno-imagination of the New Era was anything but viral. It took a while for the promoters of Big to realize that large-scale projects were solely driven by speculative financial setups. Bigness could easily collapse if financial resources were withdrawn and economic recession set in. In that sense Koolhaas' XL approach is a product of the roaring nineties, extracting value from the post 89 peace dividend. The gigantism of the Clinton era proved to be a special effect of short-term bubble policies, not a long-term trend. As The Economist formulated diplomatically, "the IT industry is becoming less of a growth story and more like a standard cyclical business. Traditionally, vendors have driven most big IT markets. But IT buyers are increasingly reluctant to play this one-sided game".[91] Paradoxically, less growth also leads to fewer players. In a stagnating market the Big turns out to become even bigger.

Minoritarian practitioners, working within the spirit of Deleuze and Guattari or not, do not seek open confrontations. The humble streamers, passionately tinkering and hard to distract, hide in the shadow of the Big gestures, ignoring the Zeitgeist, perhaps hoping in secret that the technocultural 'memes' would one day burst out over society. They do not account for their teeny-weeny activities to authorities and their 'popular culture'. Many didn't have revolutionary dreams in the first place. After the total disaster of existing socialism, leftist infighting snarled up long marches, it simply wasn't the time to Think Big. It was not a coincidence that the Xchange network was administered from a former Soviet republic. Let's conclude by saying that petite networks, cute or not, are here to stay. Time and again the pocket-sized nodes are proving to be immune against the fast pace fluctuations of global capitalism. Theory itself may have to shut up for a while and resist the temptation to vocalize the non-verbal or rather the not-yet verbal. The ever- growing paradox of 'singularity in the age of its digital reproduction' will not be solved any time soon.

89. Bruce Sterling, "The Spirit of Mega," Wired 6.7, July 1998. URL: http://www.wired.com/wired/6.07/mega_pr.html.
90. See: Rem Koolhaas and Bruce Mau, *OMA: S M L XL*, Rotterdam: 010 Publishers, 1995 and Lars Spuybroek meet Rem Koolhaas, Africa Comes First, in: Joke Brouwer a.o. (ed.),*Transurbanism*, Rotterdam: V2_Publishers, 2002, pp. 160-193.
91. Reprinted in *The Australian*, August 27, 2002, p. 31.

Streaming futures

Five years after its founding the Xchange network has found a modest, pragmatic way of operating. Despite the fact that a common web portal annex net.radio scheduler has not yet emerged, collaborations do happen. The network regularly meets and puts out (paper) publications. Pit Schultz (Klubradio, Berlin) stresses that, despite the loose ties, projects indeed emerged out of the Xchange network.

> I can only talk about the numbers I know. Sites such as Betalounge, Groovetech and Klubradio have thousands of visitors a day, not a gigantic number but certainly more than an average media institution with a perhaps1000 times higher budget.[92]

No matter how fragile lists may be, the Xchange example shows that valuable collaborations are its results, perhaps not visible for the outside world but so much more sustainable compared to the defunct dotcoms.

A critical streaming discourse is still in its infancy. Caught between the established 20th century discourses on radio, (pop) music and sound art, streaming is still off the radar of most critics and curators. This even includes the new media arts system itself with its recently opened centres and annual festivals. University departments or cultural institutions with their own dedicated streaming server are still a rarity, even though streaming from live events is in an upward trend. System administrators do not like the bandwidth-eating streaming servers. Yet, the streams are silently streaming. Pit Schultz:

> The role of 'sound' is really important and what that means in a geographically diverse Internet context, is providing a platform for non-textual exchange. There is what one could call the 'Nordic element' in Xchange. Not talking much, but saying a lot. Much of this (invisible, silent) work is done on the local level, in developing nodes, interconnecting them in a loose way. Even during the most active times of Xchange it would be difficult to describe where the fascination manifests itself, in the in-between, the actuality of the live element, the process of exchange, meetings and relationships.[93]

The broken dreams of web TV still echo through the Net. Limited by the underutilized broadband capacities ('dark fibre'), Xchange is setting out to explore what sound means beyond downloading MP3 files. Their message is a simple but challenging one: streaming is more than radio or television on your computer screen. Similar to peer-to- peer networks, independent streaming networks put the question on the table of what users have to contribute once they are confronted with the wide range of technical possibilities that the Internet has on offer.

92. Pit Schultz in a personal email to the author, June 13, 2002.
93. Ibid., June 14, 2002.

CONCLUSION
FROM LISTS TO WEBLOGS

> The dilemma of information in the Internet era is not that there is insufficient content, but that there is too much of it. The situation has been called 'drinking from the fire hose.' The problem is to find a filter for relevance and quality. Personally, I am on the verge of unsubscribing - not because there is insufficient GREAT content but because there is too much GOOD content.[1]

In this thesis I have mapped the transition of critical Internet culture from the years of Internet euphoria up until the dotcom crash and the subsequent downfall of the global financial markets and '911'. In a period of seven years enormous changes occurred. This last chapter will sum up some of the conclusions from the case studies on the Amsterdam Digital City project and the Nettime, Syndicate and Xchange list communities. It will look into current Internet developments that leave behind late nineties parameters and deal with present issues, and pick upon one specific trend, the rise of the 'weblogs.' I will describe how I see 'open publishing' web tools as a possible answer to the limitations of existing Internet community models (and email based mailinglists in particular). The possibilities—and limitations—of weblogs directly respond to the 'benign dictatorship' of lists and their rather primitive way of collaborative text filtering. Towards the end of the chapter I will address the wider issue of (internal) democracy and ownership of Internet projects and explain how software is mediating between social experiences and technical possibilities.

The Internet after '911'

By 2002 the Internet euphoria of earlier years had all but disappeared. Mainstream print and broadcast media started to report about the 'death' of the Internet. In the aftermath of 'September 11' both civil rights activists and Internet pioneers voiced their concern over the rise in surveillance, tighter laws and the subsequent 'closure' of the once open Internet. There were stories about a plot of IBM and Microsoft taking over the Net.[2] Even the neo-liberal UK weekly *The Economist* complained: "The Internet sells its soul," referring to the introduction of subscription fees on many sites after the failure of free services during the dotcom age.

> A new hard-nosed commercialism is spreading over the Internet. Users are increasingly being asked to pay for information and services, while advertising is becoming more intrusive.[3]

The Internet proved unable to 'route around' the steady rise in state-backed corporate control, a situation not helped by the specific background of the Internet pioneers who, due to their

1. Millard Johnson, posting to the *Triumph of Content* mailinglist, January 1, 2002.
2. David Berlind, IBM, Microsoft plot Net takeover, *Znet*, April 11, 2002. URL: http://techupdate.zdnet.com/techupdate/stories/main/0,14179,2861123,00.html.
3. *The Economist*, The Internet sells its soul, April 16, 2002. URL: http://www.economist.com/agenda/displayStory.cfm?story_id=1085967.

techno-libertarian beliefs, in the past selectively focused on the dangers of national governments taking over their 'free' and 'global' medium. This was and remains a time of deregulation and privitisation, a climate that only aided corporate interests, intending to 'tame' the medium. The post-911 'War on Terrorism' requested a dramatic swing of regulatory concerns towards surveillance and control. In one sense libertarian values are being pushed aside as unpatriotic. Yet, on the other hand, the undermining of civil liberties by government anti-terrorist legislation is presented in a rhetoric that claims to be preserving so-called fundamental values of liberal societies.

Jeff Chester, director of the Center for Digital Democracy, has also come out with another warning for the "death of the Internet as we know it". So far most users (in the USA) still pay a pay a flat fee for Internet access. However, with the gradual rise of broadband, telecommunication companies want to introduce bandwidth caps, after which users pay for each Mb they download. The fundamental character of the Internet today is that it lacks precisely these kinds of tolls, barriers and gatekeepers (except in Australia, where users pay for each Mb they download). Chester:

> When you consider the fact that the largest American telecommunications firms are often part of the same mega-corporation with music, video or movie-producing entertainment divisions—such as AOL-Time Warner—you can see how an industry-regulated Internet would handily end music and movie industry worries about Napster-like file swapping by people who don't want to pay industry-monopolized retail prices for content.[4]

The proposed business model of pay-per-download would erect economic and technical barriers to entry for non-commercial and public interest users of the high-speed Internet, forcing civic discourse, artistic expression and non-profit communications such as the Xchange network to act in the same way as commercial content providers. As such, an important and indeed necessary tension between non-profit and for-profit sectors is undermined when both have to follow the same logic.

The stories of the decline of the Internet are not just myths. Growth of users in the USA has indeed levelled off. This is a trend reflected in the growing scarcity of 'cool' sites. Glenn Davis, founder of the once-popular online destination Cool Site of the Day, has not only kicked his web habit but also almost completely given up the medium. The Cool Site of the Day still exists, but Davis, who no longer has the enthusiasm to surf the Net, no longer runs it. "We lost our sense of wonder," he told *The New York Times*. "The web is old hat".[5] The 'creative class' (Richard Florida)

4. Jeff. Chester, How Industry Intends To Kill The Net As We Know It, October 24, 2002, URL: http://www.tompaine.com/feature.cfm/ID/6600/view/print. A Sydney-based friend wrote me the following response to Chester: "USA has resisted use-based billing although non-user based billing has all along disadvantaged customers who might not want to use streaming video etc. and just do a bit of email (after all still the really interesting part of net-life) are actually subsidising the rich techno elite who do. My bandwidth is metered and it always has been". According to him, conflicts over domain name policies and intellectual property rights are more pressing.
5. Lisa Guernsey, As the Web Matures, Fun is Hard to Find, *New York Times*, March 28, 2002. URL: http://www.nytimes.com/2002/03/28/technology/circuits/28WEBB.html.

had become bored with the medium— even worse, it had become bored with boredom itself. "What else have you got?" Glenn David asks.[6]

With Internet growth peaking in Western countries, the cultural cutting edge is starting to lose its interest in the 'new media' saga. Despite the global crisis in the telecom sector, some players are keen to move to the Next Big Thing such as wireless networks (Wi-Fi) and mobile phone applications (MMS, 3G). Others are turning their back on technology altogether and returning to school or university to finish a degree. Users drastically reduce the amount of time surfing the web, hanging around in chat rooms and using ICQ (instant messaging). As expected, the average user integrates the use of computer (networks) into everyday life. Elsewhere I have written about the 'sweet erosion of email.'[7] The spreading of email as a mass communication tool results in the paradox of longer reply times. The eagerness to be connected has vanished. Not only is there a consolidation of mainstream news portals such as Yahoo!, CNN, MSNBC and AOL, a rise of conservative websites has also been noticed. The liberal hegemony of Clinton and his Third Way European counterparts has been replaced by rightwing populism and this overall turn of the political climate is reflected on the web.

Before discussing the rise of the weblogs I would like describe a number of trends, which are changing the nature of critical Internet culture. I am stressing both technological and socio-political aspects. These developments will no doubt affect the character of virtual communities, the relationship between consensus and conflict, underdeveloped democratic culture, the question of (shared) ownership and the never-ending balancing act between radical openness and the 'quest for meaning.'

Diversification of Internet access devices

Worldwide, in 2002 one billion people possess a mobile phone. This is twice as many people who have access to the Internet via a personal computer. Whereas most users still use their mobile phones only to make phone calls and for SMS-messaging, Internet usage via mobile devices is on the increase. The number of those accessing the Internet via their television (cable set top box) is also on the rise. Then there are personal digital assistents (PDAs) such as Palm Pilots. But we can also think of the rise of cyber cafés, telecentres and other public access spaces. The advent of cheap PCs and tablets such as the Simputer (US$200) will also change the user base. The many programs overcoming the 'Digital Divide' worldwide are also contributing to the expansion of users. Wireless networks plus the steady rise of broadband also increases—and diversifies—Internet usage. The cultural impact of PCs, wireless and wearable devices on critical Internet culture has not yet become fully visible (nor debated). The culture as mapped in this study is by and large confined to the desktop PC, bound to the office/home environment. Despite the enormous growth in terms of its user base, the Internet is still mainly shaped by the engineering culture of IT programmers. Both coders and producers of content (with their specific PC desktop cultures) have so far remained relatively close to the user base. Thus what consolidated is a socio-political techno-culture of centres as distinct from networks.

6. See Rob Walker, Work Daze, in: *New York Times Magazine*, June 23, 2002 (accessed via the Web).
7. See: Sweet Erosions of Email, posted to *nettime*, June 13, 2000. Printed in: Geert Lovink, *Dark Fiber*, Cambridge (Mass.): MIT Press, 2002, pp. 176-180.

At some point this might change when the Net becomes available in multiple ways and has a billion or more users.

Content: contradictory developments?

With the dotcom wave of 'free' content and access on the brink of extinction and a system of micro-payments still not in place, the big question remains if and how users will pay for Internet content. Even though the subscription model is on the rise, the overwhelming amount of content remains freely available. Content remains a spin-off effect of the hardware and software precisely because these modes of informational exchange and production do not have a payment system in place. Critical Internet culture has by and large supported the classic hackers' position that 'information wants to be free.' This position states that, regardless of the commercial or political interests, information cannot be hidden behind passwords. If information is 'jailed' on secure servers, hackers will come out and 'liberate' the content. This has been the prime concern of the entertainment industry. The hackers' hegemony throughout the 80s and 90s prevented, with few exceptions, serious attempts to create pay-for-content systems. The Internet currency 'beenz' failed, mainly because of its dotcom model. Many Internet professionals lost their jobs after the 2000 NASDAQ crash. As a consequence, little or no money has been available for professional online content production—a situation remaining remarkably unchanged—suggesting that critical Internet culture will remain dominated by volunteer labor unless some sudden revolutionary discovery is made and either a barter or micro-payment system establishes itself. The advantage of mobile phones in this respect is that there is indeed a payment system in place, that is, the phone bill. PC-based Wi-Fi enthusiasts, pretending to compete with third generation mobile phone systems, are inclined to overlook this difference. To do so threatens the cultural logic, and to some extend the political hegemony, of free content within a system of networks. Wireless networks may extend access to the Internet and further speed up user mobility, but they avoid the issue of how such networks can be transformed into sustainable economies. Wireless networks are, once again, driven by the ideology of the free, meaning that there is nothing in it for independent content producers.

From a content perspective 'community' is just another word for nothing left to lose.[8] Weblogs are not bringing any change in this situation. The popularity of free peer-to-peer networks such as Napster and its followers such as Gnutella and Kazaa will make it difficult for a pay-for-content culture to establish itself. This picture contradicts the dark views of experts such as Lawrence Lessig (see chapter one) who warn of a victory for the intellectual property regime over the innovative and open character of the Internet. Tensions between free content and intellectual property claims (from both artists and the industry) are likely to rise, with no immediate resolution in sight.

From Internet to global capitalism

While socio-technologically speaking more and more people have access to the Internet, this

8. Reference to Ditherati, June 21 2002: "I never got into this in order to lure all of you here and sell you to advertisers". Rusty Foster, on discovering that community's just another word for nothing left to lose, Kuro5hin, 17 June 2002 (http://www.kuro5hin.org/story/2002/6/17/23933/5831). The reference can be found in the Ditherati archive: http://www.ditherati.com/archive/.

by no means implies that the gender, race and class divides within the medium will simply fade away. This particularly counts for IT-developers. After years in which there was a growing belief that technology may bring down global inequality, since 2000 the mood is slowly shifting back to general technology criticism. Utopian promises have been slashed, and with it the hegemonic position of libertarian technological determinism. But what on the one hand may seem a healthy return to pragmatism, could just as well become a backlash for many of the net art, free software/open source projects and community networks that draw heavily on voluntary labor, driven by the collective belief that independent software, interfaces and infrastructure form the key battleground. Many post-2000 critical projects have shifted their attention from technology in a narrow sense to a broader analysis of global capitalism. The popularity of Michael Hardt and Antonio Negri's theoretical epos *Empire* is one indication, *No Logo*, Naomi Klein's critique of corporate branding, another.[9]

Despite repression and 'September 11,' the series of global protests that started with the WTO meeting in Seattle (November 1999) have only grown. Even though it is not disputed that these movements would not exist without the Internet, the so-called 'anti- globalization movement' has so far not developed its own theory of technology and new media. Instead we see a withdrawal into a 'Chomsky' position, which states that all elements in society, including media and technology, are ultimately subordinated to US foreign policy.

One could also say that the 'anti-globalization movement' carefully avoids new media topics. In short, it is the WTO and the World Economic Forum, not the browser war between Netscape/AOL and Microsoft (or for that matter the heroic battle between Linux Thorwalds and Bill Gates), where power is located. Even though the use of IT for social change has been described in detail,[10] the topic has been by and large absent from the agendas of the movements' own meetings in Porto Alegre (early 2001 and 2002) and regional 'social forums' such as Florence (November 2002). Technology and new media are absent in the movements' list of urgent social, economic and political issues. The danger of a setback to previous activist arguments that 'technology is evil' and 'all media are propaganda' is imminent. Email and the web are seen as mere tools. New media are not seen as a strategic environment with its own battles.

There are both progressive and conservative voices calling for a 'return to reality.' In chapter one I dealt with the example of Hubert L. Dreyfus. Regression might be on the rise, particularly in times of corporate consolidation with increased censorship and surveillance, such as after 'September 11' (2001). Critical Internet culture could then seriously suffer, resulting in disengagement from key issues such as the design of a digital public domain and related network architecture. It should not be taken for granted that significant numbers of artists, activists and critics will identify themselves forever with the (new) media question. The technology discourse (including its critics) will not be able to deliver the answer to all the world's problems.

9. Michael Hardt & Antonio Negri, *Empire*, Cambridge (Mass.): Harvard University Press, 2000; Naomi Klein, No Logo, London: Flamingo, 2000.
10. See for instance Graham Meikle, *Future Active*, Media Activism and the Internet, Pluto Press Australia, 2002.

Information overload and filtering

A clear sign of the consolidation of the Internet is the steady decline in the importance of email in people's everyday life. After a period of excitement about the speed and intimacy of email people have become used to 'telephone letters' and integrate the medium into their already busy lives. The Internet not only has to compete (time wise) with television, radio and print media but also with upcoming 'wearables' such as mobile phones, PDAs and MP3 players. The 'attention economy' concept,[11] once associated with the rise of Internet, is turning against itself. There is no longer enough attention for the Internet. For so many websites the first impression has been the last one. Users have moved on from initial curiosity of how to use the new medium towards personal (crisis) management of the ever-growing information and communication flows. A friend tells me how he copes:

> I get about 80 emails a day. Remember the days when one's self-worth was proportional to the number of mails in one's inbox? I don't mind the large numbers of mails so much. I select the sources into separate mail folders. And then there is always is the delete button. Scanning is the problem for me: how do I know what will be of interest? So a brief summary at the top (or keywords) of the mail or a very clear subject heading is what helps me most.[12]

Email has been around for a good thirty years.[13] The use of email is becoming more complex and unpredictable. It is a communication tool that increasingly suffers from inflation and social fatigue. Getting an answer three weeks later, actually much slower than 'snail mail' through the conventional postal system is not uncommon anymore. There are full mailboxes, crashed mail servers, broken transcontinental cables or bankrupt ISPs. Incidents such as these can no longer be blamed on the newness of the technology.

Independent infrastructure

The lessons to be learnt from the Amsterdam Digital City project (DDS) are countless. Here I would like to focus on the importance of an independent Internet infrastructure. Ownership of actual servers, accessible in nearby workspaces or media labs is not common within critical Internet culture, even though one would think otherwise. Since the late nineties there has even been a steady decline in the amount of small, independent Internet service providers. This has also affected the cultural sector. The commercialization of DDS is a classic case in which cheap and independent Internet access (email, webspace, streaming servers, list software, chat rooms, etc.) available to activists, artists and NGOs was lost due to a lack of sustainable models. The same happened to projects that used to run on university computer networks. Free access to servers hardly exists anymore. Cultural service providers such as The Thing (New York) have become

11. See: Michael H. Goldhaber, The Attention Economy and the Net: The Natural Economy of the Net. URL: http://www.firstmonday.dk/issues/issue2_4/goldhaber/. The attention economy is a classic late nineties attempt to explain why founders of a free website could turn into millionaires overnight. How 'eyeballs' were miraculously transformed into overvalued stock options is explained on this website: http://www.newmediastudies.com/economic.htm.
12. Personal email of the new media artist, activist and curator Trebor Scholz, June 26, 2002.
13. Elsewhere I have summed up the variety of causes for the inflation of email. Geert Lovink, Sweet Erosions of Email, *nettime*, June 13, 2000.

rare. An increasing amount of websites now run on anonymous commercial servers, somewhere on the East or West coast of the United States—so called server farms where bandwidth and server space is (still) cheap. A further increase of intellectual property and copyright issues, however, could stop the decline of independent infrastructures. After the dotcom crash, prices of Internet services have been (re-) introduced. As described in the streaming media chapters, the cost of bandwidth for streaming media projects has risen. Instead of the predicted fall in the price for transferred gigabytes due to the rise in bandwidth capacity, the opposite is happening. Users are forced into a pay-per-Mb-you-download system. Now that the 'funny money' (venture capital) has dried up, all operators in the networks need to come up with real revenues. Unlike the dotcom logic of profit through an economy of hype, the pressure to make money within the information economy and its complex infrastructures results in a user-pays system. All of these developments may result in a return of community infrastructures, perhaps in contemporary forms such as neighborhood wireless networks, shared office spaces centred around bandwidth and telecentres for small businesses.

From consolidation to isolation?

For critical Internet culture the telephone never rings. The cultural arm of the new media sector has not had particularly prosperous years in recent times. Ironically, its golden days may as well be located at the dawn of the World Wide Web, around 1990-95, when the air was laden with promises and mythologies.[14] Since the mid nineties business and technology has dominated Internet reporting, both on the Net and in the old media. It is very likely that insiders in the IT-industry have never heard about the initiatives and topics discussed in this thesis. By 1998, when the dotcoms started to dominate the Internet, the new media culture's heyday was over. Badly needed funding for Internet culture either wasn't there or disappeared into competing offline categories. Ever since, the position within society of new media culture has remained undefined. This may sound like a unique opportunity, shaping the future while starting from scratch—but the reality looks different. In times of shrinking budgets the cultural establishment is not welcoming yet another mouth in the trough. Why would film, visual art or literature, let alone opera or theatre, support new media and voluntarily give up scarce resources?

As discussed in various chapters the emerging new media culture has so far been incapable of funding its own activities, depending instead on articulation with other institutional support infrastructures. While growing modestly in the 1998-2002 period, we can hardly speak of an institutionalization of new media culture. Volunteers do most of the work. While the funding structure differs widely from country to country, the overall trend is the same. Instead of the expected (steady) rise of funding both by governments and non-governmental foundations, spending on new media culture has actually declined. As a result critical Internet culture has not reached its potential—and perhaps never will as its historical window of opportunity to intervene and invent is rapidly closing. The Internet, after all, has always been described in terms of a set of functions and its potential as a medium to transform society, be this in utopian or dystopian ways. It is therefore

14. I have discussed the mid nineties swift from speculative theory to a more critical approach in a lecture at InterCommunicationCentre, Tokyo, December 19, 1996 called From Speculative Media Theory to Net Criticism. The essay was published in *Mute*, Issue 7 Spring 1997, p.1-2 and *InterCommunication Magazine*, Nr.20, Tokyo 1997. The text was first posted on *nettime*, January 13, 1997.

better to analyse practices of new media cultures, instead of reading new media as embryonic forms of emerging landscapes. In analogy to the cyberpunk phrase 'the future is now,' we could say: 'the Internet is now.'

Openness and editorial control

Leaving general concerns for what they are, the key issue of this study has been to analyse the ways in which Internet culture deals with the constant danger of information overload. There is a fine line between meaning and noise, and no other topic has been as contested as this one. It is not sufficient to say that this is a matter of personal taste. Over the next pages I will, again, dig deep into this hot topic and present another case study on weblogs. I firmly believe that the conclusions of this study have to deal with the new possibilities (and limitations) that weblogs are offering. In this thesis I have focused in particular on the internal dynamics of list culture. Discontent with Internet mailinglists must be as old as the application itself. Moderation and filtering is one issue, the linear character of postings another. Lists have a maximum of topics they can deal with at the same time. Not more then three or four threads can take place simultaneously. As far as I can remember, discussions inside the Nettime circle and neighboring lists about the necessity to build a web-based multi-layered 'workgroups' environment go back to 1996 and 1997. It took a few more years for something to happen.

From lists to weblogs

Despite all the technical changes, electronic mailinglists pretty much stayed the same. The improvement in the nineties from majordomo list software (Unix type of code) to mailman (open source application with a web interface) did not made a real difference for the way in which list communities operated. In the second part of the nineties system administrators and programmers started their own web platforms to discuss technical matters. Slashdot ("News for Nerds – Stuff that Matters") was launched mid 1997. In 2000 Slashdot made its 'slash code' software available which a number of web projects started using.15[15] Around mid 1999 Catalyst, a Sydney-based activist group (with Matthew Arnison as a key member) developed Active, an open source web platform, similar to Slashdot. Active was going to become the base for the global www.indymedia.org activist open publishing site. Indymedia, the website belonging to the Independent Media Centres (IMCs), was launched during the WTO-protests in Seattle (December 1999) and rapidly spread with the growing movement against corporate globalization agendas.[16] Local initiatives, mainly in the USA and Europe, duplicated and modified the Active code and set up their own Indymedia sites.

Another community weblog is the New York based Interactivist Info Exchange run by the Autonomedia publishing collective and Interactivist.net. Interactivist developed its own Slashcode adaptation. On the Interactivist website everyone can post an article. Still, "not every article posted to

15. http://Slashcode.com/sites.pl lists the projects that use its source code.
16. The history of the independent media centres (IMC), the Indymedia weblog and the (originally Australian) Active software is well described in the special chapter Open Publishing, Open Technologies of Graham Meikle, *Future Active*, Sydney: Pluto Press Australia, 2002, pp. 88-101.

the InfoExchange appears on the front page, some will only show up in their section".[17] Slashdot and Indymedia are only two of many of community weblogs that popped up in the 1999-2001 period. Originally weblogs (or blogs) were often-updated websites, run by individuals that linked to others weblogs. David Winer runs one the oldest weblogs called Scripting News. In his definition a weblog is a

> continual tour, with a human guide who you get to know. There are many guides to choose from, each develops an audience, and there's also comraderie and politics between the people who run weblogs, they point to each other, in all kinds of structures, graphs, loops, etc.[18]

Noah Shachtman described blogs as a "constantly updated combination of diary and link collection".[19] According to David Winer the first weblog was the first website, http://info.cern.ch/, built by Tim Berners-Lee at CERN. From this site Berners-Lee pointed to all the new sites as they came online. NCSA's What's New page took over this role, then Netscape's What's New page was, in a sense, a big blog around 1993-1995, until the web exploded. Other early weblogs include Robot Wisdom, Tomalak's Realm and CamWorld. In one of the first books on the topic, *We've Got Blog*, Rebecca Blood defines weblogs as a "frequently updated webpage with dated entries with new ones placed on top".[20] 'Links with commentary, frequently updated' was the original formula. "Just as email had made us all writers, weblogs have made all of us publishers," says Rebecca Blood.[21] This is an important remark in the context of this thesis. Lists indeed make people write—but they are not by definition publishing tools. Whereas lists are sensitive to some extent about copyright issues and leave authors the possibility to publish their content elsewhere (and get money for it within an IP system), weblogs no longer care about their relationship with print media. List owners often insist that posting to a list is not the same as 'publishing' on a website (even though most lists have web archives). Weblogs brought the emancipation of the web as a mature medium a few steps closer.

Weblogs could be described as the follow-up of the 'homepage' and act as a grassroots response to the corporate concentration of power by a few news portals and directories such as Yahoo! AOL, MSN and CNN. One could also stress the empowering aspects of self-publishing. Bloggers seize the means of production, as Andrew Sullivan points out in *Wired* magazine.[22] In the past "journalists needed an editor and a publisher. Even in the most benign scenario, this process subtly distorts journalism. You find yourself almost unconsciously writing to please a handful of

17. See: http://slash.autonomedia.org. Other examples of weblogs are http://www.peek-a- booty.org/pbhtml/index.php, www.blogskins.com, http://www.kuro5hin.org/. A listing of various blogs that use Scoop: http://scoop.kuro5hin.org/?op=special;page=sites.
18. Dave Winer, The History of Weblogs, URL: http://newhome.weblogs.com/historyOfWeblogs.
19. Noah Shachtman, Blogging Goes Legit, Sort Of, *Wired News*, June 6, 2002. URL: http://www.wired.com/news/print/0,1294,52992,00.html. The article reports about professional journalists and university departments having started to use weblogs.
20. Rebecca Blood, Introduction, in: John Rodzvilla/Editors of Perseus Publishing, *We've got Blog*, How Weblogs are Changing our Culture, Cambridge (Mass.): Perseus Publishing, 2002, p. ix.
21. Ibid., p. x.
22. Andrew Sullivan, The Blogging Revolution, *Wired* 10.5, May 2002. URL: http://www.wired.com/wired/archive/10.05/mustread.html?pg=2.

people—the editors looking for a certain kind of story, the publishers seeking to push a particular venture, or the advertisers who influence the editors and owners. Blogging simply bypasses this ancient ritual". Blogging is also described as a sort of neo-geek sensibility. "Webloggers typically offer pithy, sarcastic commentary about the links".[23] Others emphasize the speed with which weblogs update news and links. Salon.com: "Weblogs, typically, are personal web sites operated by individuals who compile chronological lists of links to stuff that interests them, interspersed with information, editorializing and personal asides. A good weblog is updated often, in a kind of real-time improvisation, with pointers to interesting events, pages, stories and happenings elsewhere on the web. New stuff piles on top of the page; older stuff sinks to the bottom".[24] Evan Williams: "the blog concept is about three things: Frequency, Brevity, and Personality". It wouldn't be exceptional to say that weblogs are symptomatic of a cultural logic that celibrates excessive banality.

Others stress that blogs are in essence media platforms for individuals, no more than personal diaries. But for Ziod Slashdot is more than just a blog:

> I remember trying to tell my dad about Slashdot way back and told him it was like reading the newspaper and submitting your letter to the editor in a matter of seconds with other people commenting on your letter to the editor within a few minutes. He responded 'so it's total chaos.' That's when I decided I had no idea how to explain Slashdot.[25]

All seem to agree that blogs, either run by user groups or individuals, need to have a lively, interactive audience. The users build up a common personality and give the weblog its own, unique characteristics. Over the years weblogs have become associated with the easy-to-install software developed for this genre of sites. Software is the message, as is often the case with the Net, which initially brings together people with widely different interests and opinions. Greymatter, Blogspot, Movable Type, Pitas, Diarist, Groksoup and Blogger could be mentioned as examples of build-your-own weblog software.

By 2002 weblogs were discovered by mainstream outlets. David Gallagher, writing for *The New York Times*, points at an emerging war between weblogs. Says Glenn Reynolds, a right-wing weblogger and law professor at the University of Tennessee:

> The weblog world before Sept. 11 was mostly inward-looking—tech people talking about tech things. After 9/11 we got a whole generation of weblogs that were outward-looking and written for a general audience.[26]

Gallagher describes a culture clash between the 'war bloggers' who support George W. Bush's War on Terrorism and the 'veteran weblogs' that are critical of the policy of the Bush administration. Gallagher:

23. *Chicago Tribune*, July 9, 1999 (quoted from David Winer's site).
24. *Salon*, May 28, 1999 (quoted from David Winer's site).
25. Ziod.com on www.slashdot.org, re: Slashdot a blog?, June 6, 2002.
26. David Gallagher, A Rift Among Bloggers, *New York Times*, June 10, 2002. URL: http://www.nytimes.com/2002/06/10/technology/10BLOG.html.

> The war-blogging movement took off after Sept. 11 as people used blogs to vent their anger about the terrorist attacks. Though they are still commonly known as war blogs, these sites now address a wide range of news and political topics, usually from right of center.[27]

It came somewhat as a shock for apolitical tech insiders that the 'blog community' suddenly seemed divided over a political issue. The controversy over the 'war blogs' could be seen as an indication as the blogging phenomenon moved from underground to mainstream. According to New York Internet analyst Clay Shirky:

> the blogosphere is resolving itself into a power distribution, with many small blogs (small in terms of readership), some moderately sized blogs, and a handful of highly trafficked blogs. This in turn recreates all the difficulties the original web users had in locating content, which created niches for search engines, directories, portals, et al. Many of these solutions don't work well in the blogosphere, because weblog content is time-sensitive.[28]

The direction blogs will take is as yet unclear. Individuals' blogs, supported by easy-to- install software continue to spread. "Will readers flock towards trusted meta-blogs that filter and organize, or will other models of collaborative filtering arise, Shirky asks".[29]

Critical new media culture has largely ignored the steady rise of weblogs. After an initial period of network euphoria (1995-98), a consolidation phase for critical Internet culture set in. Overwhelmed by the dotcommania storm, chronically under funded, the cultural arm of new media faced a range of conceptual dilemmas. Squashed between the freedom of passionate dilettantism and the financially motivated professionalism of 'the suits,' the cultural sector had maneuvered itself into a vulnerable charity situation. Excluded from the dotcom venture capital, critical Internet culture has found itself situated somewhere between non-profit, commerce, living off state support, grants and sponsorship, if available at all, while doing commercial work to pay the bills. One of the burning issues of the outgoing nineties was internal democracy and how to deal with political and cultural differences. The Kosovo crisis in March-June 1999 should be seen as a symbolic moment. The 'first Internet war' accelerated an already tense atmosphere, as the case study on Syndicate demonstrates. The heated debates had brought different approaches to the surface, way beyond the pro/anti NATO bombing of Yugoslavia polemic. In this tense climate during a crucial period in which the new arts sector, worldwide, struggled to establish itself, the desire to have open and stimulating online conversations, as embodied in the weblogs, wasn't on many people's minds. The 2001 breakdown of the unmoderated Syndicate mailing list illustrated this worrisome trend.

There had been a growing discontent with the way in which (both majordomo and mailman) Internet mailing lists operated. Yet, there seemed no way out of the dilemma between open and closed lists. Open lists tend to become noisy and irrelevant for those who prefer less traffic and more content. Moderated lists on the other hand show a tendency to become quasi-editorial

27. Ibid.
28. Clay Shirky in *Europe Online* newsletter, May 2002, www.europeonline.com.
29. Ibid.

magazines, thereby losing the 'informality' of email exchanges of ideas and material. Collaborative mail filtering, the magic word of the Nettime list, was in danger of losing its lively, social aspect. The discussion about open or closed lists was exhausting itself and showed signs of repetition.

With the overall Internet still growing at a considerable pace, existing list channels are becoming slowly institutionalized. But how else can list-owners manage the increased traffic? This is an issue that affects all users. There are growing suspicions about those who moderate and others who 'chat' or even 'spam.' The net result is a standoff: a climate of tension from all sides, and even more troubling, silence—a gradual breakdown of communication, an increase of suspicion and the loss of an invaluable exchange of information and arguments. However, many feel that there is no reason why this situation should be passively accepted. Weblog software could quickly bring critical new media culture up-to-date, overcoming the current list problems. Existing websites and lists in the field of new media culture have not (yet) adopted open publishing software. Writing late 2002, an initiative for a broad web-based platform still has to be developed.

List Culture in Australia

The Fibreculture list community, which I co-founded with David Teh in early 2001, proved once again that list culture wasn't exactly dead. David and I had met in Sydney and were both unhappy with the decline of the Australian new media arts 'Recode' list. Started in early 1998, Recode had become stuck in complex funding politics, which was plaguing the once vibrant scene in Australia.[30] The list was locked up inside the Internet and a climate of informal chats and rumors slowly exhausted the community. The incestuous relationship between artists and funding bodies contributed to a feeling of diminishing opportunities. With the increased pressure to push arts, education and culture into the commercial arena, Recode failed to defend itself. In a political climate of decreased funding, artists treated their fellows as competitors and a mutual sense of distrust emerged. Over the course of 2001 Recode slowly faded away and was closed in early 2002 after a conflict between moderator Julianne Pierce and net.artist mez.

Something had to be done to break the downward spiral. David Teh and I had the idea to focus on the enormous potential in Australia of new media researchers. We could not solve the looming crisis of the shrinking new media arts sector; others had to take initiatives at that level.[31] Within weeks the Fibreculture list was up and running. The interdisciplinary education, research, policy and theory angle seemed a productive one. Within half a year the list had 300 subscribers and 6 facilitators, based in different parts of Australia. The list held its first meeting in December 2001 in Melbourne where it presented its first publication, a collection of critical essays called *Politics of a Digital Present*.[32] A second meeting took place in Sydney, late November 2002. A free newspaper was produced for that occasion. By then the Fibreculture list had doubled in size. The

30. There is no online archive of the recode mailinglist as of yet. See also: http://www.netculture.gr/eng/showdocwars.asp?view=76.
31. In January 2002 the Australian net artist Melinda Rackham initiated the Empyre list. "Although - Empyre- is an international list it first evolved to address the gap in the Australian regional online terrain after the decline of the recode list, presenting a companion list to fibreculture". URL: http://www.subtle.net/empyrean/empyre.
32. Hugh Brown a.o. (Ed.), *Politics of a Digital Present*, Melbourne: Fibreculture Publications, 2001.

list remains open and largely unmoderated and runs a separate announcement list. As the Fibreculture example shows, if focused on topics and outcomes, lists could still be vital backbones for social networks.[33]

As an open and unmoderated list Fibreculture soon had to deal with the handfull of globally operating trolls that move from list to list to post their messages (which some call spam and others poetry). Classic cases of email soloists are Brad Brace, Integer/N.N., mez and Max Herman. They usually do not engage in debates. Other well-known list provocateurs are Trevor Barr, Lachlan Brown and Paul Treanor. What unites these Internet performers, desperately seeking an audience, is that they move from one list to the next, do their act, are unsubscribed and a little later appear on another online forum. Open and unmoderated lists are ideal stages for trolls to perform on. Each time a troll showed up the Fibreculture facilitators and most of the subscribers would get confused, becoming divided in their response. Whereas most despised the egomania and ruthless self-promotion of the trolls, many hesitated to remove the trolls from the list. In the meantime the troll had reached his/her goal by attracting a considerable amount of attention. As soon as a list was closed and moderated the troll problem would disappear, but in its first years the Fibreculture list wasn't big enough to do so, thereby exposing itself to exhausting debates over the continuing troll highjacks.[34]

Depending the speed with which broadband technology spreads, critical Internet culture will have to move to the web and develop weblogs where multiple threads, debates and news threads can take place, in a way that is not possible within the linear electronic mailing list structure. The compilation technique that, for instance, Nettime moderators use to filter related messages into one email has partially helped, but the more moderation is done the less participants have the exciting feel of an intimate and 'live' exchange.

And, quite importantly, moderated lists have proved very labour intensive, which in itself contributes to power relations that at times perceived in resentful ways. Slowly Nettime is losing its community feel. With over 3000 subscribers (in 2002) it is turning into a new- style publishing channel. The advantages of a weblog over lists are numerous. Whereas a list can only carry a limited amount of parallel threads, weblogs can host an infinite number of conversations, including hundreds of responses on each individual posting.

Allegories of Democratic Network Culture

It is important to not just complain about a corporate takeover of the Net, the tragedy of the 'digital commons' or the decline of virtual communities, but to actively reshape the Net by writing

33. For more information: www.fibreculture.org. During 2001 the facilitators group consisted of Hugh Brown, Geert Lovink, Helen Merrick, Ned Rossiter, David Teh and Michele Wilson. In 2002 Chris Chesher, Danny Butt, Molly Hankwitz and Lisa Gye joined the group.
34. In order to solve the troll problem on Fibreculture, on February 14, 2002, Posting Guidelines appeared on the list, formulated by the 8 facilitators. "The following kinds of posts are not suited for Fibreculture announcements (send to fibreculture-announce), flames, unannotated URLs/forwarded articles, fiction, long (>5000 wd) academic papers/thesis chapters, text-art-One-liners (unless "really" funny or insightful), promotional material".

code, developing weblogs and other software projects. Yes, the Net is in danger but there are also plenty of developments pointing to a 'renaissance' of the medium. The dilemma between 'noise' and 'quality' should no longer be so paralyzing. "The real struggle at stake now is between old and new," Lawrence Lessig writes in *The Future of Ideas*.[35] But for Lessig that which constitutes 'the new' is vastly different from the critical Internet culture that I have just been describing. As Lessig describes, "how an environment designed to enable the new is being transformed to protect the old".[36] But the dangers for the Net are not just coming from intellectual property lawyers. There are also internal dynamics at hand, besides the burdens created by law. The 'new' is not just a fixed set of funky ideas which are waiting to be implemented on a large scale. The restorative forces of 'old media' are on the rise as witnessed by AOL-TimeWarner for instance, and in this defensive atmosphere 'the emergence of the new' could all too easily become an empty phrase.

The hotly debated issue of open vs. edited channels, be it on email or the web, can be dismissed as a minor technicality, only of interest for Internet nerds. But I don't think this is the case. The material presented in this thesis can be read as an allegory of the tensions peculiar to 'electronic democracy.'[37] Is the troll the online adversary, in need of our sympathy? Or should dissent rather be classified as 'noise' and filtered out? The fight over the architecture of net-based conferencing systems goes to the heart of the question of what the 'new' should look like. It is this uncarved, yet to be defined, element that makes the new different from the 'old.' Otherwise we may as well position the evolution of the Internet into the eternal return of the same old 'laws of media.' Media history has shown how revolutionary means of production were constantly retrofitted into profitable and controllable top-down channels. The cynical cycle from innovation and hype to mainstream adaptation, back to regression and discontent becomes a predictable pattern. Does the Internet inevitably have to deteriorate? Are there ways to escape such well- known patterns? What happens if users and developers suspend their belief into dotcoms and no longer buy into the fateful historical cycle argument, from hype, start-up and IPO to bankruptcy? Appropriation and cooptation are not inevitable. There are no natural laws of culture that one fatefully has to obey. After Gramsci we understand that the scene of hegemony is one of contestation and negotiation. Power, as Foucault demonstrated, is not static. Still, cyclical movements in both fashion and economy are all too real. Are there ways to sabotage the course of history from creative experiment to boom and bust? Both weblogs and peer-to-peer networks are encouraging phenomena, pointing to a turn of the Internet, away from corporate and state control. Are the innovative and creative forces Lessig speaks so highly of in *The Future of Ideas* condemned to start all over again each time a new round of technological innovation comes into view? As a lawyer holding

35. Lawrence Lessig, *The Future of Ideas,* The Fate of the Commons in a Connected World, New York: Random House, 2001, p. 6. In parallel to the dangers of a (self) marginalization of new media arts, Lessig writes: "sometimes a society gets stuck. In these times, the hardest task for social and political activists is to find a way to get people to wonder again about what we all believe is true. The challenge is to sow doubt".
36. Ibid.
37. I define electronic democracy as a practice within Internet culture. This is in contrast to experts such as Steven Clift and others who usually talk about electronic democracy in terms of transparency by bringing (local) government documents online, promoting electronic voting and raising citizen participation through online forums. Electronic democratic culture, in the context of this thesis, is not confined within the relationship between citizens and government. See also Clift's homepage: www.publicus.net.

liberal values, Lessig overlooks the capacity for dynamic Internet cultures to form 'the new' in ways other than narrative of cyclical history would have it.

Democracy, in my view, is primarily an 'agonistic culture,' not a set of laws and legal procedures enframed by models of rational consensus.[38] When democratic culture is becoming technological, sooner or later, democratic rules also have to be hardwired into the technical systems in the form of software, for example. Technology is not an alien force invading democratic societies. Instead of asking how representative democracy can be saved or renewed by using the Internet, the question that needs to be asked first is how democratic the Internet (and its culture) itself is. That is, one must ask and inquire into the material dimensions of online communications. In this thesis I have not looked at the ICANN domain name controversy to answer that question.[39] Instead I have looked at online networks that interface technology and culture.

Democratic network culture starts and ends with the power of the user. Feedback channels for the user-as-producer have to be inscribed in the software if the aim is to go beyond the polite and never printed letter to the editor. If there was anything 'new' about technical media, it should the possibility of users becoming editors. In itself it was not enough to have cheap means of production to digitally edit films or xerox zines if the distribution issue (reaching a critical mass) was not dealt with. Hardware is a condition but no guarantee for anything interesting to happen. Dotcom portals addressed this issue through marketing techniques (billboards, TV ads, t-shirts, etc.) but by and large failed to solve the mystery of how to build up a sustainable audience (and related revenue stream). How is critical Internet culture in the future going to address the topic of 'wider' audiences and the inevitable conflicts associated with more broadbased user communities? At some stage critical Internet culture has to go 'out of beta' and release its debugged blueprints of the 'network society.' However, for the initiatives operating within the time frame of this study it is too early (or rather too late?) to radicalize Manuel Castells' analysis of the Internet in his book *The Internet Galaxy* as a neutral engineering culture, nurtured and corrected by a supposedly socially benign Third Way agenda in terms of the fields of tension within emerging online political cultures.

Weblog architecture is one such field. The key objective of community weblogs such as Slashdot and Indymedia is to modify the grading system of incoming communications in order to keep

38. See introduction of this thesis for an explanation of the term agonistic democracy and Chantal Mouffe's interpretation of the concept in her book *The Democratic Paradox* (London: Verso, 2000).
39. I refer here to the battle who owns and administrates the top-level domains such as .com, .org and .net (see also the Nettime chapter in this thesis). Since 1998 the Internet Corporation for Assigned Names and Numbers (ICANN) is the body responsible for this task. Ever since its start, the legal structure of ICANN and its accountability has been highly controversial. For many ICANN is the exact opposite of what Internet democracy could be. See: www.icannwatch.org. Pointing at the conflicts and shortcomings, Castells still praises ICANN. "Without prejudging the effectiveness of these new institutions, the truly surprising accomplishment is that the Internet reached this relative stability in its governance without succumbing either to the bureaucracy of the US government or to the chaos of decentralized structure". (p. 33) Lawrence Lessig does not mention the ICANN drama of Internet self-governance, neither in *his Code and Other Laws of Cyberspace* nor in *The Future of Ideas*. One of the first critical ICANN studies, *Ruling the Root*, Internet Governance and the Taming of Cyberspace by Milton Mueller (The MIT Press, 2002), appeared too late to be included in this thesis.

the moderators in line. This is how Amy Alexander, a software artist, teaching at UC San Diego, explains the Slashdot moderation procedure:

> If someone turns out to be an unfair or wonderful moderator, everyone else gets to moderate that person's moderation. Someone who's considered a troll will tend to be consistently moderated down to 0 or -1, and then those users who want to set their threshold above that don't get annoyed with it, while those who prefer to see everything can either set their threshold lower or choose to view everything, thus ignoring the moderation altogether. You can easily choose to read N.N. and other trolls—or to not see them at all.[40]

The idea is to let the user customize, filter, don't filter, read threads, read in a specific order, switch back and forth. Moderation according to the Slashdot definition involves ratings points given by participating users, which cause a post to have a rating somewhere between -1 and 5. Although some of the Slashdot readers are moderators at any time, any reader can meta moderate—which means keeping the moderators in check. Anyone who does bad moderation loses the moderation privilege in the future. There are four goals of moderation, as mentioned on the Slashdot site:

> 1. Promote Quality, Discourage Crap; 2. Make Slashdot as readable as possible for as many people as possible; 3. Do not require a huge amount of time from any single moderator; 4. Do not allow a single moderator a 'reign of terror.'[41]

The curious paradox of Slashdot is its exclusivity. To be 'slashdotted' by an editor is arguably the highest honor on the Net—one's posting is then given headline status at the top of the homepage. What is harder, to get an article submitted to the online journal www.salon.com or to be featured on Slashdot? Slashdot moderators have to go through hundreds of contributions a day. The editorial filtering is one of the toughest on the Web. Ironically Slashdot turned into the opposite of 'open publishing.' The choices made by its moderators are anything but machinic. The editorial policy of the moderators can be described as apolitical, focused on mainstream games and gadgets; in short, 90s techno- libertarian. But then… their (meta)moderators are wizards in their own universe, ordinary geeks turned into Gods. If someone wanted to obtain that wizard level and change geek culture they could probably work themselves up from user to moderator to meta- moderator.

Instead of featuring many editorial articles, the Slashdot model focuses on the democratization of the back-end, the readers' comments, unlike online magazines that grant primary attention to contributors of top stories. The procedure for how the main stories get selected (which are then fiercely commented on) remains unclear. The core content remains tightly controlled. Slashdot is about the high art of administering commentary.

> Slashdot gets a lot of comments. Thousands a day. Tens of thousands a month. At any given time, the database holds 40,000+ comments. A single story might have a thousand replies—and lets be realistic, not all comments are that great. In fact, some are down right terrible—but others are truly gems.[42]

40. Amy Alexander in a private email, December 18, 2001.
41. http://slashdot.org/moderation.shtml.
42. Ibid.

In the Slashdot model users are first of all readers who comment on postings by others. The user as key author is not treated as a sovereign, singular content producer. They can submit a story, but that's not the essence. Slashdot commentator Platinum Dragon describes the Slashdot editorial process as such:

> It's not really anarchist. It's more of a dictatorship, quite frankly. The articles to be discussed are chosen by an unelected group of editors, and we just get to rant. 'News by consensus' would imply that the editors decide collectively which stories will be posted, all stories were unanimously agreed upon, and tossing in the word 'anarchist' implies that all participants have a say in which stories are posted, instead of the unchosen few.

Instead Platinum Dragon proposes to look at the features of Indymedia:

> Their center-column stories are developed by individuals or groups, and they're posted and edited on a collective, consensus basis. Anyone may submit a feature to any Indymedia site (generally, it's good to try to make a feature relevant to the local site you're submitting to, though this varies greatly), and anyone can get involved in the editing and decision process.[43]

The Indymedia model is much more transparent in its editorial policy concerning original postings. According to the site Indymedia is a democratic newswire:

> We want to see and hear the real stories, news, and opinions from around the world. While we struggle to maintain the news wire as a completely open forum we do monitor it and remove posts. You can see the decisions we have made by viewing the hidden articles page. In the overwhelming number of cases, stories have been removed for the following reasons: being comments, not news, duplicate posts, obviously false or libelous posts, or inappropriate content. [44]

Indymedia says it is working on technology to make the editorial process more transparent, so that users can see when such decisions have been made, and why:

> In future, we want our audience to be part of this process too. For the meantime, you can check out stories that we have chosen to remove by looking at the hidden articles page.[45]

Weblog conflicts, the Indymedia case

In April 2002 Indymedia moved the open publishing newswire from its front page. The idea was to decentralize power from the global site into the hands of local collectives. According to Indymedia insiders the tension between an open, anonymous, egalitarian weblog and a creditable news organization had become so obvious that something needed to be done. Calls were made to build a system of credibility while remaining open and democratic. Reliability had become an issue because Indymedia started covering hot and controversial issues such as the Middle East

43. Platinum Dragon on *Slashdot*, June 7, 2002. http://slashdot.org/comments.pl?sid=33810&cid=3658121.
44. http://www.Indymedia.org/publish.php3.
45. Ibid.

conflict. There were numerous cases of posted news stories which could not be confirmed or which were posted with the intent of spreading disinformation. The organization also faced an increase of police infiltration.

A solution was sought in an e-Bay style reputation management system. Evan of Indymedia explains:

> Unlike the traditional press that enforces consistent credibility through an authoritarian model of editorship we are trying to build up a networked credibility. In doing this we are developing effective strategies for fighting a net war. Our information systems covering the battle on the streets of Palestine has a very real effect upon the fighting. Indymedia operates as a fundamentally networked organization. There is no center or head office but we are very coordinated.[46]

Indymedia is testing the boundaries of the weblog as a (very successful) medium of substantial size. Whereas some within the organization would like to outdo *The New York Times* by claiming objectivity, replacing one worldview with another, others insist on 'deep plurality' (embedded in software). Evan:

> We are not advocating the kind of world that fits neatly into one modernist perspective. Unlike the Marxist-Leninists who had THE answer, today we have many answers and even more questions. For credible media to be created in this new networked, postmodern if you like, world we need to fully reconstruct what we mean by credibility.[47]

The answer to the challenges that community weblogs face lies, in part, in software. Matthew Arnison, maker of the original Indymedia software wrote a proposal in which he tries to balance the freedom of users with the need for collaborative editing, taking Indymedia to a next level. Matthew noticed that the Indymedia editing collective simply had too many stories coming in to deal with. "Open publishing is about more than just open posting. It's also about open editing".[48] According to his proposal an 'automated open editing' procedure with ratings such as Slashdot and Kuro5shin would empower the users without creating an information overload on the front page. Matthew:

> Users would be able to create highlights pages, updating them with the stories they are most interested in. They could choose a topic, or not, or have several different collections, and maybe share their highlights with a team of people. Indymedia would then survey all the highlighting every hour, and then build its front page based on whatever people are highlighting at the time.[49]

46. Evan, Indymedia, Credibility, & Covering Palestine, April 5, 2002 (from a closed internal list).
47. Ibid.
48. Matthew Arison, *Fibreculture*, November 10, 2002 (posted by Graham Meikle). URL: http://www.cat.org.au/maffew/cat/openpub.html. Related text about open editing by Dru Oja Jay: http://www.dru.ca/imc/open_pub.html.
49. Ibid.

For Matthew 'open editing' would mean a return to the heart of open publishing. There is a lot at stake here. Proposals such as Matthew's may sound technical—and that's what they are. But they are not techno-deterministic. The community is not a special effect of the software. The parameters of communication platforms used by millions of users, such as Indymedia, are highly political. The drive to carefully renegotiate the roles of the user and the editorial team indicate that reaching a mass audience does not necessarily mean a rise in editorial control by a limited group. There should be ways to deal with growth without compromising the open character of networks—and software could assist in that transformation to larger, more diverse audiences.

Comparing Lists and Weblogs

So far existing net art communities have not (yet) introduced open conferencing weblog systems comparable to Slashdot or Indymedia.[50] Nettime, Spectre and Xchange are not even planning to go beyond their status as a list. Electronic mail, for the time being, remains the Great Denominator. Despite the rise of weblogs it is not yet time to question the 'supremacy' of email communication over the web. However, in some cases ASCII art and email has become an implicit excuse for stagnation. Instead of celebrating low- tech as one amongst many strategies, list culture is in danger of becoming a habit, a dogma, in short: a symptom of regression. The steady growth of broadband/cable users and other forms of flat-rate access to the Net will no doubt further bring weblogs into the mainstream. There is also a generational aspect to weblogs. Users in their twenties seem to prefer the web over email and hardly subscribe to lists. Weblogs are not trying to resolve the long and exhausting debate over the merits of email and list culture; rather, they simply bypass the impasse of list culture altogether. Lists, no matter how open or democratic, are becoming outmoded vehicles.

Nothing is as subjective as the distinction between sense and nonsense. The challenge of every Internet project I have been involved in consists of aiming for the highest possible level of sophistication while keeping the channels open. The trick is to 'seduce' users to post quality content while preventing it becoming yet another publisher-to-customer business. An impossible task perhaps, but worth trying. In the age of networks, editing becomes anticipation of content. It is the task of those who run lists and weblogs to shape and facilitate the wishes of the users, even before he or she is aware of their thoughts.[51]

That's the true aim of moderation: to facilitate dialogues. Would it be possible to welcome the 'alien' position without alienating the average participant, wary of redundant information? Following Mouffe, at what point does the adversary become an enemy of the project? How does a controversy turn counterproductive? The weblog discourse doesn't set out to make the friend-enemy distinction; there is just arbitrary signal to noise ratios, set by each individual user in a different way.

The issue here is the tension between the unstoppable all-too-human destructive forces and the belief that technology could protect humankind against itself. The Slashdot founders designed their software to be helpful. Amy Alexander:

50. More on Scoop: scoop.kuro5hin.org/special/whatisit.
51. Reference to Robert Altman's film Gosford Park.

> There is something to be learned from geeks, and that is that they don't put any barriers between tech and life, meaning, if they see a people problem. They say: 'how can we design the software to help us with the people problem?' It's very natural to them because software is just the result of their thought processes, whereas in non-geek circles that kind of thinking might be taboo, or at least kind of weird. Non-geeks see software as an inorganic 'thing,' not as a product of human thought the way writing is. But really software is just human writing—geeks write it, so they realize that.[52]

Computer geeks have an almost unlimited confidence in self-regulation. 'Ignoring technologies' such as email filters and automated moderation are believed to take away the concerns of users. I do not share this confidence. Ultimately I would remove users if they endanger the overall project. This has little to do with the repression of differences of opinion. I would give the facilitators, those who put in so much work, the possibility to block those who threaten the existence and growth of the online community. Survival and sustainability are more important than some absolute definition of freedom. Some opponents would have fabulous rhetorical skills, whereas others are just out to frustrate the dialogues. Few could even literally try bringing down the site, sending hate mails, spreading rumors, and intimidating friends. It takes wisdom and experience to stay calm in a situation where you have a lot invested at a personal level. Most social networks have to deal with such cases. I personally can tolerate a fair bit, but not when the community as such is in danger of disintegration. It takes years to build up a social networks—and only days to destroy them.

There is a difference between the high art of editing and censorship. I have never seen 100% 'free' projects; there were always limitations, be it knowledge, race and gender boundaries and other cultural factors such as language. I remain suspicious of the libertarian 'freedom of speech' argument and those who cry 'censorship' because it seldom creates interesting clashes of difference. Nineties cyberculture never encountered serious cases of censorship like those in China, the Middle East or Africa. Instead, techno-libertarianism cried for the right 'to be left alone.'

All interesting media projects are 'staged' and have a performative aspect, even the most free and informal ones—and so do weblogs. Interesting parties are 'seduced' to participate. In the case of Slashdot, for instance, writers are paid to contribute.[53] That's what it takes to have an interesting site. List culture has run up against the wall of volunteer labour. As the Net matures it can no longer be presumed that everyone is working for free. A challenging web project should at least raise the issues of money and think through alternative models to generate a (micro) income for those without a regular job. The dream of 'free' is good enough for those who work on Internet projects in the evening hours. But serious and reliable content for new media cannot be produced in a hobby situation. Or can it?

We can see a growing awareness that the structure of software influences what you create and how you behave with it. Amy Alexander explains:

52. Amy Alexander to Geert Lovink, December 31, 2001.
53. Many Phpnuke-based weblogs have the following restriction: ""People who have admin access get to upload/download files, add articles, and review submissions if they want. "

> There's an old adage that goes 'if all you have is a hammer, everything looks like a nail.' Whatever tool you are used to using is going to influence how you perceive a situation and how you should respond to it. There are certain ways a community can work. If you're the list admin, you can decide who gets to post, who gets unsubscribed, whether you'll reject posts based on size, etc. It gives us a certain hammer that makes us approach every situation as more or less, a nail.[54]

Larry Wall argued that 'perl' was a postmodern programming language because instead of giving you a hammer, it gives you a Swiss army knife.[55] Amy Alexander:

> We should try hard to think 'outside the box' that the mailman/majordomo mailinglist software has forced us into all these years, and see if we can build a more flexible structure. I don't expect new software to solve our human-relations problems, but we should recognize that old software has probably had a lot to do with creating or perpetuating our human-relations problems, and try to break out of the old ways of thinking.[56]

Unlike Slashdot-like weblogs, 'scoop' weblog software allows subscribers to post stories, not just comments. By allowing users to post stories as well as comments it's necessary to have some form of filtering. The idea of Scoop is that other users vote stories onto the front page and/or sections. Comments, on the other hand, always go directly on, but can be rated up or down by other users. With a certain amount of negative ratings, a comment by default will be hidden from other readers. Readers can set their threshold to see as many or as few comments as they like. This is how Slashdot works, and it's a nice feature that allows flexibility without being overrun by trolls. Scoop also allows moderators to set limitations to how many stories and comments a user may post in a certain amount of time. After that amount of time, a user will be locked out from posting for a while. Of course, a user could subscribe under multiple addresses to circumvent this if they really wanted to. So the community moderation system becomes an important element in the software design and eventually in the way collaborative weblog culture operates.

The Ownership Question

One thing current weblogs still lack is internal democracy. Founders and owners (also called 'admins') of weblogs cannot not be voted off, thereby continuing the 'enlightened dictatorship' regime of lists.[57] As in the case of mailinglists, weblogs do not open up ownership. The implicit idea is that of an entrepreneurial individual that initiates the weblog and then 'invites' others to

54. Amy Alexander to Geert Lovink, January 6, 2002.
55. See: http://www.wall.com/larry/.
56. Amy Alexander to Geert Lovink, January 6, 2002.
57. Eric Raymond, in a similar context of open source software development, speaks of "benevolent dictators". Eric Raymond, Homesteading the Noosphere, URL: http://www.tuxedo.org/~esr/writings/cathedral-bazaar/homesteading/x349.html. Quoted from Felix Stalder and Jesse Hirsch, Open Source Intelligence, *First Monday*, issue 7/6. Stalder & Hirsch: "They are not benevolent because the people are somehow better, but because their leadership is based almost exclusively on their ability to convince others to follow. Thus the means of coercion are very limited. Hence, a dictator who is no longer benevolent, i.e. who alienates his or her followers, loses the ability to dictate".

participate, either as co-editors or moderators or commentators. The owner exclusively possesses the passwords to root access, the domain name and the server(space). It is the owner who, in the end, will have to pay the bill for the Internet traffic, server space, the renewal of the domain name and other related costs. In many cases, as seen in the instance of The Digital City, it has been proven that those who ultimately own the domain name have the power over the project in the end. Therefore, there is no real democracy for the 'readers' unless they become owners themselves. Owners install and configure the software and have the ultimate say over its content and user base. This often unknown 'last instance' is why there is always is an (invisible) meta-level on both lists and blogs which reduces the power of users to mere 'participation.' Ultimately the status of the user is downgraded to that of a guest. As with mailinglists, weblogs in theory have the option of editors being elected by the user base. In practice however, this is not happening. At least, not so far. Elections within lists and blogs are rare (though technically easy). Only within Usenet/newsgroups has voting established itself as a culture, in which users are asked to give their vote for/against the opening of a new Usenet group. The 'openness' of a weblog is constrained to the content level. The explanation is a simple one. The admins/editors will not easily give up the ownership of a project in which they have invested so much of their (free) time. Money is a secondary element here as I am speaking about non-profit initiatives, but it can play a role as well. This all puts significant limitations to the idea of 'free speech' within user- driven weblogs.

Sooner or later critical Internet culture will have to confront the issue of its own democracy. Again, here I am not referring to the big picture of the relationship between the Internet and representative democracy. What is at stake is an agonistic 'electronic democracy' that can address the plurality of difference that define user communities. The emergence of such a polity will, in the first instance, bring forward the democratization of collective publishing platforms. The dream of an 'Internet without adversary' has vanished.[58] That issue could be seen as the 'cultural' version of the Internet governance battles (such as the one over domain names). Experiments with new forms of democracy and shared ownership of (global) Internet projects will also have to address legal issues of 'open ownership' looming, as they are, on the horizon.

Technical software for voting has been around for some time but has not yet even been utilized or further developed, or at least not in the circles of artists, activists and critics that I have dealt with in this study. The same could be said of micro-payments that could enable content producers to develop their own independent revenue streams, beyond the goodwill gesture of giving it all away for free, which is the only option right now. Software for micro-payments has been around for a decade but has not reached a broader audience, besides a few commercial attempts to establish private currencies. The telcos are currently best positioned to benefit from a centralized unilinear micro-payment system.

The democracy deficit can, in part, be explained by the libertarian Zeitgeist that emphasizes the right to be left alone: if you don't like our list or blog, then set up one yourself. If you don't like this digital city, then build one according to your own principles. There is infinite space in cyberspace, so the argument goes. The problem with this rhetoric is the fact that financial resources, necessary to install the infrastructure, are not always limitless. Neither do all users have the necessary technical skills to set up sites, servers and databases. The argument that everyone is autonomous is mainly used by those who already run a list, blog or server. Users should be grateful for the service—so shut up. Users on the other hand see themselves as the most valuable assets of a system— and rightly so. One can expect that the lingering conflict between operators and users will hit the surface sooner rather then later.

58. Reference to Chantal Mouffe's last chapter called 'A Politics with Adversary?,' in: *The Democratic Paradox*, London: Verso, 2000.

Today's online forums may facilitate a variety of debates but their influence on institutional politics remains unclear, to say the least. Polling, for example, is now a common feature on weblogs and news portals—and so is vote rigging. The reliability of online polls is next to zero as users can vote as many times as they like. The influence of lists and blogs cannot be measured and can only be evaluated indirectly at a discursive level. In the world of old media it is taken for granted that neither the publisher nor the editors of newspapers can be elected by the readership, but this may change on the Internet in the near future.

Open publishing channels create an expectation of freedom of speech by giving users editorial control. Sooner or later users might find out that this is not the case and the fight over the degree of openness will start. It is up to the blog owners to decide who will be included and excluded, despite all the thresholds. There is no neutral and fair 'facilitation.' This very fact is often denied by those who are running online forums, an attitude which only further fuels debate. It can be expected that the tension between the official Internet ideology of access for all and the actual power of the owners/operators will only further increase. The contradictions between users and owners described in this thesis could therefore lead to a further increase of frustrations amongst users. On the other hand, the limitations of weblogs might equally well lead to a new generation of software that will bring online dialogues to a higher democratic level without having to compromise on the quality expectations on the content level of debates—no matter how high or low.

In the conclusion of *The Internet Galaxy* Manuel Castells calls for more institutions, political representation and participatory democracy. He admits that this is the weak link of the network society. In most societies the practice of democratic principles is in a shambles. He writes:

> Until we rebuild, both from the bottom up and from the top down, our institutions of governance and democracy, we will not be able to stand up to the fundamental challenges we are facing.[59]

The Internet may embody freedom, but as this study has shown, there is much to be learned from the Internet experience if we look at the ways it currently deals with its own decision making procedures and the many conflicts that have arisen within social networks. The development of the Internet until recently has been run by a small group of consensus-driven (largely male) technologists. It is now being taken over by business interests assisted by governments. Global civil society, if it is ever to exist, has to stand up and (re)claim the Internet. The case studies presented here do not answer Castells' call. Instead they point at increased levels of tensions and conflicts.

59. Manuel Castells, The Internet Galaxy, Oxford: Oxford University Press, 2001, p. 282.

The discomfort in critical Internet culture comes out of the general lack of interest in new media policy and economic power structures. One way out of this malaise involves the production and distribution of 'agonistic' software that acknowledges the antagonisms in society in which the Internet operates.

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This study examines the dynamics of critical Internet culture after the medium opened to a broader audience in the mid 1990s. It is Geert Lovink's PhD thesis, submitted late 2002, written in between his two books on the same topic: *Dark Fiber* (2002) and *My First Recession* (2003). The core of the research consists of four case studies of non-profit networks: the Amsterdam community provider, The Digital City (DDS); the early years of the nettime mailinglist community; a history of the European new media arts network Syndicate; and an analysis of the streaming media network Xchange. The research describes the search for sustainable community network models in a climate of hyper growth and increased tensions and conflict concerning moderation and ownership of online communities.

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