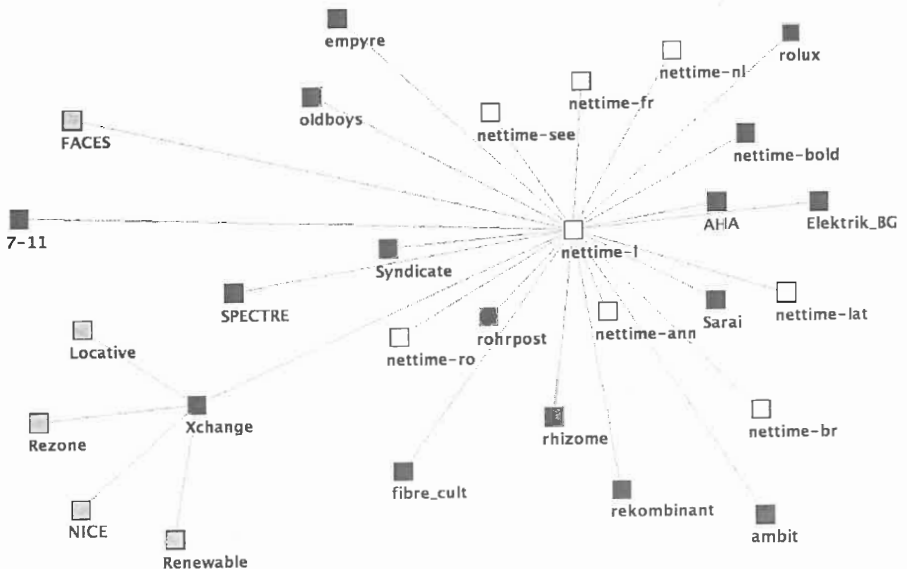


Rasa Šmite

CREATIVE NETWORK COMMUNITIES

Summary of the Doctoral Thesis

Scientific Supervisor: Asoc. Prof. Ilva Skulte



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Summary of the Doctoral Thesis
(Speciality – Sociology of Culture and Mass Communication)

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Riga, 2011

This doctoral study was carried out at Riga Stradiņš University,
Department of Communications during the time period from 2006 till 2010.

Scientific Supervisor: Asoc. Prof. Ilva Skulte

Reviewers:

- 1) Dr.sc.soc. Agita Lūse (Latvia)
- 2) Dr.sc.soc. Baiba Bela-Krūmiņa (Latvia)
- 3) Prof., PhD Phil Kerstin Mey (UK)

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Abstract

In sociology *network* has been used as a metaphor for over a century yet, with the end of the 20th century and along the emergence of the Internet the term *network* has not only gained a new meaning, but also a new image – *networks* have become sophisticated *socio-technical* systems. The complex relationships that emerged within such environment are referred to as *socio-technical formations* – *network communities* are also one of them and they constitute the object of this study.

With the aim to investigate the meaning of the social action, the new social dynamics as well as forms of social organization I carried out a research on *creative network communities* – by which I refer to those *formations* of self-organization that emerged during the early stages of the Internet (during the second half of the 1990s) and whose participants were mostly creative and socially active individuals (artists, theorists, programmers, electronic activists, etc.). Also, I have compared creative network communities with today's *social networks*, namely – networks that are based on contemporary social media platforms of *web 2.0*.

This study also develops a theoretical foundation and terminology in order to consider the different interpretations of *network* concept as well as relations between the terms *network* and *community*; thus serving as basis for the empirical research. *Case studies* were used as the main research strategy. It combined different methods – interviews with network founders, participants and experts, network mapping, analysing of mailinglist dynamics, etc. On the whole, 5 translocal and 2 local creative network cases were analysed, including: *Nettime* – mailinglist for the critical discourse of net culture, *Faces* – cyberfeminist mailinglist; *Syndicate* – European media art collaboration network, 7-11 – net.art project, *Xchange* – global Internet radio community, *Open* and *E-Lab* – local community networks for alternative and digital culture in Latvia.

The closing part of the study provides conclusions concerning the meaning of social action of network communities and their contribution in network society's development. Also, it hypothetically argues that a *network community* research can serve as a reference phenomenon through which to interpret those changes in the social structure of today's society that are occurring under the influence of socio-technical transformations.

Keywords:

Networks, communities, digital networks, social networks, creative networks, network communities, network culture, socio-technical formations, social dynamics, network society.

Summary

I INTRODUCTION

The Problematics and Topicality of the Proposed Theme

Society can be viewed from different perspectives, approaches and based on different conceptions. One such notion is *network*. Since ancient times network has been a well known concept describing the structure of society (for instance, historical trade networks). In sociology network has been used as a metaphor for more than a century representing the complex totality of relationships that exists between the members of social systems on different levels – on personal, international, a.o.

However, only by the end of the 20th century with the emergence of new information and communication network technologies such as the Internet the concept of *network* had gained not only a new meaning but also a new twofold image. On one hand, the network had “materialized” in the form of the global computer network, on the other – it had become a virtual social space.

When in 1996 Manuel Castells introduced the term “network society”¹, a fundamentally new form of modern society had been originated where “*all dominant functions and processes .. are increasingly organized around networks*”. Furthermore, Castells also asserts that “*the new information technology paradigm provides the material basis for its pervasive expansion throughout the entire social structure*” foreseeing that this will be a dominating factor also in the distant future. Network, as Castells suggests, has become a basic element of the modern society. [Castells, 500]

Although it has been more than 15 years since the Internet became publicly accessible the history of virtual communities is just as recent and nowadays the social networks have become a mass phenomenon. However, new social dynamics, interactive communication and forms of social organization that emerged within the digitally networked environments are currently still invisible – due to their virtuality, their non-institutionalized and heterogenic forms, as well as their translocal qualities. Due to the fact that social phenomenon in Internet mediated environments is still a relatively new, the research carried out in this field show ambiguous results and

¹ Before Castells the term “network society” was used in Dutch by Jan van Dijk in his book “De Netwerkmaatschappij” (1991) (The Network Society, 199, 2006).

researchers have yet to come to definite conclusions regarding the social meaning behind digital networks. Social dynamics created within environments of digital networks has been contextualized neither by media nor social theories. Therefore, it is still important for “network sociology” to “develop analytic categories” – as Dutch sociologist Saskia Sassen explains – in order to understand the complex relationships between technologies and the society. [Sassen 2002, 365] In short, *networks* nowadays have become complicated socio-technical systems. The complex relationships that emerge by interrelating social actions and information technologies may be called *socio-technical formations*. Such are also the *virtual* or *online network communities* that have emerged on the Internet through the process of self-organization and that constitute the main object of this study.

Object

The object of this study is *network communities*, which have emerged on the Internet during the process of self-organization and which in a result of their social and creative action have developed *network culture*.

This study distinguishes two types of *network communities* – *creative network communities* that emerged mainly during the early stages of the Internet (ie. in the beginnings of the network culture, when it was still a marginal, alternative phenomenon) and *social network communities*, which have emerged within today’s *web 2.0* social media platforms (ie. when network culture is turning into the popular culture). This study focuses on the first (creative) type of communities and provides a comparison with the second type (social networks).

Query of the Study

One of the most fundamental ideas in network studies belongs to M. Castells who claims that network is a basic element of today’s society. Based on this assertion, I would argue that elaborate research on *network communities* that have emerged as a result of complex interaction between social action and digital network technologies, constitutes another (bottom-up) notion through which we can comprehend the new *social morphologies*² of

² Social Morphology – in this study the term is used to refer to elastic form / structure, according to Manuel Castells that “networks constitute the new social morphology of our societies” and that “network community is a community where the key social structures and activities are organized around electronically processed information networks.” [Castells]

today's society. Creative explorations for new communication and organization forms went on most often during the early stages of the Internet, therefore this study uses the early creative network communities as the point of departure. These statements imply the principal query of this study aiming to clarify if and in what ways a study on network communities and the meaning of their social action can serve as a reference phenomenon through which to understand the changes within the today's network society.

Aims

The main aim of this study is to investigate and analyze the early creative network communities, in order to interpret the meaning of their social action, and from such perspective to look at changes in the social structure of today's network society occurring under the influence of the *socio-technical transformation*.

Several successive tasks have been set up for attaining this aim:

1) to develop theoretical background for a systematic overlook of theories which would uphold the empirical research; 2) to develop the terminology (for clarifying the relations between *network* and *community*) – following both theoretical resources as well as personal experiences of community participants; 3) to develop research strategy and to select the most adequate methods; 4) to carry out research on the early creative network communities in order to study participants' motivations, their shared field of activities as well as common visions; to analyze the forms of social organization and communication; 5) to perform comparative analysis between creative network communities and social networks of nowadays in order to distinguish important differences and to line out future development tendencies for network communities; 6) to draw conclusions regarding the results of both theoretical and empirical research in order to analyze processes and influences, as well as to position the role and place of network culture as a *self-organizing formation* within the *network society*.

Research methods

The theoretical background and terminology developed in this study facilitates a base for carrying out empirical research. In order to provide more elaborate research and explanation on the meaning and basic principles of creative network community's social actions, *case studies* were used as

the main research strategy of this qualitative research. It combined different methods – interviews with network founders, participants and experts, network mapping, analysing of mailinglist dynamics, etc. On the whole 5 translocal and 2 local creative network cases were analysed.

In certain cases I applied an approach of literary sociology as well as personal reflections (concerning those network communities in which I have been involved in myself) to address the importance of a certain aspect or case and to explain tendencies that are fundamental for the activities of the early creative network communities.

The specific element that complements this study is the application of an analytical approach such as *network mapping (social network analysis / SNA)* in order to explore and analyze the structure of ties within respective network communities as well as its influence on individual and mutual relations.

Motivation in selecting the Theme

On one hand, the scientific interest about network studies – network theory and network communities – comes from my more than a 15 years long practical experience by developing the Internet culture ever since its beginnings in the mid 1990s. Although my experience so far has been more related to new media networking, art and culture, in this study I particularly wished to explore the social dimension, following the idea that the processes of creative networks contain potential that can be used for solving different social problems (for instance, as societal integration) and for social activism (organizing actions, campaigns and other social struggles). Furthermore, in my opinion, the sociological research methods are the most appropriate (especially the qualitative methods) explaining, for instance, the social dynamics of the network and the meaning of the social action of these self-organizing formations (namely, of network communities). Thus this study corresponds to the field of Sociology of Culture and Mass Communication.

Scientific Novelty

A research of such level and scale investigating society from the perspective of networks and considering network communities not only as social phenomenon but also as socio-technical formations has not been done in Latvia until now. The approach and methods selected also indicate towards the innovative nature of this study. For example, as for methodology – the qualitative methods are used in combination with *social network analysis*

which is a quantitative analysis of social relations. As to the approach – this is a sociological research in which studying the technologies have been considered in as much as the social action, creativity or the politically economical context of global networks. With a special focus on the theoretical context of the network and on the network cultures of the early Internet period this study aims to establish a ground for *network research* in Latvia's sociology.

On one hand, the number of Internet researchers at the moment is increasing all over the world however, these studies are rather interdisciplinary and relatively little sociological research has been performed in this field yet. On the other, the most active network studies school in sociology, which deals with social network analysis, is a very specific one – its research primary focuses on network structures and ties between participants which is limited in explaining, for example, the motivation of social action. Furthermore, if research is carried out in the field of creative Internet culture, it is mostly performed within the context of art history, culture or media studies.

This study tends to interpret and analyze the most quintessential tendencies within the emerging *socio-technical formations*. It is also specifically oriented towards investigating the role and meaning of creativity and self-initiative in the social organization of networks. Also, it covers a vast theoretical field and analyzes the creative network communities from the sociological perspective. Thus this study is also a novel research that contributes towards developing the field of network sociology on an international level.

The Volume and Structure of the Study

Total amount of the study – 194 pages.

The work consists of “**INTRODUCTION**” which provides an insight into aims and tasks of the study, its selected methodology, expected outcomes a.o. The basic structure of the work consists of three main parts:

“**Part I: NETWORK. Theoretical Context**”. This part is divided into five sections (“Interpretations of Network Contexts and Terminology”, “The Basic Principles of a Network”, “Network Topology”, “The “Social Logic” of the Network”, “Network Communities – an issue of terminology”). Each section has three to five subsections.

“**Part II: NETWORK MAPPING. Research Methodology**” This section is divided into three parts (“Mapping as a Methodology of Sociological Research”, “Qualitative Research Methods”, “Other Applied Research Methods”); each part consists of 3 subsections.

“Part III: NETWORK MAPPING. Research” This part includes five subsections (“Emergence of Creative Network Communities – the global space of digital networks”, “Social Organizational Forms of Creative Networks”, “Local Community Networks During the Early Stages of the Internet Development in Latvia”, “Global Network as an Extension of Local Community – the case of *Xchange*”, “From Virtual to Locative Media Communities”). Each section includes 3 – 5 subsections.

At the ending each section provides conclusions. The conclusions from each section have been summarized in the section “ENDING CONCLUSIONS”.

The study has “**Abstract in Latvian**” and “**Abstract in English**” at the beginning as well as “**List of References**”, “**Index of Images**” and “**Index of Terms**” at the end of the study.

The study is supplemented by an “**APPENDIX. Research materials**” (80 p.).

II THEORETICAL BACKGROUND (PART I, Summary)

Network Theories and Context Interpretations

Manuel Castells's concept of network society is used as the main theoretical base in this study. He has reflected on it in the first book “The Rise of the Network Society” [1996] of his well known trilogy “The Information Age” which is considered to be one of the most fundamental studies on digital networks and network society in the Information Age. Along Castells' global construct of network as “space of flows” the theoretical part includes the concept of network as rhizomatic, heterogeneous structure as described by such postmodern authors as *Gilles Deleuze* and *Felix Guattari*. The attention has been also paid to the “Actor-network theory”, which allows to map relations simultaneously on a material level (between things) and on a semi-otic level (between concepts). The proponents of this theory (which often is considered to be a method instead) are the contemporary French social theorists and science researchers *Bruno Latour* and *Michel Callon* and British sociologist *John Law*.

As the postmodern approach accentuates the importance of studies of practice (which is essential also here), this study is also influenced by the reflexive approach of *Pierre Bourdieu*, who considers the social world not only

as an object, but also as an active subject creating itself, because “*the social world produces a lot of notions about itself*” [Bourdieu]. By dealing with methodological considerations and deciding which analytic categories to select for conducting the empirical research I was also influenced by the studies of the remarkable contemporary sociologist and globalization researcher *Saskia Sassen*, including her works “Towards a Sociology of Information Technology” [2002] and “Electronic Markets and Activist Networks” [2005].

Also, many contemporaries, who have once been active creative network community founders and members themselves, offer a lot of significant theoretical approaches – including the critical network culture theories and “new network theories” by media theorist and net critic, founder of Nettime, and currently – director of Amsterdam Institute of Network Cultures professor *Gert Lovink*. Also, there is a lot of significance to theoretical attempts of Dutch media theorist and author *Eric Kluitenberg* to contextualize the social dynamics of the network; to articles by Austrian media theoretician, artist and writer *Armin Medosch* on wireless network communities and network topology; as well as to the interpretations of “flow maps” by American writer and political critic *Brian Holmes* and last but not least, to the “organized networks” idea proposed by Australian media theorist *Ned Rossiter*.

This study (in more of a methodological context) reflects also on the *network theory* and (*social*) *network analysis* that takes as its departure point the idea that “the primary task of sociologists is to research the social structures” [Wellman 1983, 156–157]. At the end of the 20th century one of the largest groups of network researchers formed around sociologist *Harrison White* and his followers *Mark Granovetter* and *Barry Wellman*. In general, an important characteristic of *network theory* is that it studies and analyzes relations (connections) between actors instead of social groups or categories moreover – with the help of visual mathematical methods (mapping and analysis).

The Basic Principles and Network Topology

The essence of any network can be expressed through its main principle – *interconnectedness*. It is included in the general definition that “*a network is a set of interconnected nodes*” [Castells, 501]. This basic principle can be attributed both to technical, social and hybrid networks, as well as to any other networked form. Interconnectedness is also the basis for all other most relevant network principles, that interlace and reference it.

The second principle is *openness* and it already is more specific. Formally it also refers to any type of network, although in social practice the principle of openness could be realized at its most potential only on the Internet which could provide boundless and free access due to its decentralized technical structure.

The third principle – *simultaneity* becomes perceptible only within networked environments of the electronic media. This principle enables our presence in the space of electronic online media – to be present and to experience happenings in real-time and from distance.

Social processes in the environment of digital networks are closely tied to the technological context. “Social architecture” in the case of digital networks can not be viewed apart from its technical design. Since now technologies in sociological studies were mostly considered as an independent object of study (detached from the subject or researcher). As Saskia Sassen claims, in such case (from the sociologist point of view) “there is almost nothing to study, everything is done and functioning, there are no new fields to be explored.” Sassen believes that the problem lies in the circumstance that social sciences do not look at technologies from the “inside” and she tries to solve the problem of “how to embed a new object, a new sphere into social sciences”. By being involved in the *inside* of the electronic space and by looking through such perspective Sassen tries to understand in what way can the social logic deform or change the results through praxis, which would be different from the results obtained in case the technologies were to be viewed as isolated (“from outside”) [Sassen, 2006]. And vice versa – by being inventors of digital networks computer scientists had the key position, therefore theories that are considered to be “network theories” mainly refer to the infrastructure of computerized networks, drawing mathematical graphs and performing their analysis. But during the last decade the situation has changed and the number of Internet users and information technology workers has increased to a point where the socioeconomic and network culture issues have become an important matter. This means that the development of digital networks today does not depend only on scientists or engineers – it is rather constituted by a complex process of inter-relations of different spheres of society.

Network topology has always had an important role in studying the complexity of network culture and network society. This term refers to both physical layout (technical level) and on the organizational model (the social

level) of the network. The level of content is important as well (which is examined in part III of this study within the research on social action meaning and motivation of creative networks). Just as important – as media artist, writer and free network researcher Armin Medosch notes – is to explore the politically economical level of the network in order to comprehend “power that affect the content”. Therefore, before moving up to a much complicated social level analysis, one must examine the multilayered structure of the Internet itself of the physical (technical) level of the network as well as its politically economical context [Medosch].

Nowadays *networks* must be viewed as complicated socio-technical systems that developed by technical media encountering the social action of users within them. In order to understand the social phenomenon of digital networks it is insufficient to analyze, for example, the social relationships of Internet users within some social network platform (*Facebook, draugiem.lv*). Instead, the task of network sociology should be to embrace a deeper field of study by looking at social relationships in the context of different levels of network structure, since all these levels – technical, politically economical and social – create the totality of specific conditions, which result in specific given social processes.

The Terminology Issue

Since the end of the 20th century the concept of “network” has been used widely in reference to mainly technical computer-based infrastructures. Although this is already starting to change already – since year 2004 and with the arrival of *web 2.0* and social media platforms as blogs and social network environments the term “network” has been more associated with social networks. However the term “network” can still be referred also to other technical and social infrastructures.

Therefore – as suggested by Eric Kluitenberg – it is necessary to distinguish these different networks. In his opinion, the term “digital networks” could be used specifically when referring to networks based on computer technologies, but the general term “network” could be used in order to refer to social phenomena and social practice [Kluitenberg, 2008, 306].

Traditionally “communities” are defined as groups of individuals that are interconnected or that organize themselves around shared values usually in the same geographical location. Along with the rise of the Internet the geographical conditions have become less relevant to the concept of com-

munities, because it is possible to create “virtual communities” in the digital space of no boundaries. Howard Rheingold who also introduced this term in his work “Virtual communities” [1993] describes the *translocal communities* which are created based on common interests, topics or theme; and which are absolutely decentralized and disseminated all over the world. A case where digital network technologies are used in a context of geographically localized communities is described by Rheingold as *community networking* [Kluitenberg 2008, 307].

This study employs such similar division of *geographical distribution* as well. But I have also used another division – by *the character of social relationships* in order to separate the early (collaborative) networks from today’s social networks. In this study the term *creative networks* refers to those new *socio-technical formations* that emerged in the early period of the Internet (the 1990s) in the process of self-organization and whose founders and members were mainly creative people – artists, theorists, electronic activists, hackers a.o.). Yet the term *social networks* despite the fact it is very general and can be ascribed to any period of time and any human network I was using to refer to today’s social networking sites and communities that are based on the so called *web 2.0* social media platforms (*Facebook, draugiem.lv, Twitter, a.o.*).

III RESEARCH METHODS (PART II, Summary)

In order to provide more elaborate research and explanation on the meaning and basic principles of creative network community’s social actions, *case studies* were used as the main research strategy. It combined different methods – interviews with network founders, participants and experts, network mapping, analysing of mailinglist dynamics, etc. In certain cases I applied an approach of literary sociology as well as personal reflections. The specific element that complements this study is the application of an analytical approach such as *network mapping* or *social network analysis (SNA)* in order to explore and analyze the structure of ties within respective network communities as well as its influence on individual and mutual relations.

1. **Case studies** provided analyses of 5 translocal and 2 local creative network cases. The selections for this study were made in order to 1) incorporate the main translocal and local (in Latvia) creative network societies

which were created during the early stages of the Internet in the mid and late 1990s and 2) those who have had a significant role in developing *translocal network culture* and creating the *local alternative cultural network* (accordingly in the case of Latvia) as well as 3) to encompass the different fields represented by the creative communities.

1) The study included 5 translocal network community case studies: *Nettime* – which created and developed the critical discourse for Internet culture; *FACES* – dedicated to cyberfeminist issues; *Syndicate* (latter – *Spectre*) – that tends to create a joint platform for media art in Eastern and Western Europe; *7-11* – net.art community; *Xchange* – global Internet radio network.

2) The study used and analyzed in total 2 local community network cases: 1) Alternative contemporary culture network that self-organized around *Open* project in the mid-90ties; and 2) Digital culture local network that was formed around *E-Lab* electronic arts laboratory. 12 participants of these communities were also analyzed deeper including *Open* – organizer of contemporary culture, alternative fashion and hybrid techno music events, *E-Lab* – the first electronic arts laboratory in Riga; *Ozone* – creative radio project in Internet, *Orbita* – a project of the young generation Russian poets and writers, *Baltic center “Sadarbiba mieram”* – one of the first social activist NGOs in Latvia; *Törnīs* – association for independent and noncommercial music bands; *NEKAC* – an independent youth culture project in Kuldīga, Latvia; *Locomotive* – Ltd., independent movie and TV producer group, *K@2* (Culture and information centre in Liepāja, Karosta) – an independent creative integration project; *Varka Crew* – Russian and Latvian DJ group and multimedia project, *SSS (Sloka Sounds System) / Elast* – independent electronic musician group and label; *Casablanca 2000* – a new club music project, *Slepenais eksperiments* – a club working also as an exhibition space.

2. Qualitative research methods were selected as the main type of method for explicating the meaning and motivations of community participants' social action, as well as other proposed questions. Mainly a semi-structured deep interview technique was used, as well as expert interviews.

During the time period of January 2009 and March 2010 6 semi-structured deep interviews were performed with founders of translocal network communities, 8 deep interviews with the most active participants of local communities and 2 expert interviews. The interviews with network found-

ers were based on the developed guidelines of deep interviews (see annex) which included such blocks of questions as: 1) motivation – personal, outer conditions (economic, political, etc.) and the like; 2) terminology – how do founders themselves define the given socio-technical formation – a society, network or a mailinglist; 3) a comparison between the early creative and current social networks – similarities and differences (from the founders' point of view). Local community participants were asked extra questions: 4) to describe 1990s local cultural environment and to compare it with nowadays; 5) how was the social network of alternative culture in 1990s created. And for experts – an additional question: 6) which are the main aspects that provide sustainability for a network.

Adding to the deep interviews, an e-enquiry in the form of a short structured interview was used in one of the translocal community cases (in cyberfeminist network mailinglist *FACES*). The e-enquiry was made in order to give an insiders' point of view on what do the participants themselves think of their community. The respondent selection was random – a message containing 4 questions was sent out in the mailinglist with a request to answer the following: 1) the personal motivation (to be part of this community); 2) the significance of the community; 3) terminology; 4) aspects that provide a sense of community. The responsiveness was noticeable and 13 answers were received during the time period of February 26, 2010 to March 3, 2010.

3. This study used **network mapping** (social network analyses) as an experimental way – as a metaphor, and as an analytical approach with intent to visualize those social communication processes that took place in digital network environments and whose self-organization created network communities as a result. The “invisibility” of these new socio-technical formations is still a relevant issue in studying and analyzing their social impact. In cases of both creative and social networks it is not necessary, even more so – in the case of social combats of electronic activists or communities it can even be an inconvenient obstacle. In this study network mapping and analysis is mainly used to make the structure of creative networks more visible and to analyze central nodes and their junctions which can not be recognized or studied by charts, for example.

In order to initiate the mapping of creative community social networks it was important to choose the methods for collecting data. The translocal

creative community cases included in this study are specifically related to the development of the Internet culture itself which means that absolutely all recordings, archives, documentations of events, in short – all traces, starting with the most early periods, are found on the Internet. I collected the data available on-line following these principles: 1) finding individuals who attended certain events together (festivals, exhibitions, performances); 2) which people are mentioned in the same articles together; 3) which people have published what articles together; 4) who have collaborated in organizing what projects; 5) in which mailinglists, forums, discussions who has had discussions with who. In addition, the collected data were compared with information that I acquired from interviews, different publications and books that were written by the “writing” creative community participants. Social network maps were produced from the obtained data by using the SNA (Social Network Analyses) computer programme of USA based network researcher Valdis Krebs, as well as consulting him in both making maps and analyzing the collected information.

4. Other used research methods: The research also uses quantitative data analysis. Data from the investigated creative network mailinglist cases were collected in time period beginning with the foundation of the communities (in the mid 1990s) until nowadays (the end of 2009). The data was obtained from archives publicly available on the Internet. Charts were made based on the obtained data which show the dynamics of the network. This way the study was done on: 1) activity in mailinglist following the number of messages published in the mailinglist in a year/month which was compared with 2) the increasing or/and decreasing number of mailinglist participants in the same period of time. The quantitative data were compared also with information acquired in the qualitative study (interviews) in order to analyze to what extent the objective data match the subjective notions of participants during the most dynamic period in the network.

The literary sociology language elements were used to add a more vital experience to the study – author’s personal reflections, most significant event descriptions, more explicative quotes from the interviews an the like.

IV EMPIRICAL RESEARCH (PART III, Summary)

Translocal Network Case Studies – Nettime, Faces, Syndicate

Mailinglists were one of the first network community forms of social organization that were around during the very early stages of the Internet – the 1970s and 1980s. Mailinglist is a simple electronic mail programme where subscribers (members of the respective network) not only receive messages in their personal electronic mail boxes, but are also authorized to freely publish their own messages in the mailinglist by sending their e-mail to a specific address, which automatically delivers it to other subscribers. In the mid 1990s when free Internet access became available, but other Internet communication possibilities were limited, for instance, due to low bandwidth, mailinglist was the main platform for communication and social organization of the early network communities. In the mid 1990s, mailinglists were used not only for communication, information exchange and discussion, but also for organizing the field, meetings and other collaborative activities of the respective translocal communities. To begin with, I will examine one of the very first creative network cases – *Nettime* mailinglist.

1. *“Nettime 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, IT journalism, and media activism.”* [Lovink 2002, 68]

One of the first larger *Nettime* meetings, also called <net.time> took place in 1995 during Venice Biennale, which was organized by network activists and media theorists and also the founders of *Nettime* – Geert Lovink and Pit Schultz. It gathered an international group of activists, artists, organizers, theoreticians, writers and others with an interest in the new Internet network, net art, culture and politics. Later the same year, *Nettime* mailinglist was founded. Asked, if *Nettime* is a ‘network’, ‘a community’ or just ‘a mailinglist’, Geert Lovink replied:

“It has changed over time. It was very much a movement in its early days. Then it became a scene and very briefly, around May 1997 even a group-like thing, but that didn’t last long and then it fell apart, step by step. Slowly it turned into a loose collection of mailinglists” (interview with Lovink 2010).

In May 1997 *Nettime* conference in Ljubljana³ gathered 120 *Nettime* participants (from altogether 400 subscribers of *Nettime* list) from both the Eastern and Western European countries, taking place at an old school building where the Soros supported media laboratory Ljudmila was set up. [Lovink 2002, 68] Although *Nettime* organized a few significant events⁴ also later on, it did not succeed to create anything similar to Ljubljana conference in a sense of community. Opinions of what a community is and what it means for *Nettime* founders differ – Lovink: “*I personally do not like the term community because of its religious connotation, it suggests unity and harmony, which, back then, wasn't the aim*”; and Schultz: “*I totally believe out of all what can be community, it is when involved is human interaction, which can't be mediated. .. Maybe there will be technologies in future, who can replace that, but definitely not now.*” One can conclude that *Nettime* has never had the goal of establishing a community – as the primary motivation of *Nettime* was to organize the field – namely, developing critical Internet discourse and network culture.

Since the turn of the century *Nettime* became only a mailinglist, in fact – a set of mailinglists: *Nettime* started to operate also in other versions – Dutch, French, and Rumanian and for other language speaking communities. Still, the main mailinglist “*nettime-l*” is dedicated to discussions in English. The number of subscribers doubled each year and continued to grow. If *Nettime* mailinglist consisted of only few people in the beginning (in 1995), soon after it was already 500 people (1997) which rapidly grew to 850 (in 1998) and continued growing reaching up to 2 500 (2002).

Regardless of the fact that other social communication forms have emerged along *web 2.0*, today mailinglists including *Nettime* continue to work just as actively as before. Geert Lovink argues, that “*social networking sites are not ideal community tools, and do not constitute counter public spheres*”. He explains that they are good for expanding one's social horizon but not for organizing a field – they are good for promotion and campaigns, but “*they are less suitable as mediators between the real and the virtual. That's what lists do best.*” [Interview with Lovink 2010]

Nettime most definitely was (and to a certain extent still is) in some respect the heart of the early network culture. During the second half of the

³ *Nettime* conference in Ljubljana “Beauty and the East” took place in May, 1997 (<http://www.ljudmila.org/nettime/>).

⁴ For instance, the even more remarkable 100 day event – laboratory “Hybrid Workspace” in Kassel in the framework of Documenta X.

90ties other mailinglists – *Nettime* “neighbors” continued to grow and to form around it, including *Faces* list which is a platform for cyberfeminism. Although the open structure of *Nettime* aimed at involving different participants, for women who even had “full online access, good education, and excellent English writing skills could find *Nettime* a difficult forum to crack” [Nettime, 21]. Regardless of the fact that more and more women use the Internet, there is still a remarkable lack of women representation. [Sassen 2002, 379]

2. Curators, artists and activists Kathy Rae Huffman and Eva Wohlge-muth came up with the idea of forming the *Faces* list in the beginning of 1997 during a conversation at a dinner party in Vienna, “[later] we were hosting dinners and discussing Internet and technology in general with women curators, artists, etc. in several cities”. [Interview with Huffman, 2010]. Later the same year Huffman together with new media activists and organizers Valie Djordjevic and Diana McCarty founded the international cyberfeminist mailinglist *Faces*, which works actively still today. The aim of *Faces* mailinglist was to create an environment where it was possible to speak out in a more liberate and private way but with less focus than in *Nettime*. It was decided not to allow male subscribers in this mailinglist.

Eventually *Faces* became a translocal network for women who worked with new media – it included artists, programmers, DJs, curators, activists, theoreticians, researchers, academics and others. In 1997 there were 30 woman subscribed to *Faces* and during the following years the mailinglist subscriber number grew to 50 and 100, and up until 2002 there were more than 400 women subscribed. Right now *Faces* mailinglist includes approximately 300 women from many European countries, the USA, Canada, Australia, etc.

Regardless of the fact that today with the ubiquitous social networking, the Internet communication has become easier and the cyberpresence of women has slightly increased, *Facebook* has not replaced *Faces* yet. For sustaining a network or yet more – a community, it is important, as Huffman suggests, to know the audience of the network, to know who the people are and what they need. “*I think the environment in Faces is much more personal*” [Interview with Huffman 2010]. I can only agree to that. This is one of the few mailinglists that has a very responsive and friendly atmosphere. I was subscribed to this mailinglist in its beginning period, because I was also one

of the participants in the first cyberfeminism symposium in Kassel, in 1997⁵. While doing this research I recently re-subscribed again. And I must admit that the atmosphere has not changed a lot during these last more than ten years. Thinking about the reasons as to why this particular mailinglist is sustainable, it seems as it is the merit of the founders themselves. Their ability to take care of their community can be compared with the skill of a good hostess to take care of her guests. During any of the cyberfeminist events (symposiums, conferences, workshops, exhibitions) preparing meal and sharing soup was just as important as discussing the development of the Internet, or video and sound editing activities. In other words, as Dutch media theorist Eric Kluitenberg puts it: “community results as an emerging property of these networks, but not without a decided effort” [Kluitenberg 2006, 306].

After doing the inquiry at *Faces* mailinglist it is possible to conclude that, first, *Faces* may be considered in terms of all three notions – *Faces* is a mailinglist, but it is also a network and a community. Regarding the community aspect – what creates the feeling of community in *Faces*, most of the respondents think similar to Pit Schultz (but are not so radical – as that community can only exist in real space) – they suggest that meetings in real space are necessary for an (online) community to exist. Respondents also think that the responsive and supportive environment, which exists in *Faces* mailinglist and determines the atmosphere, also plays a great part – it creates a sense of solidarity instead of self-representation and competition characteristic to other mailinglists. And last of all, *Faces* mailinglist has managed to balance out its content, which is “a mix of media art, theory discussion and domestic announcements” – as *Faces* member and respondent Melinda Rackham says, there is no duality between discussions and announcements (which is a crucial problem in other lists).

3. Another important *Nettime* “neighbor” was *Syndicate* network and mailinglist which was launched in 1996 as one of the first attempts after the fall of the Berlin Wall to foster the cooperation between Eastern and Western European media art and digital culture scenes. On an institutional level the practice of networking in Eastern Europe in the beginning of 1990s was initiated by Soros Open Society institutions. Such was, for instance, the Soros

⁵ The first cyberfeminism community symposium of *Faces* and OBN (Old Boys Network) took place as part of the event “Hybrid Workspace” organized by Geert Lovink during the contemporary art exhibition Documenta X in summer of 1997 in Kassel, Germany.

Contemporary Arts Center network. Yet this network developed under the influence of Soros policy while *Syndicate* network was self-organized. Furthermore, *Syndicate* network not only included artists from Eastern Europe but also joined on equal terms both Eastern and Western European artists, groups and organizations – all who were interested in translocal cooperation with the aim to develop emerging field of electronic networked media art. But such networking was only possible among people who were online, as explained by *Syndicate* founder Andreas Broeckmann: “*in mid 90ties it was a very particular group of people that could be involved. Over time it expanded of course, but this meant, that people like you, and us, we could say – ok, we go online, but it means that we deal with technological determinacy, and social anti-techno-logic. So these were people, who wanted to discover, how these technologies can allow to communicate*”. [Interview with Broeckmann 2009]

The number of *Syndicate* mailinglist subscribers in 1999 reached 700 and it continued to increase. The main fields of activities of *Syndicate* network and mailinglist included information exchange, organization of the network and mailinglist, and initiating collaborative projects. *Syndicate* was operating successfully until the summer of 2001, which was a turning point for this network due to three important events – as revealed in an interview by the founder of *Syndicate* Andreas Broeckmann:

First was the *Syndicate* meeting in Bulgaria to which many members did not show up – people begun to believe that the network was created by the mailinglist and not the meetings. Second was the spam mail campaign on the mailinglist by the aggressive artist Netochka Nezvanova. The highly professionally organized exhibition of young Albanian artists marked the third event, which indicated that there were no relevant differences between Eastern and Western Europe anymore. [Interview with Broeckmann 2009]

All three reasons made *Syndicate* founders come to a decision to discontinue *Syndicate's* work. Instead, a new mailinglist *Spectre* was created. But in the case of *Spectre* it was a mailinglist only. Broeckmann explains the difference: “*In Syndicate days people had a clear idea of who is on the list. 50-60 people, who knew personally each at least five, some of them knew even more than 30 others personally. For newcomers (of Syndicate list), they had a feeling that there is a spirit. Also they realised that there are these meetings, during which people talk and exchange information after meetings*” [Interview with Broeckmann 2009]. Such personal communication was important also for those who didn't attend these meetings, and it was also different from *Net-*

time, which organized just few initial meetings. The case of closing down *Syndicate* shows how fragile networks can be, that they are not immune to inner disagreements and attacks and such personal difficulties may tear the structure of a network apart.

In 2001 the circle of participants within the newly created mailinglist *Spectre* remained similar to the one at the previous *Syndicate* mailinglist. The topic was also similar – media art and culture – only this time in “deep” Europe, following the idea that it is not so important to focus on the Eastern European context anymore as it was back in 1996.

Local Community Networking Cases – Open and E-Lab

An example of creative network initiatives that emerged in Eastern Europe is the global Internet radio network community *Xchange*. It was launched at the end of 1997 by *E-Lab*⁶ – new media artists group from Riga, Latvia. It was developed in collaboration with other small scale initiatives from all over the world – sound and new media artists, electronic musicians and DJ groups, community radio activists, independent journalists from the Eastern and Western Europe, Australia, Canada. *Xchange* participants’ motivation was based on a particular shared interest – creative experimentation with novel streaming audio technologies. In opposition to other creative networks, which were rather discussion and debate societies (using text based communication), *Xchange* community aimed at exploring social communication potential within the Internet through exchanging sound material. Obviously the case of *Xchange* can be studied as a translocal community (similar to *Nettime*, *Syndicate*, *Faces*), but since it involved a strong local aspect being founded by Eastern European artists group *E-Lab* from Riga, it is also relevant to study it as an extension of local community networking that was developing in Riga and Latvia in 90ties, in parallel to *E-Lab’s* activities in translocal networks.

1. The new contemporary art tendencies and forms of subculture emerged in Latvia during the mid 1990s. They appeared under the influence of globalization but were transmitted within different local contexts. The “live” formations of young artists, musicians, DJs, club event organizers,

⁶ Electronic arts and media center E-Lab as a nongovernmental organization was founded in 1996. In 2000 a new structure was founded on E-Lab’s resources – Centre for New Media Culture RIXC still continuing the work today (<http://rixc.lv>).

fashion designers, poets and other young creative people manifested themselves as a hybrid of techno music culture and experimental contemporary art. One of the “connectors” which not only introduced techno culture in Latvia but also established new connections between the more active creative people of that time was *Open* initiative. “*Being in search for an environment (that I myself would enjoy) I guess I just whisked it all together maybe even unintentionally.*” [Interview with Vanags 2010]. These events could not be described just as “subcultures” or “techno parties”, they were large scale – they involved a large number of participants and visitors, but they did not amount to being commercial “raves” yet. “*Altogether these expressions manifested an alternative reality which indicated rather towards new perception, towards fundamental changes in the society.*” [Kluitenberg 1999]. In such energetically saturated grass-roots culture environment in 1996 emerged and developed *E-Lab* initiative.

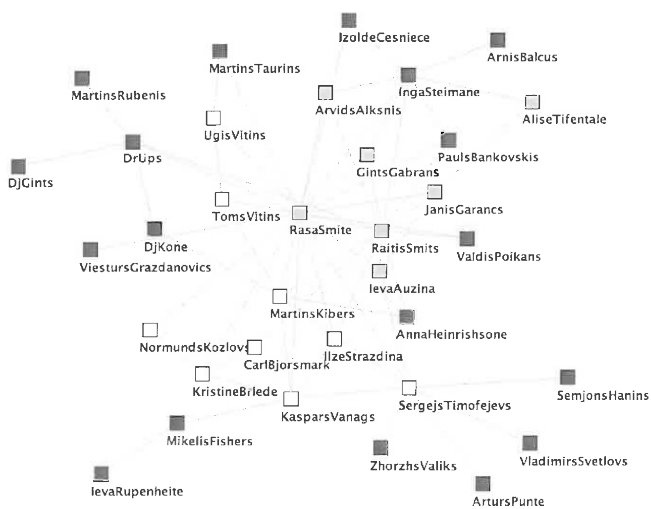


Image 1. Social map of *E-Lab* local community network participants

2. From the point of organizational structure *E-Lab* was an example of Eastern European NGO, from content – electronic art laboratory open and freely accessible to everyone interested. Physically (and locally) *E-lab* was situated in a tiny room on Artists’ Union building. The laboratory soon (in 1997) was equipped with our own Internet connection and the first set of computers purchased from Soros Foundation Internet Programme competi-

tion grant. When the first server was installed in 1997 *E-Lab* alongside the translocal *Xchange* mailinglist established a mailinglist in Latvian with the title *Rezone* for local community, where to discuss and exchange information on local and international contemporary culture, new media, urban and club culture events, thus being a bridge between local and translocal media culture. Currently *Rezone* mailinglist continues to exist with about 400 subscribers and an average of 10 messages per month – the activity of the mailinglist during those past 14 years has remained similar, even slightly growing – thus *Rezone* today has approved itself to be one of most active local mailinglists in Latvia.

However, for *E-Lab* artists the Internet was more than just an information exchange platform or a new media and material for creating artworks. We associated the Internet with a new and unexplored space, where it was possible to implement many ideas which would not have been possible in real life and in the mid of 90s with its post soviet societal and cultural system. Being overwhelmed with the idea of freedom, openness and autonomous zones, *E-Lab* primary focused its activities on audial communication, using early audio live broadcasting technologies that appeared on the Internet (Real Audio). In 1997 *E-Lab* established its local Internet radio node *Ozone*, which by communicating with other similar small-scale Internet radio initiatives from all over the globe, grew into a global network project *Xchange* later on.

With broadcasting archiving possibilities *E-Lab* (now – RIXC.lv) server today hosts a sound art collection of more than a ten year long time period, that includes Internet radio *Ozone* recordings of live sessions, archived files of early live streams that were provided from different local and international events (festivals, conference, etc.) as well as collaborative experiments by *Xchange* community. In 2009 *Xchange* website⁷ was renovated and turned into archive, which now is available for future research. *Xchange* online archive includes mailinglist archive (with all messages in time period from 1997–2009), sound files (selection of historical *Xchange* collaborative broadcasting sessions), and information of all most important *Xchange* community members.

During the rise of the Internet broadcasting age, Riga and *E-Lab* with its experimental Internet radio projects *Ozone* and *Xchange* was described as

⁷ *Xchange* network archive available at <http://xchange.re-lab.net>

the “epicenter” of global network radio or “something similar to the capital of world’s Internet radio” [Kluitenberg 1999]. By being actively and creatively engaged in the network “*the small E-Lab organization with practically zero budget somehow managed to find their way inside the very heart of the international cooperation network which was created by artists, theoreticians and organizers, who were all eager to explore the boundaries of the new digital media*” [Kluitenberg 1999]. Thus the local networking case of E-Lab together with its translocal extension – Xchange network – manifests the way that the potential of digital networks may be used in strengthening social activity fields locally, as well as broadening it to translocal and global scales.

V CONCLUSIONS

The ending part of the study provides conclusions concerning both theoretical context, as well as interpreting results of the empirical research.

1. In respect of the **theoretical context** main conclusions have been made as follows: although the network has been well known as a form social organization for a long time, the raise of the Internet at the end of the 20th century has largely connected the term *network* to global computer network based infrastructures. At the same time social networks have not ceased to exist and what is most important by merging these both types of networks – technical and social – new hybrid forms of network have emerged. These complex modes of relations created by interaction between social processes (the “social logic”) and digital network technologies (the “network logic”) are called *the socio-technical formations*. In a result, these relevant socially technical changes have created as Manuel Castells calls it – “the network society”. Castells goes as far as to claim that the forms of networking which are currently expanding throughout the whole social infrastructure will be a dominating factor also in the distant future. If until now the global finance market, for instance, has been one of the most effective socio technical formations, then today by the end of the 21st century’s first decade its place has been taken by the social networks which have gained undeniable popularity and which organize themselves on *web 2.0* social media platforms. This is an essentially new tendency indicating that the network as a form of social organization is nowadays used not only by translocal corporations or national

governments but also by people on a scale of mass self-initiative. This in a way serves as an evidence for Castells' prediction that the paradigm of information technologies leaves a significant impact on *all* levels of society's structures nowadays and the *network* can be used as a perspective through which we can view today's society.

By examining the main principles of the network it was concluded that (1) *simultaneity* together with (2) the principle of *mutual interconnectedness*, (3) *openness, decentralization and free access* is a combination for a precondition to create new socio-technical formations such as *network communities* and the process of self-organization.

By analyzing *networks* as complicated socio-technical systems a conclusion was made that in order to explain the new social dynamics and other forms of social activities in digital networks the social phenomenon can not be examined without relating it to technologies in which it is embedded. Instead, this needs to be considered as a result of interactions of all the significant network levels – technical, political and social.

This complexity also requires a search for novel research approaches and identification of original fields of study in order to develop analytic categories for the sociological research in digital network environments – which has been accomplished in this study.

2. In the attempt to clarify the **terminology** in the case of the term *network* it is important to differentiate between two separate terms. If the term *digital networks* denotes primarily the technical infrastructure of the network, respectively – the Internet (and other digital networks, for example the mobile communication network), then the general term *networks* is attributed mainly to (any) social network as well as different hybrid network combinations (for example, mobile + the Internet + social network). By subdividing the types of social networks operating within the Internet the term *creative networks* is even more specific – it ascribes the social cooperation networks that were created in the early phase of the Internet (in the second half of the 1990s in a time which could be described also as *web 1.0*). I use this designation in order to separate the early networks from nowadays *social networks* – by this term meaning networks that have been created along the rise of *web 2.0* (in the second half of the first decade of the 21st century).

Concerning the term *network communities*, one of the early terms “virtual communities” (after Howard Reihngold) was replaced by such contemporary

terms as *translocal network communities* and *local community networks* – in order to describe the communities by their geographical distribution. Also, I applied terms such as *creative network communities* and *social network communities* in order to subdivide the communities by the character of their social relations, their specifics and idea around which they are organized.

However, the most important interpretations regarding the terms – *what is a network and what – a community, and what relates these two terms*, I gained by analyzing the information acquired during the interviews. By summing up and analyzing the answers which were based on respondents' personal experience of more than 10 year active work in creating and sustaining creative network communities, I could come to the following conclusions:

1) **The term network mostly ascribes the structure: on the whole, network can be of any type** – as the general definition of network suggests – a network is a mutually connected totality of nodes; accordingly the type of the network depends on what the particular nodes are. Those may or may not be humans, in case if they are – the important thing is to find out the reason behind creating the network.

2) **The term community applies to a more personal level of relationships between network participants.** The answers of respondents conveyed quite radical opinions, for instance, – the community exists only in a case if the communication is not technologically mediated – or that – the aim of networks is whether to be or not to be a community and that the concept of community suggests an unrealistic vision of harmony. There was also an opinion that if a mailinglist contains less discussions than announcements this can be a reason for members to distance from one another and for community to fall apart. However, the dominant opinion was that meetings in real space strengthen the community in an important way (along the everyday communication in electronic mailinglists).

The study on creative network communities confirmed this – in cases of networks (or during certain periods), where these meetings took place (formal meetings such as conferences, or informal – as shared lunch), their participants believed that their “formation” is rather a *community* than a network different from cases or periods where real meetings were not organized. Those participants suggested that their community is rather a *network* associating it with less personal relations or weaker ties between participants of the according network.

As to the qualitative research on the **meaning of social action** it can be concluded that the self-organizing process of creative network communities is determined by two main motives.

On one hand, **the situation (outer conditions) must be prepared**, the indications of which in the case of emerging creative network communities in the mid 1990s are such factors as a) the political situation – a time after the Fall of the Berlin Wall when borders to the Western world are opened up, when translocal cooperation is beginning to emerge and transformation of global ideas becomes possible in a local environment; b) the new communication technologies (the Internet) – which makes this cooperation possible; c) a slow improvement of the economic situation – the work within cooperation networks requires support for traveling and technical infrastructure (at least an access to the Internet); Soros Foundation is the first support of this sort in Eastern Europe in the 1990s.

On the other hand, there has to be an **initiator** (with a personal motivation) and other like-minded people, which create the core of the network and have the motivation to create it because they a) have the ability to understand and to make use of the given situation and accordingly to work in the name of achieving a shared goal, b) there is a certain goal and a locally or globally important idea which can find and attract like-minded people accordingly on a local or a translocal or global level; c) feel the responsibility to take up the role of a “connector”.

4. The selected method of case studies delivered the necessary deepened outlook on the main **forms of social organization and communications** in creative network communities. Also, the combination with qualitative research interviews helped to formulate the **common field of work and the common goals** as well as to draw **comparison with today's social networks**. As a result, a conclusion was made that in the case of creative networks the common field of work *is a clearly defined one* and that it has a particular *meaningful goal* related to creating and developing its field of work.

Also, as it turns out, the main forms of social organization for creative networks are mainly oriented towards developing the culture of networks and technology; those are the following: 1) local media centers (and structures alike) – as the main nodes of creative networks; 2) international festivals for media culture (featuring exhibitions and conferences) – as meeting places for network communities; for evaluating the situation and for

social communication; 3) the technical infrastructure: servers – which host network communities virtually, providing not only communication but also development for the entire field.

However, the most significant form of social organization is mailinglists for organizing the common creative network field and the social everyday communication. In comparison, social networks (*Facebook*, *draugiem.lv*, etc.) are more suitable for simpler and faster social communication on a more personal level as well as for self-promotion in the widest sense – from publishing personal photos of vacations, dogs, cats, cars and relatives to publishing one's most recent articles, artistic projects even academic studies. However they are not very suitable for organizing a shared field because the communication is available only through personal profiles or by following messages sent out of them (*Twitter*). Of course, this is not that strict – social networks (especially in a combination with mobile communications) may help, for example, in organizing various operative social aid or socially political campaigns. Still, minding the fact that creative network communities have the organization of the common field as their main goal, they continue to utilize mailinglists for their communication.

5. The study included network community cases from different perspectives with intent to analyze the potential of digital networks both on a translocal level of cooperation and in creating local communities. As this study particularly stressed the importance of exploring the potential of global communication from the perspective of the local, the ending provides several conclusions in relation to the significance of the “local” in the global digital age. It was concluded that the term “global” contains negative associations with the threat of the cosmopolitan for the local, but it also contains a positive potential for developing the local culture and the social field of work – for example, the global forms of subculture can be transformed and adapted on a local context by prescribing them a new meaning as it occurred in the case of developing networks of alternative culture in Latvia during the 1990s. Therefore, it can be concluded that the global communication technologies and the translocal cooperation networks in the 1990s was the support mechanism without which the younger generation in Latvia would not had been able to create such strong “alternative reality” which in a few years time changed from subculture to an officially acknowledged contemporary culture and which still has a resonance in the local Latvian culture today.

On the other hand, global digital networks (as in the case of *Xchange*) may serve as the extension for providing a translocal level to local community's field of work. In this case small, often marginal locations may gain a significant resonance on a global level with their creative ideas and socially dynamic forms of work which under different conditions (without the Internet) would not be possible.

6. Regarding the experimental approach – **social network analysis**, it was important to take notice of the difficulties that could be encountered when mapping such networks in which everyone is mutually acquainted. Still, it was worth a try because gradually a way was found on how to create maps of creative community social networks. In the case of creative networks a more effective result could be attained by using information about participant relations available on the Internet: 1) in which events have the participants participated together; 2) what articles have they produced together; 3) which articles or books feature both of their names; 4) what have they organized together, and so on. In a result of the social network analysis a conclusion was drawn that the creative networks are largely based on their initiators / founders, which often is one and the same person. On one hand, this centrality of one person bears a threat to the sustainability of the corresponding network. In a case where he or she ceases to take care of the community, the activity of network participants may decrease (for example, in a mailinglist), the ties between the participants may weaken and the network may fall apart rapidly. On the other, as networks are non-institutionalized self-organized structures and they are often very little connected to the monetary economy (they require almost no financial support), their goals may not include being sustainable. If creative networks are organized from such a perspective it is quite clear that this structure is not completely centralized – almost all participants mostly know one another. Since those are people who share a history, in a case of a network break-down, they are capable of creating their clusters, to change the goal and to continue cooperating in a different combination of nodes in the same field of work.

In general, it can be concluded that during the process of social transformation the structure of “network society” today – along the mobile communications, wireless networks and the popularity of social networks, becomes increasingly complicated. In order to explain the social dimen-

sion and structure of this complex networked system, I conclude that *it is important to study the social phenomenon in relation to the technological and politically economical context, in which it is embedded*. A study on network communities performed in such context tend to reveal not only the complex relations between the interaction of social action and technology but also the politically economical influences, in order to reveal the very basis of *network society* and therefore to make this complexity more “transparent”.

The insight gained through this work’s theoretical study in combination with the results of the empirical study provides a notion on today’s society’s new social morphologies¹ in relation to the work field of creative network communities, their forms of social organization as well as other processes and influences. Therefore I conclude also that a study on the creative network social work (and practice) may serve as a reference object which can help to explain those changes in the social structure that take place in the influence of the socially technical transformation.

Due to the fact that early creative networks (which is the object of this study) in a sense are the ancestors to the currently popular phenomenon – social networks, the doctoral study “Creative network communities” may serve as a fundament through which analytical categories can be produced and developed for further sociological studies on the meaning of the social action and development tendencies of the variable creative and social network communities.

VI RESULTS AND APPROBATION

1. The Expected Results of the Doctoral Study

The study contains a wide explanation of the theoretical context, the methodology of the performed study, description of applied methods as well as the accounts of interpretations on terms “network” and “community”. In a result of the study, by processing the information acquired during the interviews, the meaning of the social action and motivation of many significant early network community participants have been ascertained and analyzed (both local and translocal cases), as well as the main social communication and forms of organization. Also, the according creative community social network maps have been created and relations have been analyzed, as well as network social dynamics quantitative data analysis has been performed. As

a result, an innovative study has been created which interprets the most significant tendencies in development of social dimension in digital networks and from this perspective it explains the changes in today's social structure that takes places under the influence of technical transformation.

It is intended to publish the full version of this study in Latvian to provide a study material (for sociology, communication science, new media art, a.o. fields) as well as basic material for the author and other researchers to perform further studies in this field. An intended translation in English is planned for the near future to approbate the study in an international context.

2. The Approbation of the Doctoral Study

The study in different stages has been approbated in more than 10 scientific conferences and more than 25 publications (in magazines, compilations, international publications, a.o.), 6 of those have been submitted and published in local and international scientifically edited publications.

Based on this study several lecture courses have been developed for Riga Stradina University Communications programme and in Liepāja University New media arts programme.

Scientific publications on the subject of doctoral study in quotable resources:

1. Smīte, Rasa. The Rise of the Creative Network Communities – in Eastern and Western Europe // *European Societies*. Routledge (Taylor and Francis Group), 2010

Article submitted: 20.05.2010. Under editing. 34700 signs.

2. Šmīte, Rasa. Kultūra un kreatīvās kopienas tīklu sabiedrībā // *Sabiedrība un kultūra: Haoss un harmonija* (Nr. 13). – Liepāja: Liepājas universitāte, 2010

Article submitted and approved for publishing: 17.05.2010. 24800 signs.

3. Šmīte, Rasa. Lokālās kopienas digitālo tīklu globālajā telpā // *RSU Zinātnisko rakstu krājums*. – Rīga: RSU, 2010.

Article submitted: 31.05.2010. 37800 signs.

4. Šmīte, Rasa. *Xchange* tīkla mākslas kopiena akustiskajā kibertelpā // *Personība mākslas procesos* / Red. Ābele, K. – Rīga: LMA MVI/Neputns, 2010.

Article submitted and approved for publishing: 03.03.2009. 30700 signs.

5. Šmīte, Rasa. Kreatīvo kopienu pieeja sabiedrības ilgtspējības jautājumu risināšanā // *Akustiskā telpa: Enerģija* (Nr. 8). – Liepāja/Rīga: Liepājas universitāte/RIXC, 2010.

Article submitted and approved for publishing: 27.03.2010. 29200 signs.

6. Šmite, Rasa, Linda Vēbere. Elektromagnētiskie mīti un fakti par Skrundas signālu (Sociālekoloģisks mākslinieku kopienu pētījums) // *Akustikā telpa: Spektropija* (Nr. 7). – Liepāja/Rīga: Liepājas universitāte/RIXC, 2008. – 21.–50. lpp.

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