Technology Appropriation in Transnational Networks of Social Activists

A Study of the European Social Forum

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PhD Thesis

Submitted in fulfillment of the requirements for the degree of Doctor of Philosophy

January 2012

Dedicated to my parents, wife and daughters

Abstract

Civil society organizations and other networks of social activists have gained significant importance in supporting citizens, as states are rolling back from their duties. In order to be an effective force these networks have become transnational in their operations. These transnational networks are typically characterized by a lack of resources, an absence of formal hierarchical structures, and differences in languages and culture among the activists. Modern technologies could help these networks in improving their working. Technology support for transnational social movements and civil society organizations is an important field of research not only due to the increased political importance of this sector in a globalizing world but also due to their organizational characteristics. In order to design appropriate technological support for social activists' networks, it is important to understand their work practices, which widely differ from traditional business organizations.

In this thesis I present results from a long-term ethnographical field study of the European Social Forum (ESF), a network of heterogeneous political activist organizations. In this network different actors organize a periodic (biannual) event. During my data collection period, the 5th and 6th European Social Fora were held in Malmo (2008) and Istanbul (2010), in which some 13,000 and 3,000 activists participated, respectively. I particularly focused on the usage of information and communication technologies (ICTs) in preparing and conducting ESF events and knowledge sharing practices during the transition period. I specifically highlighted coordination and knowledge management practices to understand the potential for ICT support.

The thesis describes complex social practice of organizing ESF events. I use the term *fragmented meta-coordination* to highlight coordination in this type of practice. Mundane ICT applications, such as a mailing list and a content management system, play a central role in enabling different aspects of fragmented meta-coordination. The findings also indicate how lack of resources, organizational distribution, and technical limitations hamper the preparation process and reduce transparency of political decision-making.

I also present a specific type of knowledge, termed as *nomadic knowledge*. It is required periodically by different actors and travels along foreseeable paths between groups or communities of actors. This type of knowledge lets us question generally held assumptions about the way knowledge is enacted. Nomadic knowledge is a specialized type of knowledge, which is enacted in a discontinuous pattern by a changing set of actors and further flows on a defined trajectory. This knowledge is quite important but is required sporadically, so it has varying levels of importance for stakeholders at different instances of time. The limited interest of knowledge holders after the creation of knowledge makes knowledge sharing process complex. Furthermore, new actors overloaded by the tasks at hand often ignore the knowledge sharing aspect due to

urgency. The thesis provides insights into the complexity of managing nomadic knowledge and implications for organizational processes. Moreover, the issues, which make the transfer of nomadic knowledge complex, are also discussed and the potentials for ICT support for management and transfer of nomadic knowledge are also highlighted.

Moreover, the thesis provides a historic perspective on the evolution of ICT artifacts in the organizational boundaries. A user-centered evaluation of two technology artifacts (European mailing list and OpenESF) is also carried out to identify design improvements. The empirical findings highlight how the mailing list is used for a variety of different activities such as collaborative work, decision-making, coordination and information sharing. I discuss the findings with regard to the discourse on cooperative work and come up with implications for design.

The analysis highlights central organizational and technological challenges related to ICT appropriation in transnational networks of social activists. As a next step it is important to design appropriate prototypes aligned with highlighted work practices to evaluate them in the field and realign if necessary. In order to better support this application domain universities and community-based organizations need to work jointly on action research projects to improve organizational processes of civil society organizations.

Acknowledgements

First, and foremost, I am thankful to Allah Almighty for helping me to complete PhD work and the thesis.

I am greatly indebted to my supervisor Prof. Dr. Volker Wulf, for his inspirational guidance and mentoring throughout my stay in Siegen. This dissertation would have never been possible without the constant encouragement and tremendous support from Dr. Markus Rohde. He was always available with his valuable suggestions and guidelines, whenever I needed him. I would also like to acknowledge the great support of Prof. Dr. Volkmar Pipek and Dr. Bernhard Nett.

I am indebted to many of my current and former colleagues and wish to pay my special thanks to all the colleagues at research group: Prof. Dr. Gunnar Stevens, Dr. Tim Reichling, Dr. Christian Doerner, Dr. Fahri Yetim, Dr. Alexander Boden, Jan Heß, Sebastian Draxler, Michael Veith, Dalibor Hrg, Benedikt Ley, Claudia Müller, Muhammad Adeel, Cornelius Neufeldt, Christian Reuter, Kai Schubert, Mary-Ann Sprenger, Martin Stein, Lin Wan, Anne Weibert, Torben Wiedenhöfer, Thomas von Rekowski, Timm Wunderlich, Juri Dachtera and Karin Ofterdinger for their support. I would also like to mention the help of Seth Hulse, Kathrin Zimmerman and Maria Severin in copy editing the manuscripts during my stay in Siegen. I would like to thank all of my interviewees who kindly consented to devote some of their time to this research project. I would like to highlight efforts of my friends Dr. Rizwan Ahmad and Farrukh Masood Khawaja for proof reading this thesis.

I would also like to mention the support of Bahria University Islamabad, Pakistan by providing me study leave to complete this work. I am also grateful to Higher Education Commission, Pakistan and German Academic Exchange Service for the scholarship support during my studies. Finally I would like to thank my family: parents, wife, daughters and brothers for their love, prayers, encouragement and support.

List of Figures

| Figure 1: Evolution of ESF | .6 |
|---|----|
| Figure 2: Snapshots during an EPA Meeting1 | .7 |
| Figure 3: Snapshots of Activities during ESF 2010 in Istanbul | .8 |
| Figure 4: Organizing Committee of the ESF 20081 | .9 |
| Figure 5: Organizing Committee of ESF 2010 | .9 |
| Figure 6: Research Methodology Cycle2 | 2 |
| Figure 7: Snapshot of a Seminar during the ESF 20103 | 7 |
| Figure 8: A Snapshot of ESF 2002 Website5 | 3 |
| Figure 9: A Snapshot of ESF 2003 Website5 | 5 |
| Figure 10: A Snapshot of ESF 2004 Website5 | 7 |
| Figure 11: A Snapshot of the ESF 2004 Alternative Wiki-based Website5 | 8 |
| Figure 12: A Snapshot of Collection of ESF Participant Organizations6 | 0 |
| Figure 13: A Snapshot of the E-Library Website6 | 0 |
| Figure 14: A Snapshot of AlterMundo Website6 | 1 |
| Figure 15: A Snapshot of Visualization by AREA6 | 1 |
| Figure 16: A Snapshot of ESF 2006 Website6 | 2 |
| Figure 17: A Snapshot of Official ESF Website6 | 4 |
| Figure 18: A Snapshot of ESF 2008 Website6 | 5 |
| Figure 19: A Snapshot of OpenESF Website6 | 6 |
| Figure 20: A Snapshot of ESF 2010 Website6 | 9 |
| Figure 21: OpenESF Members Statistics | 9 |
| Figure 22: OpenESF Projects Statistics | 9 |
| Figure 23: OpenESF Mailing Lists Statistics8 | 0 |

List of Tables

| Table 1: Research Focus | 3 |
|---|----|
| Table 2: Research Efforts of ICT in Individual Organizations | 7 |
| Table 3: Research Efforts of ICT in a Set of Multiple Organizations | 8 |
| Table 4: Research Efforts of ICT in Network of NGOs | 9 |
| Table 5: An Overview of ESF 2008 and ESF 2010 | 20 |
| Table 6: Themes of ESF 2008 and ESF 2010 | 30 |
| Table 7: Schema of the Excel File used for Merging Process | 33 |
| Table 8: Schema of the Excel File used for the Final Program | 33 |
| Table 9: Monthly Traffic at European Mailing List | 72 |
| Table 10: Monthly Statistics of OpenESF | |
| Table 11: Properties of Knowledge Sharing | 90 |
| Table 12: Knowledge Transfer Means during ESF 2008 | 91 |
| Table 13: Knowledge Transfer Means during ESF 2010 | 92 |

Contents

| ABSTRACT | |
|--|------|
| ACKNOWLEDGEMENTS | V |
| LIST OF FIGURES | VI |
| LIST OF TABLES | VII |
| CONTENTS | VIII |
| 1 INTRODUCTION | 1 |
| 1.1 MOTIVATION | 2 |
| 1.2 AIMS AND OBJECTIVES | 3 |
| 1.3 CONTRIBUTIONS TO THE FIELD | 4 |
| 1.4 Overview | 5 |
| 2 RELATED WORK | 6 |
| 2.1 TECHNOLOGY APPROPRIATION | 6 |
| 2.1.1 Technology Usage by Social Activists | |
| 2.2 COORDINATION | 10 |
| 2.3 Knowledge Management | 11 |
| 2.4 SOCIAL FORA AS A RESEARCH SETTING | |
| 2.5 Knowledge Gaps | 14 |
| 3 RESEARCH DESIGN | 15 |
| 3.1 CASE SETTING | 15 |
| 3.2 RESEARCH METHODS | 21 |
| 3.3 CHALLENGES IN THE FIELD | 22 |
| 3.3.1 Access to the Field | 23 |
| 3.3.2 Balanced Information Access | 24 |
| 3.3.3 Ad-hoc Nature of Practices | |
| 3.3.4 Multicultural Implications | |
| 3.3.5 Skepticism about Technology | 26 |
| 4 ORGANIZATION PRACTICES AT ESF | 28 |
| 4.1 COMMUNICATION AMONG THE ORGANIZING MEMBERS | 29 |
| 4.2 THEMES SELECTION OF THE FORA | 29 |
| 4.3 Proposal Submission | 30 |
| 4.4 Merging Process | 31 |
| 4.5 PAYMENT OF DUES | 34 |
| 4.6 ACTIVITY PREPARATION | 35 |
| 4.7 Mobilization | 36 |
| 4.8 Interpretation | |
| 4.9 Program Publishing | |
| 4 10 DOCUMENTATION OF FORUM | 38 |

| 5 KNOWLEDGE TRANSFER PRACTICES AT ESF | 40 |
|---|-----|
| 5.1 Knowledge Sharing Practices | 40 |
| 5.2 KNOWLEDGE TRANSFER FROM ATHENS TO MALMO | 41 |
| 5.3 ORGANIZATIONAL PROBLEMS IN THE MALMO FORUM | 42 |
| 5.3.1 Financial Deficit | 42 |
| 5.3.2 Failure of the Translation System | 43 |
| 5.3.3 Scattered Venues | 43 |
| 5.3.4 Problems in Setting up the Website | 44 |
| 5.4 Knowledge Transfer from Malmo to Istanbul | 44 |
| 5.5 ORGANIZATIONAL PROBLEMS IN THE ISTANBUL FORUM | 45 |
| 5.5.1 Failure of the Translation System | |
| 5.5.2 Problems in Setting up the ICT Infrastructure | 46 |
| 5.5.3 Limited Participants | 47 |
| 5.6 KM Process Weaknesses | 47 |
| 5.6.1 Difficulties in Information Sharing | 48 |
| 5.6.2 Conflicting Interpretation of Information | 49 |
| 5.6.3 Uneven Distribution of Information | 50 |
| TECHNOLOGY USAGE AT ESF | 52 |
| | |
| 6.1 TECHNOLOGY USAGE DURING 1 ST EUROPEAN SOCIAL FORUM | |
| 6.2 TECHNOLOGY USAGE DURING 2 ND EUROPEAN SOCIAL FORUM | |
| 6.3 TECHNOLOGY USAGE DURING 3 RD EUROPEAN SOCIAL FORUM | |
| 6.4 TECHNOLOGY USAGE DURING 4 TH EUROPEAN SOCIAL FORUM | |
| 6.5 TECHNOLOGY USAGE DURING 5 TH EUROPEAN SOCIAL FORUM | |
| 6.6 TECHNOLOGY USAGE DURING 6 TH EUROPEAN SOCIAL FORUM | |
| 6.7 Usage of European Mailing List | |
| 6.7.1 Information Sharing | |
| 6.7.2 Solidarity Support | |
| 6.7.3 Information about Other Fora | |
| 6.7.4 Content Sharing | |
| 6.7.5 Collaborative and Coordinative Work | |
| 6.7.6 Organizational Issues | |
| 6.7.7 Decision-Making Support | |
| 6.8 Usage of OpenESF | |
| 6.8.1 Appropriation of OpenESF | |
| 6.8.2 Problems with OpenESF | 80 |
| DISCUSSION | 85 |
| 7.1 ESF Organization as a Meta-Coordinative Activity | 85 |
| 7.2 Nomadic Knowledge Management | 88 |
| 7.2.1 Nomadic Knowledge Definition | 89 |
| 7.3 IMPLICATION FOR DESIGN | 93 |
| 7.3.1 Supporting Organization Work | 93 |
| 7.3.2 Supporting Nomadic Knowledge | 96 |
| 7.3.3 Improving Mailing List | 99 |
| 7.3.4 Improving OpenESF | 101 |
| CONCLUSION | 103 |
| | |

| REFERENCES | 107 |
|-------------------------|-----|
| 8.2 Future Work | 105 |
| 8.1 Summary of Findings | 103 |

1 Introduction

Civil Society Organizations (CSOs) and networks of social activists broadly termed as third sector organizations are an important pillar of the society along with business and governmental organizations. As state organizations are slowly moving away from their social responsibilities, community-based organizations are becoming increasingly important in a globalized world, fighting for civil rights, engaging in charity and development work, caring for environmental issues, organizing first aid in cases of emergencies, disasters and crisis.

Sooner these community organizations realized that global problems (social, economical, ecological asf.) that they are facing couldn't be dealt locally, but require cooperation beyond the borders of the national state. This transnational networking brought many dividends such as huge visibility through joint actions, strong advocacy campaigns and exchange of ideas, but at the same time introduced inherent challenges of transnational cooperation. Most CSOs and networks are only weakly connected or loosely coupled organizations working together on joint activities over a specific period of time. Their members could range from local community-based organizations, Non-Governmental Organizations (NGOs), activist groups, think tanks, trade unions, professional associations, cultural groups, religious organizations, informal citizen organizations, foundations, commissions, cooperatives, clubs, campaigns, charities and so forth. Since these organizations and networks work beyond national borders, the geographical diversity adds certain challenges to their almost volunteer work. Differences in languages being spoken, working habits and differences of culture among the activists are some of the main problems to cope with. In order to succeed in their political work, these diverse organizations need to be effectively coordinated. The cooperation in larger network structures and on a transnational level requires highly advanced organizing and communication skills by activists and social movements. Technology can support such complex communication process. There has been use of technology by community networks and social movements for a long time, as in 18th and 19th centuries print media and in the 20th century radio broadcasting and the television served as important tools for communication [Langman, 2005]. Information technology advancement has introduced new forms of media and Information and Communication Technologies (ICTs) to community organizations: e.g., use of short message systems, email communication, new forms of online advocacy and online petition campaigns asf. [Surman & Reilly, 2003]. Despite huge potential of improving communication and coordination processes, community organizations are slow in adopting technologies in their organizational processes and there is not a huge body of knowledge investigating technology appropriation issues in this application domain.

1.1 Motivation

Technology appropriation in transnational community organizations is an important field of research; not only due to increased political importance of this sector in a globalized world but also due to involved scientific challenges. Obviously the use of ICT in transnational community settings is also influenced by the previously mentioned diversity as well. Not only different languages, cultures and habits but also the variety of ICT systems that are used by different community networks add to this diversity and complexity. This diversity poses a remarkable challenge to design appropriate technological support for transnational collaboration. Ignoring differing work practices and cultural issues during the design and technology appropriation phases would most likely result in low acceptance among the stakeholders. Other important factors affecting technology acceptance and the use of ICT among community organizations are their informal organizational structure and the highly varying technological knowhow among the volunteers. Their focus of work may change abruptly due to external events such as change in political situation or in case of a natural disaster. Furthermore, community organizations are very diverse in their operations and compositions. The operations of these organizations are neither regulated by some predefined standard operating procedures, nor do they focus on a business driven decisionmaking. Instead, political sensitivity, solidarity and the consensus are more vital aspects to their working methodology. This implies that during the system design one has to be more vigilant, as one cannot generalize one scenario to another similar instance. The practices are not standard, as external factors can influence them, and actors may behave differently in similar scenarios. Most community organizations also face a significant lack of funding for development, improvement and maintenance of their ICT infrastructure. Since their activities are mainly run by donations, these donations are very often dedicated explicitly to their main work issue (like environmental work, fighting poverty etc.) and not for investments in technology infrastructure. Therefore, most of the community organizations only have a small amount for establishing sustainable ICT infrastructure and continuously employing ICT professionals.

These factors highlight that the preconditions of ICT adoption and usage of third sector organizations are fairly different from conventional (business or governmental) organizations, especially when it comes to transnational collaboration of various community networks from different geographical regions. To plan for an appropriate ICT support for transnational community organizations and networks, one has to bear in mind these particular issues. Specific research efforts are necessary to understand the certain problems of transnational CSO networks in adopting technology and to support them by technological solutions.

These challenges motivated me to explore this area and enrich the field with an extensive empirical case study. Furthermore, recent popularity of Information and Communication Technology for Development (ICT4D) discourse has made community organizations quite attractive to carry out research in field settings. The conference series like *International Conference on Communication Technologies and development*,

ACM SIGCHI Conference on Human Factors in Computing Systems, International Conference on Communities and Technologies, ACM Conference on Computer Supported Cooperative Work etc. have recently shown an increased interest in this application domain.

1.2 Aims and Objectives

Despite the societal relevance and scientifically challenging environment, there has not been enough research done on technology usage and appropriation in civil society organizations. The technological requirements of CSOs are very particular so there is a need to better understand them, before trying to introduce modern ICTs in organizational settings. With regard to the design of ICTs for community networks a sufficient body of knowledge is lacking, particularly analyzing their specific needs. In the absence of huge data of valid studies investigating the impact of ICTs in community organizations, it is a bit early to proclaim the advantages of these applications for this domain.

| Objective | To identify how is technology developed, appropriated and transferred among | | |
|-----------------------------|--|--|--|
| Objective | ESF activists? | | |
| Research Design | - Ethnographic action research | | |
| Research Design | - Grounded theory as analysis tool | | |
| Major Research Questions | What is the current level of technology usage among heterogeneous social activist networks? How do social activists use technology for their communication and collaboration needs in a multicultural environment? What kind of problems do they face? How do technology artifacts evolve over time in such networks? How does coordination take place during organization process and what is the level of technology usage in this process? Which kind of new prototypes could be developed to support this process? How does knowledge transfer take place among different organizing committees? Do modern ICT artifacts play a significant role in this knowledge transfer process? | | |

Table 1: Research Focus

Keeping this in mind, the aim of my work is to enrich the body of knowledge on the technology use in social settings and identify design guidelines. These design guidelines could serve as a baseline for technology appropriation in this socially important sector. My focus is to gain a better understanding of the work practices of community networks and to investigate their adoption and usage of ICT and new technologies, especially with regard to their transnational networking. I particularly focus to investigate the organizing and knowledge sharing practices. The thesis highlights how transnational community networks interact with technology, how this technology is developed and appropriated and what are the main problems, they face. In order to answer these issues I adopted a practice based approach [Wulf et al., 2011] by carrying out ethnographic analysis of work practices of social activists involved in transnational community settings. In order to gather empirical data I focused on the European Social Forum

(ESF), and more specifically, its biannual meeting that is hosted by a different European city (and the local activist groups there) on each occasion. The ESF is an important gathering point for activists who follow a globalization-critical agenda and strive for a more democratic society based on equality. Since 2002, the ESF attracts thousands of activists and organizations from all around Europe. The responsibility for organizing the event keeps on changing to a new organizing committee from each event to the next. The organizing tasks such as building the event's agenda, public mobilization, fund raising, logistics of the meeting and running the ICT infrastructure are knowledge-intense. As the responsibility for the organization of the forum keeps on rotating to a new organizing committee, it is a very interesting case to understand technology appropriation in such transnational community networks. The findings of this dissertation provide guidelines for ICT appropriation in transnational community networks and highlight barriers in technological adoption in this sector, so that customized design solutions can be developed in future.

1.3 Contributions to the Field

During the course of my work following papers have been published:

- 1. Saeed, S.; Rohde, M. and Wulf, V. (2009) "Technologies within Transnational Social Activist Communities: An Ethnographic Study of the European Social Forum" in Proceedings of the 4th International Conference on Communities and Technologies (C&T 2009), Pennsylvania, USA, 25-27 June 2009.
- Saeed, S.; Pipek, V., Rohde, M. and Wulf, V. (2010) "Managing Nomadic Knowledge: A Case Study of the European Social Forum" in Proceedings of the 28th Conference on Human Factors in Computing Systems (CHI 2010) Atlanta, GA, USA, 10-15 April 2010.
- 3. Saeed, S. and Rohde, M. (2010) "Computer Enabled Social Movements? Usage of a Collaborative web platform within the European Social Forum" in Proceedings of the 9th International Conference on the Design of Cooperative System (COOP 2010) Aix en Provence, France, 19-21 May 2010.
- 4. Saeed, S.; Rohde, M. and Wulf, V. (2011) "Communicating in a transnational network of social activists: The crucial importance of Mailing list usage" in Proceedings of the 17th CRIWG conference on collaboration and technology Lecture Notes in Computer Science Volume 6969, Paraty, Rio de Janeiro, Brazil, 2nd -7th October 2011.
- 5. Saeed, S.; Rohde, M. and Wulf, V. (2011) "Analyzing Political Activists' Organization Practices: Findings from a Long Term Case Study of the European Social Forum" *International Journal of computer supported collaborative work* volume 20(4-5), pp. 265-304.
- 6. Saeed, S.; Rohde, M. and Wulf, V. (2012) "Conducting ICT Research in Community Networks: Reflection from a long term case study of European Social Forum" Accepted in *Journal of Community Informatics*.

1.4 Overview

The dissertation can be broadly categorized into three sections: The introduction part covers state of the art and research approach, whereas the second part focuses on empirical data and the last section highlights findings and conclusion. In the following lines I describe briefly the contents of each chapter.

Chapter 2 discusses state of the art to give background information about the topic under discussion. It provides an overview of Computer Supported Cooperative Work (CSCW) literature focusing on coordination, knowledge management and technology appropriation aspects. This chapter also discusses ICT usage in social activists' settings. Chapter 3 provides a detailed analysis of the methodology adopted during my research work. I discuss the case settings in detail along with employed research methods. Furthermore, I highlight problems for carrying out ethnographic field studies in such settings, as a guideline for other researchers.

Chapter 4 discusses coordination practices of ESF activists during the organizing processes of ESF 2008 and ESF 2010 in Malmo and Istanbul. Technology usage in organization practices is also discussed to understand ESF technological needs.

Chapter 5 takes a look at the transfer process of organizing knowledge among ESF activists, responsible for organizing the event. The framing conditions of this specific knowledge are quite different from traditional knowledge. The chapter provides insights in weaknesses of the knowledge transfer process and the resulting problems.

Chapter 6 takes a historic perspective on technology evolution in the case settings. Furthermore, this chapter discusses the results of a user-centered evaluation of two ICT artifacts used in field settings. I selected a mailing list and a web 2.0 collaborative platform, known as OpenESF. This analysis helps to understand the usage of basic technology (mailing list) and web 2.0 artifacts (OpenESF) among social activists' settings.

Based on the empirical data, chapter 7 presents a discussion on findings and also highlights design implications, whereas the last chapter summarizes the findings and provides a conclusion of the carried out research.

2 Related Work

The focus of this thesis is on technology appropriation in community networks specifically focusing on ICT support in knowledge management and coordination work practices. In this chapter I introduce studies on technology appropriation, knowledge management and coordination work from CSCW literature along with a section highlighting ICT usage in activists' settings. I also discuss the previous research conducted in ESF settings and the knowledge gaps, which this dissertation aims to fill.

2.1 Technology Appropriation

Successful technology intervention in an application domain happens when a majority of users establish the intended use of technology artifact in practice. In order to increase the probability of success, user centered design approaches [cf. Galer et al, 1992; Vredenburg et al., 2001] advocate to focus on users to accommodate their needs while designing the system. Despite this the tasks of users and designers were considered mutually exclusive and technology use and technology design timelines were clearly separate and independent of each other. In order to further raise the chances of user acceptance the designing for change notion came to the fore. This advocated for flexibility in system design to support different organizational and user contexts, which is commonly termed as tailorability of ICT artifacts [cf. Trigg et al, 1987; Henderson & Kyng, 1991]. The notion of tailorability leads to the concept of technology appropriation. Dourish [2003] describes appropriation in the following words:

"Appropriation is the way in which technologies are adopted, adapted and incorporated into working practice." (pp.466)

Tailorability of ICT artifacts can be realized at architectural and user interface level. The focus of architectural flexibility is on developing flexible systems adapted to their usage, whereas in other case focus remains on its presentation to users. Object-oriented paradigm [Mørch 1997] and component-based development [Fischer 1994; Stiemerling & Cremers, 2000; Mørch et al. 2004; Wulf et al., 2008] approaches have been used to achieve architectural tailorability. Tailorability support at the user interface level is quite complex due to varying skill levels of heterogeneous potential users; diverse set of requirements [cf. MacLean et al. 1990] and to anticipate their required changes is also quite difficult [Stevens et al. 2006]. The best approach is to have a tradeoff between complexity and tailorability level, so that expert users can have more flexibility as compared to novice users [cf. Costabile et al. 2006]. As a result customization, integration and extension are three levels commonly used for interface tailorability [cf. Henderson & Kyng, 1991; Mørch, 1997a]. Customization is the basic level where predefined configuration settings are present and by changing the parameters an appropriate set of configuration is loaded. At integration level different modules are combined together using some scripting or plug-in mechanisms whereas extension level focuses on adding new functionality by enhancing or developing new code. In order to support end users in easily tailoring artifacts, different approaches such as end user development have emerged [cf. Teege, 2000; Lieberman et al, 2006]. Many studies [cf. Silverstone & Haddon 1996; Dourish 2003; Pipek, 2005; Balka & Wagner 2006; Stevens 2009] in computer supported cooperative work literature highlight how users adopt technology in their work practices. Pipek et al. [2006] describes that supporting users in appropriating technology in less professional settings (such as home/volunteer settings) is quite beneficial for users. Despite this, networks of social activists are one such application area where supporting efforts for technology appropriation are quite sparse. In order to further strengthen my point; in the next section I discuss the state of the art regarding technology usage in social activists work settings.

2.1.1 Technology Usage by Social Activists

With the advancements of ICTs, new opportunities for political activism have emerged [cf. Trigg, 2000; Surman & Reilly, 2003]. There are several studies that focus on ICT usage in support of organizing tasks such as information dissemination, fund raising, information management within a single activist organization. McPhail et al. [1998] applied a participatory design methodology for realizing a database system within a Canadian non-profit organization working on reforming the Canadian justice system. The objective of the prototype was to improve information access by providing centralized information storage about members, volunteers, fund raising and other similar organizational activities. By doing so the project volunteers had acquired a better understanding of their work practices and the willingness to experiment with technologies had grown. Taking a gender perspective, Pini et al. [2004] looked on the use of discussion lists by an Australian group of farm women. They highlighted that mailing lists transformed the farm women's lives, as they helped them to adopt new identities such as community leaders and political activists.

| | Working Domain of Case | Empirical Study/Technology Design | ICT Artifacts | ICT Supported Practice(s) |
|--|--|---|---|---|
| McPhail et al. [1998] | Reforming Canadian justice system | Participatory design | Database system | Organizational information management |
| Pini et al. [2004] | Australian farm women | Empirical study | Discussion list | Intra-group communication |
| Farooq [2005], Farooq et al.[2005; 2006] | Sustainable watershed planning | Participatory design | Websites, wikis | Improving day-day organizational work |
| Sen et al. [2010] | Education provision to underprivileged children | Empirical study | Yahoo! groups, Microsoft distribution lists, Facebook etc. | Coordination activities, fundraising, and community building |

Table 2: Research Efforts of ICT in Individual Organizations

Farooq et al. worked with local community groups to improve their organizational work by introducing them to ICT artifacts such as websites and wikis. They helped volunteers to get involved in the development process to enhance technology sustainability [cf. Farooq et al., 2005; Farooq, 2005; Farooq et al., 2006]. Sen et al. [2010] analyzed the work practices of a Seattle-based activist organization, working to educate underprivileged children, and found that a single web application, such as Facebook, Yahoo groups, Microsoft distribution lists, could not help activists with all their tasks. Instead, a combination of multiple social web applications better supported the differentiation of tasks. Most activists were good at using multiple applications; others preferred to stick with one application even though it might be limited in its functionality. They used applications to coordinate activities for fund-raising and for electronic community-building.

| | Working Domain of Case | Empirical Study/ Technology Design | ICT Artifacts | ICT Supported Practice(s) |
|--------------------------------------|---|---|--|--|
| Pilemalm [2002] | Multiple Swedish trade unions | Participatory design | Web-based prototype (mailing list, discussion and bulletin boards) | Organizational information management |
| Kavada [2005] | Human rights, poverty and justice organizations | Empirical study | Websites | Information provision, resource generation, organizational networking, public participation, political campaigning |
| Goecks et al. [2008] | Multiple domains e.g. humanitarian, education. | Empirical study | Websites | Fundraising |
| Torres- Coronase et al. [2010] | Multiple Catalonian organizations dealing with children, elderly, immigrants, drug addicts etc. | Empirical study | Websites | Day-day organizational tasks |
| Saeed et al., 2010 | Community development, health care, capacity building | Empirical study | Websites, email communication | Day-day organizational tasks |
| Voida et al. [2011] | Multiple organizations dealing with education, environment, health, human services, foreign affairs, and public benefit | Empirical study | Information management tools (databases, excel files etc.) | Information management of volunteer information |

Table 3: Research Efforts of ICT in a Set of Multiple Organizations

Similarly, some researchers have investigated multiple non-profit organizations. Pilemalm [2002] worked with Swedish trade union activists to explore ICT needs and to develop

technological requirements for a web-based prototype system to support trade union shop stewards. In her empirical work, she found that activists mainly used simple applications such as email lists, discussion for and bulletin boards for knowledge sharing purposes. Kavada [2005] investigated into three non-governmental organizations (Oxfam, Amnesty International and World Development Movement) in the United Kingdom and found that organizations hesitate to invest into ICT infrastructure. Moreover, she pointed out that the use of Internet differed among the organizations based on their organizational culture and goals. Goecks et al. [2008] analyzed the potential of collaborative technologies in fund raising activities of non-profit organizations. They proposed two models for non-profit fundraising and discussed research opportunities for collaborative computing in this domain. Similarly, Torres-Coronase et al. [2010] described the advantages of using ICTs and web 2.0 applications in non-profit organizations based on their analysis of third sector organizations in Catalan region. They concluded that it is important to understand the main obstacles in integrating ICTs and web 2.0 in their organizational strategy and also to see how technology can help them to carry out their mission and to improve the public image. Saeed et al. [2010] have empirically investigated Pakistani NGOs to understand the current level of technological usage. They highlighted that lack of funding hinders these organizations to invest into their technology infrastructure; as a result these organizations even did not had their own websites. Furthermore, in most of the organizations technology use was only limited to email communication. Voida et al. [2011] had a look at how information about volunteers is managed in non-profit organizations and found that activists used variety of information system tools ranging from database systems to paper-based records. The selection of tools depends upon availability and volunteers skills.

| | Working Domain of Case | Empirical Study/ Technology Design | ICT Artifacts | Technology Supported Practice(s) |
|----------------------------|---|---|------------------|---|
| O'Donnell [2001] | Irish women organizations | Empirical study | Mailing list | Inter-organizational communication and networking |
| Rohde [2004] | Iranian NGO resource center | Technology tailoring | BSCW | Social networking of NGOs |
| Mclver [2004, 2004a] | Transnational NGOs at WSIS | Empirical study | | Collaborative multi- lingual writing |
| Stoll et al. [2010, 2010a] | Network of NGOs in support of human trafficking victims | Empirical study | | Inter-organizational coordination |

Table 4: Research Efforts of ICT in Network of NGOs

Finally, there have been research efforts analyzing the role of ICTs in complex networks of non-profit organizations. O'Donnell [2001] investigated mailing list usage by women organizations in Northern Ireland. She found that institutional affiliations prevent mailing lists from becoming effective, since activists assume that their messages may be perceived as the official standpoint of their organization. Furthermore, members did not participate

in discussions actively, as activists reported difficulties in expressing their opinion without knowing the list's members. She also observed that members used mailing list only for international networking, but not for local activities. Rohde [2004] applied an Integrated Organization and Technology Development (OTD) process [Wulf & Rohde 1995] to improve the social network among Iranian NGOs. He introduced and tailored BSCW, a web-based cooperation platform, in a series of workshops in which activists from different NGOs participated. As a result of this work, he emphasized on the need for an active cooperation of the Iranian NGO community for their long-term sustainability. Furthermore, Mclver [2004; 2004a] elaborated on a set of design requirements for supporting collaborative multilingual legislative work among transnational NGOs. The requirements were based on his experiences while preparing legislation at the World Summit on the Information Society (WSIS). Stoll et al. [2010; 2010a] studied the interorganizational coordination of non-profit organizations dealing with victims of human trafficking. They realized that the political affiliations and preferences of the actors involved have a significant impact on the choice of collaboration partners. They further highlighted that individual actors are more important than organizational affiliations. Even in case individuals left an organization, the personal linkages remain while the connection between the organizations may break. They found informal coordination vital for coordination among non-profit networks.

In this work technology appropriation perspective focusing on coordination and knowledge management practices among social activists is discussed. So in the next sections I describe the CSCW standpoint about these concepts.

2.2 Coordination

The accomplishment of cooperative work is inherently a complex process, since it requires effective coordination among workers along with technical skills to carry out their respective tasks. Schmidt & Bannon [1992] define it as follows:

"Cooperative work is, in principle, distributed in the sense that decision-making agents are semi-autonomous in their work in terms of the unique situations and contingencies they are faced with locally as well as in terms of goals, criteria, perspectives, heuristics and interests and motives." (pp. 18)

Coordination is a vital activity in cooperative work and as a result it has remained a vital research topic in CSCW literature. Three key concepts have been introduced in CSCW literature to coordinate activities, which are articulation work [Schmidt & Bannon, 1992], coordinating mechanisms [Schmidt & Simone, 1996] and ordering systems [Schmidt & Wagner, 2004]. Schmidt & Bannon [1992] presented the concept of articulation work in CSCW literature, based on Anselm Strauss's work in Sociology [cf. Strauss, 1985; Strauss 1988].

"Articulation work arises as an integral part of cooperative work as a set of activities required to manage the distributed nature of cooperative work." [Schmidt & Bannon, 1992, pp.18]

The definition describes that cooperative work involves division of labor regarding tasks and actors. These actors use their strategies and skills to carry out interdependent tasks and in the process completing cooperative work. In contrast to coordination, articulation work also focuses on negotiation aspect of work distribution. Taking it further Schmidt & Simone [1996] define coordinating mechanisms as follows:

"A coordination mechanism is a specific organizational construct, consisting of a coordinative protocol imprinted upon a distinct artifact, which, in the context of a certain cooperative work arrangement, stipulates and mediates the articulation of cooperative work so as to reduce the complexity of articulation work of that arrangement". (pp.180)

In order to facilitate articulation work, coordination mechanisms provide an artifact-based support to actors, where coordinative protocols are highlighted. In order to provide a standardized mechanism for developing coordination mechanisms, Simone et al. [1995] have proposed a generic semantic notation named as ARIADNE. In complex cooperative work environments the number and complexity of artifacts and associated practices become difficult. In order to better support the actors, these practices and artifacts should be structured. Schmidt & Wagner [2004] further proposed the concept of ordering systems in the following words:

"Ordering systems are finally multi-level constructs in the sense that identification and classification schemes are expressed at different levels of abstraction. They are like generative schemes, flexibly instantiated in different forms as required. Thus, we can observe that the schemes underlying different ordering systems have strong family resemblances." (pp.403)

The ordering systems involve practices, artifacts, classification schemes, notations, nomenclatures asf. to better support the cooperative work. Since organizing work in community networks is also quite complex, my focus is to investigate how coordination takes place in volunteer settings of transnational social activists and whether such kind of coordination phenomenon are employed in practice.

2.3 Knowledge Management

The topic of knowledge sharing in organizational settings has been extensively explored in CSCW and Human Computer Interaction (HCI) communities. A specific focus has remained on the role of ICT artifacts in knowledge sharing processes [cf. Ackerman, 1998; McDonald & Ackerman, 1998; Lutters & Ackerman, 2002; Halverson et al., 2004; Reichling & Wulf, 2009]. In terms of traditional organizations, Fitzpatrick [2003] has empirically analyzed a branch of a government department and discussed expertise sharing practices in newly established groups. Looking at less traditional organizational settings, Pipek & Wulf [2003] analyzed the merits of the Answer Garden approach to foster knowledge sharing among a steel mill and its engineering office which provided maintenance engineering services. Pipek et al. [2003] studied a network of trainers and consultants to find out obstacles in knowledge sharing and expertise location. Reichling

& Veith [2005] looked at expertise sharing practices in a major European industrial association and the network of its member companies. While some of these studies took place in organizational networks rather than in traditional organizations, the set of actors involved in knowledge sharing was rather stable and knowledge sharing activities happened in a rather continuous manner.

A second line of work looked at knowledge management process of nomadic workers who spend a high portion of their working hours outside their offices [cf. Kammas et al., 2003; Becerra-Fernandez et al., 2007; Foley, 2007; Pawar et al., 2007; Mark & Su, 2010]. Orr's [1996] seminal study on service technicians describes the way they pass knowledge within their occupational community. Fagrell has investigated into knowledge sharing practices of mobile workers, such as electricians [Fagrell et al., 1999] and journalists [Fagrell & Ljungberg, 2000]. The complexity of mobile work makes knowledge sharing quite a challenge, also with regard to an appropriate design for fitting ICT artifacts. Lyytinen & Yoo [2001] suggest the term 'nomadic knowledge work' to describe mobile workers' activities of managing, organizing and sharing information at four levels (the individual, team, organizational and inter-organizational level). While their dislocation makes knowledge sharing a challenge, nomadic workers belong to rather stable occupational communities that interact on a regular basis.

The term 'nomadic knowledge' has occasionally been used to describe the phenomenon that workers change organizations or work places frequently ('nomadic workers') while their know-how is also moving with them. For instance, Pittinsky & Shih [2004] call workers who change their organizations frequently 'knowledge nomads'. Miller [2001] attributed the indigenous knowledge possessed by nomads in China's rangelands as 'nomadic knowledge'.

Although Bechky [2006] has described how temporary organizations coordinate their work through role systems but there are only a few studies which have focused on knowledge sharing practices in civil society organizations. Smith & Lumba [2008] investigated into an international non-governmental organization network (One World International) to identify knowledge sharing practices and the inherent challenges. Similarly, Klein et al. [2005] have helped NGOs working for children rights in Africa by designing a learning environment for sharing ideas and best practices. However, knowledge management has not been looked in transnational voulanteer settings, where there is a clear time lag before knowledge is required by a new set of actors, and during this interval knowledge holders may not be interested or present to share the knowledge.

2.4 Social Fora as a Research Setting

Due to its political importance, social for have been an interesting research setting, especially for political scientists. Most of them focused on their role in global politics, organizational structure and associated challenges [cf. Conway, 2002; Fisher & Ponniah, 2003; Sen, 2004; Patomaki & Teivainen, 2004; Santos, 2006; Smith et al., 2008]. Similarly some researchers have focused on the European Social Forum, which is the case setting for my research as well. Dowling [2005] has looked at the organizing

process of ESF 2004 in UK and described her experiences. She further documented events where her personal ethical and political thoughts clashed with the dominating actors in the forum. Doerr [2007] has looked how the decision-making process at ESF assemblies involves the perspective of resource-starve organizations. She further describes the strategies which are employed by these organizations to establish their own transnational networks. Doerr [2009] has further compared the ESF assemblies with local assemblies in UK and Germany to analyze how multiple languages affect democratic discussions and decision-making processes. She found that multiple languages do not reduce the quality of democratic deliberation as compared to national meetings. She further described that lack of information, transparency and informal power struggles indirectly reduce the accessibility of European meetings. Similarly Haug et al. [2009] have looked at the decision-making process during the European Preparatory Assemblies of ESF and defined control mechanisms used by different actors to influence decision-making processes in ESF assemblies. Moissonnier [2009] has looked at different thematic networks formed around the European Social Forum to evaluate their impact on the global justice movement. He described that though these networks help in preparation of the European Social Forum, they become a place of conflict when strategies are defined beyond the scope of ESF.

Some researchers have also looked at the technology aspect of ESF. Nardis & Alteri [2011] have investigated the European Social Forum and concluded that despite the usage of emails and other internet tools, activists prefer physical meetings as compared to online tools. Juris et al. [2008] have analyzed the importance of open source software applications for social activists by providing a comparative analysis of World Social Forum (WSF), European Social Forum (ESF) and United States Social Forum (USSF). Kavada [2009] has worked empirically on the role of mailing lists in the preparation process for ESF 2004. She described that three parameters, namely mailing list objectives, accessibility and geographical diversity of participants help to change the level of collective identity. She further highlighted that email communication increases the reachout of the movement. However, email overload, the lack of trust in solely email contacts and the vulnerability towards misunderstandings can lead to the fragmentation of the political process [Kavada, 2009a]. Fuster-Morell [2009] has investigated into user participation with regard to the collaborative platform of the ESF. She described that involvement of heterogeneous organizations in the ESF process creates tensions in adopting online platforms especially focusing on individual versus organizational participants and open versus closed control. In one of my earlier paper [Saeed et al., 2010a] I carried out a post-event analysis to understand the technology usage in the organizing process of 2006 World Social Forum held in Karachi, Pakistan. It was observed that despite the technological awareness the organizing committee was not able to provide much of ICT infrastructure. Despite the shortage of funds, the organizing committee had to outsource the development of website, due to lack of volunteers having technological background. Despite these initiatives, a clear focus on technology support in organizing and knowledge management practices among heterogeneous social activists participating in social fora have not been explored.

2.5 Knowledge Gaps

Reflecting on the state of the art, it could be observed that most of the studies focusing on technology usage by social activists highlight that inter-organizational coordination, information management, fundraising and collaborative writing are challenging tasks within networks of political activists. They mainly seem to indicate positive effects of ICT usage. Despite their promises, advanced ICT tools supporting collaboration are seldom used by social activists. Instead rather mundane applications, such as email, get appropriated to a vast variety of different tasks. Similarly the technology focus in prior research on ESF has been quite sparse. None of these studies has looked at the organization of large political events and associated knowledge management, coordination and technology evolution practices, specifically in a transnational context. In order to explore the potential of ICT applications for transnational networks of political activists, there is a need for empirical work on these computer-supported practices. Keeping this in mind, I specifically focus on ESF to understand technology evolution, coordination and knowledge transfer practices among ESF activists.

I take a historical look on technology evolution from 1st ESF to date, to understand the difficulties in technology transition among ESF organizing committees. In order to understand the current level of technology usage I look into one basic technology artifact (mailing list) and a web 2.0 collaborative platform (OpenESF). The organization of huge political gatherings such as ESF requires extensive information management and coordination activities. I particularly investigate in the coordination processes leading up to the ESF to understand how it relates to the notion of cooperative work. Do the CSCW coordination concepts such as articulation work [Schmidt & Bannon, 1992], coordinating mechanisms [Schmidt & Simone, 1996] and ordering systems [Schmidt & Wagner, 2004] should play a role in ESF coordination. A comparative analysis between both ESF events and their organizational practices provide more insight about technological support in coordinating political activities. Since the ESF organizing committee keeps on changing each time, the prior organizing knowledge could be very helpful for new set of actors. I term this specific knowledge as "nomadic knowledge" (see chapter 5). In studying nomadic knowledge around the organization of the European Social Forum, I try to explore who is interested in using, documenting and sharing knowledge at a specific time and along what mediation paths the knowledge "travels". My design-oriented analysis aims at identifying design challenges and requirements for ICTs to support cooperative practices of transnational political actors.

3 Research Design

In this chapter I explain the research approach, which I followed to find answers to my research questions. I decided to use a practice based approach [Wulf et al., 2011], so the first step was the selection of appropriate case setting. I opted to focus on a transnational network of activists. Since these networks are loosely connected and activists come together temporarily for particular events or specific campaigns, this enabled me to understand the complexities of their working. The empirical data that I gathered is based on the anti-globalization movement, which focuses on problems resulting from economic and political globalization. This movement is supported by individual activists as well as members from community-based organizations, NGOs, activist groups, think tanks, trade unions, labor organizations, professional associations, cultural groups, religious organizations, informal citizen organizations, foundations, commissions, cooperatives, clubs, campaigns, charities asf. The movement is characterized by a non-hierarchical structure, the absence of a recognizable central leadership as well as a decision-making process by means of consensus. This movement organizes a regular global event called the World Social Forum (WSF), which is a central point for knowledge sharing as well as for the dialogue and social networking among the actors of this movement. WSF started in 2001 at Porto Alegre, Brazil and moved to Asia and Africa as well in subsequent years. WSF charter emphasizes that the forum is not a decision-making body, but an open discussion forum for knowledge sharing and for the coordination of common actions [WSF, 2008].

The success of the social forum concept has gained extensive recognition and resulted in many thematic and regional fora, having their independent organizing processes. The success of the movement can be seen by the fact that only in year 2010, 42 different fora have been organized in different regions of the world. I specifically investigated into the organizing process of the ESF, which is a European level platform for activists. In the next section I describe ESF setting in detail.

3.1 Case Setting

ESF follows the charter of the World Social Forum and has its own independent organizing process. The organizing committee provides the logistic support and finalizes the program based on the proposals submitted by different organizations ranging from seminars, workshops, thematic assemblies, demonstrations and cultural events. The first European Social Forum was held in Florence in 2002. After the 1st ESF, it was decided that this event would take place annually and the European Preparatory Assembly (EPA), which is open for activists from all over Europe, will manage the future ESF process and the local organizing committee will be responsible for providing logistic support. Paris hosted the second ESF followed by London in 2004. After London, the ESF transformed into a biannual event; Athens, Malmo and Istanbul hosted the 2006, 2008 and 2010

events, as shown in figure 1. In my work, I specifically focused on the last two ESFs held in Malmo (Sweden) from September 17 to 21, 2008 and Istanbul (Turkey) from June 30 to July 4, 2010. One of my interviewees described the reason for the layout of ESF as a moving event as follows:

"There are some people who participate in most fora, but I think the whole logic of moving the European Social Forum to different countries every time is that you get different people mobilized to participate in the ESF every time."



Figure 1: Evolution of ESF

The organizing committee responsible for the ESF 2008 was the Nordic Organizing Committee (NOC) and for the ESF 2010 it was the Organizing Committee of Turkey (TOC). The EPA is an open meeting taking place 3-4 times a year, in which any organization, network group or individuals adhering to the charter of the World Social Forum can participate. By means of a mutual consensus, the EPA comes to decisions about the ESF process, mainly focusing on political issues. In order to focus on specific themes and issues, different European thematic networks have emerged, e.g. labor and globalization, public services, anti-repression. These networks attract activists and organizations interested in these specific themes and are an important platform for political actions on those particular topics. There is a day before each EPA meeting dedicated to network meetings, so that activists and organizations participating in the ESF are also able to join these network meetings. The Web-Team is a group of activists working for the ESF on a voluntarily basis in order to support ICT setup, whereas Babels is a group of volunteer interpreters working at different social fora to translate during seminars. ALIS is a radio-based interpretation system, which was applied during the ESF 2006 in Athens. These people also helped setting up the interpretation equipment at ESF 2008.





Figure 2: Snapshots during an EPA Meeting

In order to get a clear understanding of organizational activities, it is important to understand the organizing practices of the ESF. Initially, activists from a region show their interest to EPA for hosting the ESF. Once the proposal is accepted by EPA, the proposing activists form local organizing committee to involve other organizations in the organizing process. In the meantime, the organizing committee tries to setup an ICT infrastructure and other logistics arrangements to facilitate European activists in proposing potential activities for the upcoming ESF. The activity can be a seminar, workshop, assembly, demonstration etc. To highlight the diversity of proposed activities, figure 3 provides some of the activities carried out during ESF 2010. Once the deadline for proposing activity is expired, the number of activities is reduced according to the availability of logistics. This process of minimizing the number of activities is called "merging" and is normally a two-phase process. In the first phase, called "voluntary merging", different organizations are encouraged to find other similar activities and to merge their proposed activities with them. Once the deadline for the voluntary merging is expired, a team of organizers coordinates this process, makes suggestions for merging and then tries to formulate and propose a program. In the meantime, the local organizing committee tries to arrange for translations during the seminars of the forum by providing volunteer interpreters and arranging equipment for synchronous translation. Furthermore, meeting spaces for the different activities as well as free mass accommodation for activists and volunteers are arranged. Additionally, the organizing committee carries out a European-wide mobilization to attract people to attend the forum. Since I specifically focus on ESF 2008 and ESF 2010, in following lines I describe the structure of the organizing committee in these forums.

The Nordic Organizing Committee consisted of 139 member organizations with participating organizations from Denmark, Finland, Norway and Sweden. The financial decision-making was the responsibility of the board with a central office to disseminate information and a coordination group for channelizing activities. The work was distributed among eleven work groups as described in figure 4. The information work group was responsible for maintaining an event website, coordinating public relations (esp. to press and mass media) and publishing information material, whereas the Logistics

work group was responsible for managing issues like security, transport, venues and infrastructure. A cultural work group managed the cultural programs.



Figure 3: Snapshots of Activities during ESF 2010 in Istanbul

The ALIS work group mainly focused on setting up the ALIS system, used for interpretation during the forum. The program work group was responsible for organizing the program of the Malmo event, the demonstration work group was responsible for preparing and managing the demonstrations during the forum. The fund-raising work group dealt with arranging the financial guarantees for the event and the duty of the contact group for Europe and the world was to mobilize for the ESF 2008 event in Europe and other regions. An additional mobilization work group focused on the regional mobilization efforts in Sweden. The interpretation work group was responsible for the synchronous translation during the forum, whereas the volunteer work group was responsible for the mobilization and coordination among volunteers [ESF, 2008].

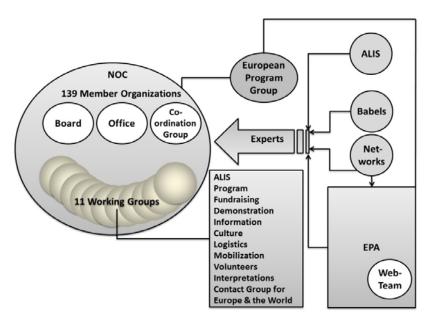


Figure 4: Organizing Committee of the ESF 2008

On the other hand, the TOC was composed of 70 organizations from the Turkish and Kurdish regions. In order to better coordinate the mobilization and organizing activities, a moderation committee was set up which included five main trade unions of Turkey. There were six different work groups as shown in figure 5, which were active at some point during the organizing process.

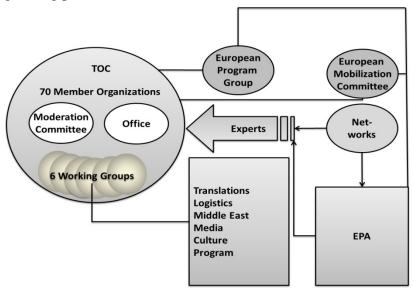


Figure 5: Organizing Committee of ESF 2010

The translation work group was responsible for managing the translations during the seminars, the logistics work group was responsible for arranging rooms and accommodations, the media work group was responsible for spreading information and the Middle East workgroup was focusing on mobilization efforts to highlight problems in this region. The culture work group was responsible for arranging cultural activities and the program, work group was responsible for assembling the program. In order to

promote mobilization especially in eastern European countries an all European mobilization committee was established, consisting of European activists.

| | ESF 2008 | ESF 2010 |
|---|------------------------------------|-------------------------------|
| Venue | Malmo, Sweden | Istanbul, Turkey |
| Size of the hosting committee | 139 Organizations | 70 Organizations |
| No of work groups | 11 | 6 |
| No of activities in final program | 272 | 225 |
| No of attendees | 12,000 | 3,000 |
| Participants in activities | Mostly full | Limited |
| Participation of local activists | High | Low |
| Interpretation tool | ALIS | None |
| Responsibility for arranging interpreter volunteers | Babels Group | TOC |
| ICT support | Web-Team | None |
| Mobilization efforts | 2 dedicated work groups | Mostly individual initiatives |
| No. of proposals submitted | 800 | 300 |
| Babels presence | Yes | No |
| ALIS presence | Yes | No |
| Budget | 600,000 Euros | 100,000 Euros |
| Website developer in organizing team | Outsourced to a Greek developer | None |
| Presence of preceding organizers in EPA meetings | Active presence | Inactive |
| Prior participation of organizers in ESF process | Low | Good |
| Number of interpreters | 380 | 130 |
| Information access for activists | Timely | Delayed |
| Number of participants | 12,000 | 3,000 |
| Number of participants in demonstration | 15,000 | 5,000 |
| Number of volunteers | 350 | 30-40 |
| Number of activities in final program | 272 | 225 |
| Program venues | Distributed | Central (2 places) |
| Merging process | Two phased (voluntary and managed) | Only voluntary |
| Simultaneous interpretation in seminars | Mainly not working | Mainly not working |
| Documentation of seminar proceedings | No | No |

Table 5: An Overview of ESF 2008 and ESF 2010

The organizing structure highlights that the Web-Team, ALIS and Babels were all missing in the organizing process of ESF 2010, which ultimately increased the burden and problems of TOC. Table 5 provides an overview of differences and similarities of the ESF 2008 and ESF 2010. The limited number of organizations involved in TOC implied that there were fewer organizations, which could input their resources (human and financial) to arrange the logistics but also to secure a strong local participation during the forum. As a result, there were only six work groups and the organizing tasks were not carried out perfectly. There was a rather low level of mobilizing activities, organizing tasks were delayed and there was a lack of information for the activists. This fact became evident, as the committee was only able to attract some 3000 attendees, which were way less than

previous ESFs. As a result most of the activities, seminar and workshops had rather few attendees.

3.2 Research Methods

In order to find answers to my research questions, empirical data was gathered from January 2008 to October 2010 using an ethnographic action research approach [Hughes et al., 1994; Randall et al., 2007]. The reason for adopting ethnographic approach was to understand the complexities of work practices as they are performed in real world settings [cf. Garfinkel, 1967; Garfinkel, 1974; Crabtree et al, 2000]. In order to have sufficient empirical bases, I decided to gather empirical data from two ESF cases. The first case took place in September 2008; I gathered empirical data, analyzed it and came up with some design guidelines. I discussed these design guidelines with activists using paper-based mockups. In order to further evaluate the appropriateness of design ideas, I performed a second analysis cycle after ESF 2010 as shown in figure 6. I again analyzed the new set of data and compared to the old set of data to understand differences and similarities.

The data collection has been carried out using triangulation of research methods, which included semi-structured interviews, participant observations and a content analysis of relevant documents and web sites. The semi-structured interviews were conducted with thirty-one activists participating in the ESF. These interviews were recorded to avoid a loss of information. The interviews were conducted at different time intervals which could be categorized into four sets (mainly before and after the ESF in 2008 and 2010). The initial set of interviews (before the ESF 2008) focused on understanding the work processes and the ICT applications involved. The second set of interviews (after ESF 2008) mainly focused on the evaluation of the ESF and problems related to technology use. The third set of interviews (during the ESF 2008 and the ESF 2010) focused on the transition process, the planning and the preparation of the ESF 2010, whereas the focus of the last set of interviews was mainly on the evaluation of the ESF 2010. The interviewees participated in the ESF activities in different capacities such as organizers, volunteers, participants and technology developers. In order to have a multicultural perspective, interviewees were chosen from different countries, six interviewees were from Greece, five from Italy and four each from France, Germany and Sweden, two each from Turkey and the UK and one each from Norway, Czech Republic, Austria and Hungary. The actors who were involved in organizing the two events were interviewed multiple times to understand the progress of work and future plans. Overall, I ended up with some twenty hours of audio-recordings of these interviews.

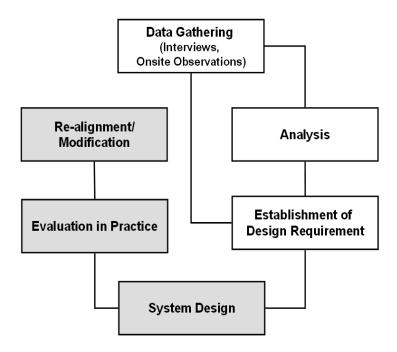


Figure 6: Research Methodology Cycle

Due to language and logistical problems with some participants four interviewees responded via e-mails. Furthermore, three Skype text chat meetings were attended. One of these chats was a meeting of the Web-Team of ESF 2008, in which participant observations were conducted. The other two meetings were held with TOC representatives to learn about the planning of the ICT setup during ESF event in Turkey. Moreover, for the participant observation, I carried out eight different field visits lasting 26 days in total from 2008 to 2010. I visited the European preparatory assemblies held in Berlin (Germany), Vienna (Austria), Athens (Greece), Istanbul (Turkey), Paris (France) and the ESF 2008 in Malmo (Sweden) as well as the ESF 2010 in Istanbul (Turkey). Content analysis was carried out on the websites, mailing lists and other official documents like minutes of meetings. In order to avoid a loss of information all the interviews were transcribed and the field notes were written down. The data analysis was based on a grounded theory approach [Strauss & Corbin, 1998]. I did not develop any hypothesis before the fieldwork, instead I explored the field by collecting empirical data. Then, the empirical material was clustered to understand problems and issues. The assumptions are driven from the empirical findings as recommended by grounded theory.

3.3 Challenges in the Field

The difficulties associated with an action research approach are well known, as it requires an extensive amount of work and time to understand the organizational structure, influential actors, working methodologies and to develop a trusting relationship. However, these problems are further compounded in the case of political activist networks. In the following lines, I will discuss the implications for fieldwork in the ESF.

3.3.1 Access to the Field

The first methodological consideration was the question of how to carry out empirical studies in such loosely-coupled and fluid organizational network. One approach was to focus on some participating organizations and to observe how they work under the umbrella of the ESF or secondly, to only focus on the meetings of the ESF where all participating actors converged. It was observed that in order to fully understand the dynamics of communication in such organizational setting, a focus on ESF meetings was more helpful as one could analyze the responses and the feedback of all other stakeholders. This in turn required an extended time, because currently the ESF is held bi-annually. In order to have enough empirical data, it became clear that I had to gather empirical findings of at least two such events. Furthermore, the European preparatory meetings were only scheduled every 3-4 months. Thus, in order to gain sufficient empirical data, I needed considerable time.

Another difficulty was getting access to the physical meetings. The official website of the ESF was not regularly updated and the websites of former ESF fora were also no longer active. I tried to find e-mail contacts of activists involved in the ESF via internet and emailed a number of them. Luckily, I received a response from one activist who also volunteered for the website maintenance. She invited me to the next EPA meeting and I found the starting point for involvement. The absence of a central physical office and the limited online presence made accessing this network quite difficult and it took quite some time to find an actual ESF community and information about their physical meetings.

Later on, I found that these networks are based on a strong personal network structure. Every activist has a strong local network where he/she is based and some of them participate on broader levels such as European or global networks. Therefore, these activists, who participate at more than one level (world/national/regional etc.), are the information hubs that communicate and connect these different levels of social movements. Once you are able to find a person in this network, even if it is on the local level, you can reach activists even in other geographical locations just through their networking.

Due to the increased virtual presence of online content, an online ethnography [cf. Hine, 2000; Wittel, 2000] approach in fieldwork has also gained recognition. This approach may look suitable for loose social networks like the ESF, which have periodic physical meetings but no central office. It has been observed that most of the social organizations lack a well-designed online representation due to lack of financial and human resources. Mostly ICT artifacts in CSOs are result of some volunteer's dedication and fade away quickly once the volunteer loses his interest. As a result important organizational data supported by respective ICT artifact also gets lost. Furthermore, if some organizations are successful in setting up some ICT tools, their continuous maintenance becomes a complex task and software artifacts may not reflect current work practices. This shortage of consistent, updated online organizational data highlights that only online ethnography may not be a suitable approach. Instead ethnographic study in the field

along with evaluation of online resources is most suitable strategy to gather correct empirical data.

3.3.2 Balanced Information Access

Another important obstacle in empirical work is the difficulty of accessing information. It is always important to understand historical and contextual information, but the majority of voluntary networks do not maintain any documentation of their work. They normally lack workforce, which actually means that most of the tasks are carried out by only some "dedicated" individuals and only they know firsthand information, which creates limited transparency. In order to deal with this issue, I first analyzed the roles of activists, whether they participate only once as some kind of visitor or whether they are regular participants, organizers etc. As a result, conducted interviews were of different length and different sets of questions were used based on the interviewees' engagement level and background. Sometimes it was difficult to get multi-perspective view about some practices, as majority of the tasks were carried out by single individuals.

Due to this uneven presence of information among actors, many times conflicting statements appear in interviews. This makes the situation very difficult, as it turns out to be difficult to know whom to trust. The best approach would be to enlist multiple views on an issue and see at which point the perceptions of people converge. Due to rapid changeover of ESF organizers and the absence of an organizational knowledge base, people who remain participants of the process from the beginning onwards, turn into knowledge experts and gain strategic importance. Sometimes these people may not be willing to share information with researchers attempting to document their knowledge. In the absence of documented knowledge, their personal profile becomes strategically important as a knowledge source.

On the other hand, some activists may refuse to reproduce old information as they become passive and so they may not want to talk about past events. Another important obstacle while conducting the interviews was the availability of activists. EPA meetings provide activists a chance to (re) establish their own contacts, which leaves them with little time to engage in other activities. As a result, I established contacts with potential interviewees and discussed briefly about my work, and only later, I conducted telephonic interviews.

Since social activists are politically sensitive, therefore, social activists need to be sure about your identity before they share any knowledge, as they may fear encountering an agent of some sort. The establishment of trust requires a regular contact in the form of meetings, but since the EPA meetings are less frequent, it takes a long time to establish trust with political actors. Since the actors joining the ESF do not belong to a single but rather to different organizations that have their own motivations, the establishment of trust becomes an even more complex task. Furthermore, the organizing committee changes for every ESF, so one has to establish trust again with each new group of actors. However, this can be achieved by participating in the group's activities, such as offering minute writings support during their meetings or the maintenance of websites etc.

It was also observed that some activists do not want to talk about ICT issues (despite using e-mail regularly) as they think that they do not have enough knowledge about it. If you ask them to give feedback on ICT usage, they always prefer to refer to other people in the network that are more tech-savvy. Another important reason for not indulging in information exchange is that there are many researchers focusing on these activist organizations. Being an important platform, the ESF is approached by researchers from social science, political science, organization science, information science etc., but when people from different schools of thought contact them to ask for the same tasks, they become bored quickly. A Swedish activist commented on it in the following words:

"In general, I must say that people here are extremely negative to the researchers because there are so many of them. I asked them about you, another German researcher, and they were saying oh no."

3.3.3 Ad-hoc Nature of Practices

Another important aspect while working with social organizations is that they do not operate under standard operating procedures, which means that they may behave differently towards the same problem at two different points of time, so planning in advance becomes difficult. As a result, predefined technological solutions may not work, and you always have to think of contingency plans during technology design [cf. Hirsch, 2009]. Describing this, one activist commented in the following words:

"You have to be also aware of the limits of the organizational capacities, so it's very difficult to be very well-organized in the process, you have people that have little time in terms of getting the result within the time table of the forum, because they don't work full time for the forum but they work for other organizations they are just participating voluntarily mainly, apart from a little group that is normally in the ESF hosting country and so you have also to take into account this problem."

Furthermore, the decision-making is not supported by a business rationale, instead, it is carried out by agreement of the actors involved. The implication of this aspect for field research is that technical requirements may change due to changes in the working process. I also experienced a similar problem when after the first stage of data analysis (after ESF 2008) I found that many activists were not happy with the process of reducing the number of activity proposals, which made it into the final program.

Some activists doubted that big organizations were able to keep their activities intact and smaller organizations were supposed to combine their activities with other organizations to reduce the program's contents. In order to increase the transparency in this process I proposed to design a software prototype on top of the ESF website. This prototype could graphically show how the merging process took place. However, during the ESF 2010 it was observed that the merging process was not required. Along with weakening of ESF process, many organizations have already realized that in order to attract a bigger audience it was better to merge ones proposal with others, especially local organizations. As a result the number of proposed activities was low as compared

to the available logistics. Most of proposed activities were included in the final program without being merged with other activities, unless someone voluntarily wanted to merge his/her activity with others. So these changes in the working process of ESF implied that transparency in merging process did not remain a prime issue. In order to foresee such requirement changes, it is better to continuously interview activists to acquire updates about their activities.

3.3.4 Multicultural Implications

There were also some common problems, which are associated with every multicultural field setting. Some of the activists were unable to understand English language. I employed different approaches but the activists who were neither able to speak nor read English had to be eliminated. Some activists needed the set of questions beforehand to understand them, whereas some activists only sent back the filled-in questionnaires and declined to be interviewed. An activist highlighted this weakness in the following words:

"Most of the people that participate in the ESF in a broad sense do not necessarily have sophisticated foreign language skills, so they don't have the capacity to maintain a connection internationally."

3.3.5 Skepticism about Technology

Some activists were quite skeptical about technology and were of the opinion that instead of being supportive, technology would hamper their activities. They think that relying on technology is not suitable for political work, e.g. it takes less political motivation to join a political mailing list while sitting at home instead of joining a protest. Furthermore, some activists think that due to the diverse backgrounds of those participants organizing the ESF, an ICT artifact may not attract all the participating actors. The Swedish activist further commented on this phenomenon in the following words:

"I am a bit skeptical because with these organizations in NOC [ESF 2008 organizing committee] we have nothing in common. There is no basis for the Internet tools. Among them there are maybe a dozen who are really actively interested in the European Social forum."

An important reason for such skepticism is the failure of ICT applications to deliver in these settings. Normally, technological introduction in CSOs is a volunteer work, having no accountability. As a result, volunteers introduced tools that they liked irrespective of whether they were appropriate or not. Furthermore, most of these applications happened to be immature, lacking required functionality. As a result, instead of helping, this made people lose their interest in using technology. One Italian activist described this in the following words:

"To adopt one technology or two to put more force and energy in building a web [site] or not, also depends on the personal passions. It was some people that were really into this and they pushed forward and it happened, so it is not a real decision that we want to do that. There is someone who is available to do something, it is ok."

Similar comments were made by another activist who was involved in setting up ICT artifacts of the ESF:

"I think these tools could play a huge role in the events but the people who are coordinating the work of the EPAs just don't care, they are not from this culture, generation, they do not really use the Internet."

The problems which I have previously described could help other researchers to better prepare for conducting fieldwork in such settings. In the next chapter I describe ESF organizing practices in detail to highlight the complexity of the ESF organizing process.

4 Organization Practices at ESF

Apart from the organizational structure of the ESF committees and bodies, the organizing process of the ESF events is also characterized by discontinuities and a "hidden leadership", described by participants as informal decision-making structures beyond the formal committee structure. Not only the organizing committee and the work groups consisted of very different organizations and members with highly diverse interests and experiences, but also the whole organizing process lacked transparency. One member of the NOC gave feedback on the ESF process in the following words:

"First thing is that there is general false information all the time because of a glassy picture that is always presented. That this is a unique process for which one has to be known...that means only people who had attended [former] ESF [events] could be among the professionals running the process..."

Over the years the ESF organizing process got strongly influenced by the informal structures of long-term participants who did not only come to the ESF events themselves but played an important role in the preparation meetings. These people used to gather frequently at the sidelines of meetings of the different committees and also at other events. These informal interactions may lead to decisions in a way that is very often not visible and understandable for newcomers or less strongly engaged participants. An Italian activist added on the issue of hidden leadership at ESF and EPA meetings:

".... in fact we have an oligopoly group, you don't write they are leaders, but if you stay always, it's here. [...] In fact this is the same situation in the IC of the WSF. A lot of people that stayed always in every international council decide more and more than the people that arrive there one time a year [...] but in fact there is a [hidden] leadership - it's a factual leadership, it's not written in every document but if you stay here you decide. If you don't stay here you decide less than the others."

Obviously the ESF organizing process suffers from personal and organizational discontinuities, some participants are able to take part on a regular basis, and others are not. A new committee organizes each event with new members and organizations involved, located in a different European region. The problems that occur with these discontinuities concerning the transfer of organizational "know how" have been analyzed in detail by postulating the concept of "nomadic knowledge" (see chapter 7).

Furthermore, the described informal structure is biased. It mainly consists of Western European "ESF veterans", mostly stemming from better organized and well-equipped organizations with their own priorities and agendas. In a message on the European mailing list on October 17th, 2010 a Hungarian activist commented as follows:

"...we should create a new, transparent and accountable coordinating commission [CC], including progressive movements engaged in green,

feminist, human rights, trade, debt issues or other field. The new CC must include mainly young people and women. The informal "hidden" leadership consisted of mainly ESF-veterans of West Europe should now step back. Eastern Europe must have a much more balanced representation than in the past."

The discontinuities and lack of transparency in the organizing process are partly reinforced by a missing (public) documentation of decision-making and administrative processes. As I will show in my analysis of the "virtual infrastructure" of the ESF (chapter 6), there is not any public "common narrative" of ESF events or a "shared history" of the movement. Neither are there ESF participants who could help with regard to visibility of (formal and informal) processes, and thus, support the building of a collective identity of the ESF community. In order to gain a better overview of the coordination practices, I looked at different organizing activities during the organizing processes of ESF 2008 and ESF2010.

4.1 Communication among the Organizing Members

The organization of such a huge event requires extensive financial and human resources. Most organizing committees are short of both human and financial resources. Although the ESF events are politically very important and people want to be involved by attending meetings and by participating in the coordination activities, normally only a very small number of dedicated people volunteer for the actual execution of the tasks. In case of the ESF 2008, the physical meetings were the main source for coordination among volunteers. These meetings were sometimes collocated with the NOC meetings scheduled every second month. Furthermore, sometimes emails and telephone calls were used to coordinate meetings. Similarly, in the case of the ESF 2010, fortnightly physical meetings were the main communication source among activists who prepared the forum. It was also sporadically supported by phone calls and mailing lists.

4.2 Themes Selection of the Fora

The first important task for the organization of the social forum is to decide on the main themes/categories around which the final program is formed later. In order to ensure that it is an open process, proposals for themes of the ESF 2008 were gathered through the website from September to November 2007. Activists proposed 70 different themes. These themes were clustered by the NOC, as they were quite narrow in their scope. So a proposal was presented by the NOC comprising 7 different themes during the EPA meeting in November 2007 in Istanbul, Turkey. The members of the EPA did not agree on these themes. As a result, the task was handed over to a European work group to further refine them. This work group met in January 2008 in Paris and also in February 2008 before the EPA meeting in Berlin. After the discussions, nine themes were finally approved. Later in April 2008, an extra residual category was added to accommodate all those activities, which could not be combined with other themes.

In case of the ESF 2010, instead of getting web-based proposals from activists, the organizing committee of Turkey presented a proposal of ten themes during the Vienna

EPA meeting in July 2009. The selection of themes was based on their discussions with Turkish organizations in their local meetings. The participants of the EPA meeting raised different objections with regard to the proposed themes. As an example, there was one theme named "war and peace – against war, militarism, occupation and Zionism", to which German activists strongly reacted as they demanded the word "Zionism" to be removed, otherwise they would withdraw from the ESF. As a result, it was decided that these recommendations would be considered in the meeting of the European program work group before the next EPA. After this meeting, the modified list of themes was to be presented again to the EPA. The program work group met on 24th September in Istanbul and reported their work to the EPA in Diyarbakir on September 25th-26th. These themes were never reported on any website or mailing list until the agenda of the next EPA meeting was circulated on the mailing list and on the website in February 2010.

ESF 2008 Themes ESF 2010 Themes 1. 1. Working for social inclusion and social rights-1. Economic and social crises: Resistance and welfare, public services and common goods for alternatives all 2. Social rights for social Europe 3. What kind of democracy? Promoting civil Working for a sustainable world, sovereignty, environmental and climate justice and political liberties 3. Building a democratic and rights-based Europe, 4. In defense of the rights of oppressed against "sectarian" policies. For participation, nations and minorities openness, equality, freedom and minority rights 5. Against fortress Europe 4. Working for equality and rights, acknowledging 6. Equality versus discrimination. Feminist diversities, against all forms of discrimination. alternatives facing the global crisis For feminist alternatives against patriarchy 7. Save the planet: Building a sustainable 5. Building a Europe for a world of justice, peace and solidarity against war, militarism and 8. Peace versus war, militarism, occupations 9. Youth-the right to education, work and a occupations 6. Building labor strategies for decent work and dignity for all-against precarity and exploitation 10. Democratizing knowledge, education and 7. Economic alternatives based on peoples' needs culture; creating alternatives and rights, for economic and social justice 11. Mass media and power relations: 8. Democratizing knowledge, culture, education Defending the freedom of expression and information and mass media democratizing information 9. Working for a Europe of inclusiveness and 12. Europe and the world: Cooperation and equality for refugees and migrants fighting development based on solidarity versus against all forms of racism and discrimination domination and neo-colonialism 10. Cross-thematic, social movements, the state and 13. The state and future of global justice

Table 6: Themes of ESF 2008 and ESF 2010

movement [ESF, 2010]

4.3 Proposal Submission

future of global justice movement [ESF, 2008]

Since the program of the European Social Forum is based on self-organized activities, different organizations proposed various activities during ESF 2008 and ESF 2010. In case of the ESF 2008, the number of proposed activities nearly reached 800, and all activities were proposed via the event website. Some activities were proposed to the NOC

without using the website (by email, fax etc.). However, the activists who proposed these activities were informed via email that they needed to use the event website to submit their proposals. Every suggested activity was identified by means of an alphanumeric code. Using this code, activity details (e.g. abstract, contact information) could be updated later on. The submission deadline was June 5th, 2008.

In case of the ESF 2010, the deadline for proposing the activities was March 15th, 2010, but the website did not start to work until early March, so the deadline was extended to April 10th. The final number of proposed activities was 303. Most of these activities were entered through the website where consolidated list of these activities were also visible. Unlike the Malmo ESF, nearly 70 activities were proposed on paper-based forms by Turkish organizations. The website was realized in English language. Since quite a few Turkish activists were not familiar enough with English language, they proposed their activities through paper-based forms. These proposals could not be seen via the website. One Italian activist described a minor problem with the activity registration form:

"There was a problem, for example, with the nationality field of the organization, it was impossible to put more than one nation. So we had lots of problems, for example, the education network is not a national network but we were obliged to write one nationality when it is not the national, e.g. you can read it like "education network France" and all the people think that this network is a French network which is not true, and we had similar problems for the labor and globalization network, and all the European networks. It was impossible to write e.g. Europe, Italy, French, and Germany and so on."

4.4 Merging Process

During ESF 2008, it was decided by the NOC that the final program would comprise 200 activities. Some activities had a relevant project page on the collaborative OpenESF website [OpenESF, 2008]; anybody could join those projects and discuss potential merging ideas. Some people contacted other organizations by emails, after seeing the list of proposed activities on the website. After the voluntary merging deadline, a European work group tried to further reduce the number of activities. As there were ten themes for the ESF 2008, all activities were categorized on the basis of these themes. A facilitator and a group of volunteers were assigned to each theme. They were provided with a Microsoft excel file that contained the activity data. The excel files were exported from the website and enabled the volunteers to work offline as well. These people looked through each activity for each theme and made suggestions for merging. Then via email they coordinated the entries hand in hand with the people who had proposed those activities, and encouraged them to merge. The merging suggestions were based on the relevance of activities and political relationships among the proposing organizations. If the contacted organizations did not like the merging suggestions, they were encouraged to find their own merging partners. The volunteers noted down these suggestions in excel files and asked the people, who had proposed activities, to merge accordingly on the website, using their activity codes. Some organizations were not able to merge via website, so they received help from the coordinating volunteers. This process introduced lots of problems in the end when the program was about to be finalized. There were huge discrepancies among the web-based merging results and the planned merging proposals documented in Microsoft excel files. This media disruption between excel-usage and online activities introduced an extra amount of workload to the program work group, which had to locate each activity to find out the discrepancies. There were different reasons for these problems. In some cases, the activity was found suitable for another theme and was forwarded to another facilitator, but the other facilitator could not pick it up. Some organizations merged with someone else's activities without informing the organizers. Sometimes one organization proposed more than one seminar, so they had multiple codes. As a result, while finalizing the merging of an activity through the website, organizations might have used the wrong activity code and merged to an activity, which they did not intend. Some people even changed their minds and cancelled proposed activities. As a result, lots of activities still remained unmerged which should have been merged according to the proposals in the excel files. Another important factor of this problem was that people changed the titles of their activities/keyword, so it was difficult to track them. Finally, when the program was published, it had 272 activities. The coordination in this whole process was carried out by using emails, mailing list discussions, telephone conferences and OpenESF. One German activist commented on this with the following words:

"I know a lot of people from personal meetings but the merging process was also supported by "OpenESF" space as well as the Internet. It is not possible to have this merging process without such media as the Internet, emails, the telephone, because we are not able to travel around the world every day, so that we could be in contact all the time, and not only on international meetings."

There was, however, a problem which occurred during the merging process and which hampered the smooth information sharing among all collaborators of an activity:

"When an activity was merged only the email address of the one who had proposed the activity was visible and this made it really difficult to get in touch with all the people, and I think it created a lot of confusion because we needed to reach people with important information about updating the languages and venues and all these things and then the information did not spread to the other partners quite often."

In case of the ESF 2010, the merging process was a bit simpler since there were not so many proposed activities. One Italian activist described the reason for the smaller numbers of activities in the following words:

"...I think one part of the reason is that the ESF is in a little crisis and the other is that we [activists/organizations] network better than before."

Due to the lack of technological knowledge, Turkish organizers were not able to export the list of activities from the web-based database. As a result, they prepared a Microsoft excel file by re-entering the data about activities that had been proposed through the website, and also by paper-based forms. The Turkish organizer, who carried out this task, commented in the following words:

"I started to copy and paste things from the website and some of them came through paper-based forms from Turkish organizations, it took a few nights actually."

In May 2010, there was a meeting of the European program work group in Istanbul and people attending that meeting were handed over a printed copy of activities, which was not updated, though. The contents of Microsoft excel file were projected with the help of a beamer. The Turkish representative initiated the discussion by starting with activity no. 1. Activists present in the meeting had the possibility to merge their activities with others voluntarily. The Turkish representative also documented this by adding another field in the excel file with the title "seminar no.". The serial number of the activity, which was to be merged with other activities, was put in this field.

| Theme of | Type of | Activity | Proposing | Seminar |
|----------|----------|----------|--------------|---------|
| Activity | Activity | Name | Organization | No. |

Table 7: Schema of the Excel File used for Merging Process

One problem was that sometimes people wanted to merge later, which disturbed the whole numbering sequence of the seminar field, and it was difficult to track seminars by numbers as the numbers for each seminar kept on changing. As the merging feature of the website did not work, the organizing committee of Turkey sent this excel file to the European mailing list and gave a week's time to report back other merging proposals. This enabled organizations that did not attend Istanbul meeting to send their merging preferences. Also, after the merging, the organizations were advised to send new titles to the organizing committee along with their preferred translation languages during the seminar at the forum. Although the translation wishes had already been entered on the website along with the activity proposals, the Turkish organizers could not look into the database, as it was an object-oriented database, and they preferred to receive this information again from the activity proposers. Some people communicated this to the TOC via email, others responded on the European mailing list. On the basis of these feedbacks, a draft program was sent to the European mailing list. The activists responded with corrections as in some cases organizations were not updated, some activities were missing etc. After these corrections, the final program was sent again, in the form of Microsoft excel file, to the mailing list.

| Time | Theme | Type of | Activity | Proposing | Seminar | Speaker | Languages |
|-----------|----------|----------|----------|--------------|---------|---------|-----------|
| Scheduled | of | Activity | Name | Organization | No. | | |
| | Activity | | | | | | |

Table 8: Schema of the Excel File used for the Final Program

Describing the merging process, a Norwegian activist commented with the following words:

"Well I think that the merging process in 2008 was more open, because now the merging process has gone through the list, and because I believe some have sent their merging wishes to the whole list, some like me, I did not send it to the whole list, because I am not interested in what kind of merging problems some other organizations had, I am just interested in my seminars, so I just answered to the Organizing Committee of Turkey. I think there were lots of emails on the list concerning the merging process, which I just deleted, because I just did not need them in my seminar; I do not want to read this. I think that through a website like the 2008, we used the OpenESF, but that was better because then you could go in and find your seminar."

4.5 Payment of Dues

Every organization proposing an activity had to pay a registration fee to the organizing committee for the logistic support. Since activists from all over Europe participated in the ESF, a web-based payment mechanism was established for the ESF 2008. One member of the NOC described her experience of enabling the web-based payment system in following words:

"It was quite difficult to get the payment functioning and we ended up by not doing it with a Swedish bank, because they were so expensive, not so much to the setting up, but per transaction it was quite expensive for the people who paid online, and we did not want it to be more expensive to pay online than through a bank transfer, because we prefer the online payments as it is easier and faster and then we ended up doing it by bank Attica [Greece], and that took a lot longer than we had thought. It was also started quite late and they had told us in the beginning that you could also pay in Swedish crowns, but then, when it was there, they said no that is not possible, so the only possible payment was through Euro online, which was a problem because of the exchange rate. In order to not confuse the people, we just used like 50 Euros for 500 crowns, even though in reality it is a bit less, so we would lose a lot of money if everybody paid in Euro in Scandinavia. We had to ask all the Scandinavian organizations just to pay through bank transfers instead of online transfer."

The web-based payment also enabled an easy and good accounting mechanism, but most of the activists thought that the website was only used to disseminate information. A member of the NOC cited this example to illustrate this:

"The finance person had a separate register to note paid organizations even though you could easily use the website. Probably because he did not know that you could do that, from the beginning and then when he had already started the database, it was kind of no use to stop it because he liked it better."

In the case of the ESF 2010, the web-based payment system was not prepared, instead a link was given on the webpage where people could connect to the Pay Pal service (money transferring facility) and transfer the fee there. The activists had problems with paying via this service; so later the TOC provided bank data for bank transfers. After the transfer of the payment, everyone had to send the receipt to an email address of the TOC, which enabled the organizers to follow which organizations had paid the fee.

4.6 Activity Preparation

The organizations proposing the seminars are normally responsible for the structure and content of their activity. I interviewed some seminar organizers to know their preparation details and their use of ICT. During the ESF 2008, the collaborative website OpenESF was used by some organizers to prepare their seminars. A workshop on the topic of "Research on social movements" was the result of merging two other activities, namely the "Librarians for informational commons and another Europe" and the "Who writes our history?". The participants did not know each other before, so they created a project on the OpenESF collaborative website and discussed the details and structure on the wiki pages. One activist involved in this workshop described her experience in the following words:

"That was easier because everybody was speaking English so that we did not really need translations... In the preparation process it was more a matter that nobody had time to prepare a speech, so no one really wanted to be the main speaker, so we were kind of discussing who had to do it because you also did not know each other in person before. But it was not really a problem...In this case it was only organized through the "OpenESF" platform and it helped very much".

She also participated in couple of other activities where organizers did not use this collaborative tool for activity preparation. She described the situation as follows:

"...Many people even do not speak English, so you have to call someone maybe in Rome, because there are many exiled Turkish people, like in Rome, in France and in Germany so they have to call the people in Turkey and the Kurdish region, so you can not send an email to everyone and then just hope that people understand."

Similar concerns were raised by another French activist who held a workshop on "Initiating a process to connect research and citizenship" during the ESF 2008:

"We tried using it [OpenESF] but because of the few people, who were quite old and not used to use such tools, we realized that it is a lot easier to use the mailing list."

Most commonly the number of activity organizers was limited (normally 2-6), some of them knew each other beforehand; others found themselves after merging. Instead of exchanging emails, telephone contacts were more widely used to plan the details of activities. So the main media for preparation of activities during ESF 2008 were emails and telephone communication and in some case the partial use of the collaborative

OpenESF website. As for the ESF 2010, this collaborative website was not present, so emails and phone calls were the main source for preparing the activities. Describing her communication practice, one Norwegian activist said the following:

"We have been merging two different activities into one and we are four organizations collaborating on this seminar and we make some calls and also email between us, so it is quite small and easy to maintain."

4.7 Mobilization

One of the main objectives of the ESF is to attract new activists in the movement. This makes mobilization activities quite critical. During the ESF 2008, there were two work groups responsible for carrying out the mobilization. The mobilization work group was responsible for the mobilization within Sweden. The contact group for Europe and the world was responsible for the mobilization all over Europe, excluding Sweden. The target was to mobilize 20,000 people to the ESF 2008. Members of these mobilization groups traveled across Europe and Sweden to hold meetings and seminars, so that more organizations become motivated to attend the ESF 2008. A Facebook group was also launched, which had nearly 2,500 members.

In case of the ESF 2010, the organizing committee was small and even just one month before the forum there was only one individual, who was mainly working for the ESF. The target of the committee was to attract 5,000 people from Europe and nearly 20,000 people from Turkey. In order to mobilize the locals, organizations involved in the TOC carried out some activities. Similar to other organizing activities mobilization activities were also very weak. In order to improve this situation, some activists formed an all-European mobilization committee to initiate the mobilization of especially Eastern European countries. But the TOC could not decide in advance on how much money they would refund in lieu of travel costs of the Eastern European countries, so the participation of Eastern European countries was very doubtful. At the last moment, all-European mobilization committee received some funding from different organizations and the travel expenses of some Eastern Europeans were reimbursed from that money. A Facebook group was also present, which emerged by merging a group of Turkish activists and the group of someone else. Currently, it has around 3,000 members. This group was also short on information, so some activists copied information from the mailing list and pasted it there. In total, around 3,000 activists attended the ESF 2010, even less than ESF 2008, where there had been around 8,000 paying participants.

4.8 Interpretation

An important attribute of the social forum is the provision of multiple languages for communication during the event. Conventional conference interpretation systems are quite expensive, so during the preparation phase of the ESF in Athens, a radio-based interpretation system was developed, known as ALIS. A group of professional volunteers, Babels, carried out interpretation services for the fora. During the ESF 2008, the interpretation equipment did not work as there were not many people with technological knowledge to set up the system and the interpreters had to form the groups during

seminars and do the translations. The volunteer interpreters were promised a refund for their travel expenses, but after the ESF 2008 the NOC was bankrupt. It was only in February 2010 that different European organizations paid the outstanding dues to the Babels.



Figure 7: Snapshot of a Seminar during the ESF 2010

(Interpreter is left most in speakers; interpretation box behind her is empty)

TOC initially proposed to use a conference interpretation system, but was advised to use the ALIS system during the EPA meeting to save money. Two Greek activists from the ALIS team made tests at the venue in 2009 and the system worked well, so the Turkish organizers wanted to use this system. The ALIS people asked the Turkish organizers to buy radio equipment early enough, but the TOC did not have money at that time and wanted to buy the equipment later, so the ALIS team refused to offer their services, foreseeing a repetition of the problems during the ESF 2008 where the equipment was not properly installed. Similarly, the Babels also refused to participate in the forum, citing the problems with the equipment and their experience during the ESF 2008. As a result, the TOC itself had to find volunteer interpreters and translating equipment. A Turkish company offered to develop a radio system, but that was not realized until the forum. As a result, there were interpreter boxes in every seminar room, but no equipment, as can be seen in figure 7. TOC personally requested volunteers from the Babels contact database to help the ESF and also requested other organizations to bring interpreters along with them. As a result, there were few interpreters and before the start of each seminar a fair amount of time was wasted on making small groups based on language preferences in the room.

4.9 Program Publishing

Keeping in mind the large number of activities at the forum, it is very important to publish the program of the ESF well in advance. During the ESF 2008, a complete program was available on the website and people were able to customize it, based on a specific location or specific theme. Furthermore, participants received a paper-based copy where they could find detailed information about the venues as well. In the case of the ESF 2010, the program was only available via an excel file on the website and the

link to the program was floated on the European mailing list. The paper-based program, available on the venue, did not hold any information about opening and closing ceremonies of the forum. Moreover, the room locations were coded and the information explaining the codes was missing on the program booklet. This information was sent to the mailing list, so either one had to find it in email or had to ask some other person who knew the coding convention.

4.10 Documentation of Forum

A lot of brainstorming and political information exchange takes place during the ESF fora, which is also important for activists, who could not make it to the forum. During the ESF 2008, there was not any documentation of the proceedings of the seminars, so people who had not been to the forum could not benefit from these discussions. However, a minor documentation activity was carried out by recording the outcomes of the seminars. Such outcomes could have been for example, any initiative or initiated network or any statement agreed upon by the participating organizations. The organizers of activities published their outcomes on the ESF 2008 website, using the activity code. It was also possible to submit them in paper-based form, which was then uploaded on the website by volunteers. Overall, there were 43 different initiatives published on the website. Furthermore, there was a final assembly, which agreed upon a joint statement.

In case of the ESF 2010, there was not any documentation for the results of the seminars, either. However, on the second last day thematic assemblies were held where each assembly approved a manifesto. Typically, a group of people would have prepared this text. This was read out in the subassembly without distributing any copies to the other participants. That is why people raised their concerns during the subassemblies and tried to agree upon a common proposal for that assembly. Each subassembly's text was read in the closing assembly. Moreover, a text for the closing assembly was finalized. People were to comment on this text before its finalization. One Norwegian activist described this process in the following words:

"I had been to some ESFs before Istanbul so I knew that on the final assembly and at the thematic assemblies we usually have some kind of document that we agree upon and I also knew before that someone is writing a proposal. I knew that there is someone who is going to write the proposal, but not everyone knows this and this is not democratic at all, because I mean there were some posters hanging around that there is going to be a thematic assembly and it was also in the program and there were some posters about a meeting before the thematic assemblies to plan how it was going to be. But you were not informed that this is the meeting for planning the thematic assemblies on Saturday, and that in this meeting we were going to discuss a draft proposal to agree upon, this information was never spread. So at these meetings you planned the thematic assemblies and wrote the proposal. These meetings were also late in the evenings after you had been to three seminars during the whole day and you were very tired, and maybe you were on the

way to go out to have dinner with your friends. Where these draft writing meetings were, I did not know, maybe they were only meant for people of the inner circle, who normally decided things and this is very bad, I believe, because if you are new to the process and new to a forum you do not understand these structures and you just come to the final assembly or the thematic assemblies and then you are confronted with the text and you do not know who wrote it and what were the political discussions in advance."

The unclear writing procedures and the lack of transparency during the whole documentation process led to a considerable discontent of those participants who did not belong to the inner circle.

Summing up the empirical findings presented so far, the ESF organizing process can be characterized by personal and organizational discontinuities, by informal processes and a "hidden leadership", by lacking documentation of transparency of the decision-making, by a missing "shared history" and common story framing and by scattered information sources. These aspects make organizing process of ESF quite complex. Transfer of organizing knowledge could help the next organizing committee by not repeating the same mistakes and continuing the good work.

In the next chapter I take a look how this organizing knowledge is transferred among different organizing committee members. The findings will help to understand whether such kind of knowledge transfer actually takes place and how effective this knowledge transfer process is.

5 Knowledge Transfer Practices at ESF

In the previous chapter I described the complexity of the organizing work, which is further compounded by changing set of actors. There has been recent interest in employing knowledge management practices in organizational business processes to strengthen the competitive capacities of (mainly) companies. These studies have resulted in optimized strategies and solutions for supporting knowledge creation, codification and transfer in different kinds of organizations. In this chapter I take a look on how organizing knowledge is transferred among organizing committee members, whether this knowledge is helpful for the new set of actors and which problems they face in case of weak knowledge sharing.

5.1 Knowledge Sharing Practices

Since the local organizing committee does the majority of practical work, it is important for the new committee to know how things were done at the previous forum. It's not possible for all members of a new organizing committee to attend all EPA meetings. Thus, representatives who participate in these meetings also guide others. Some members may have participated in previous fora, so they know some aspects of the preparation work and sometimes know key persons. Therefore, on these EPA meetings they try to connect with relevant persons of the previous organizing committee to discuss what should be done, what the requirements for organizing the event are and which problems may arise. Usually organizing committee members of the next European Social Forum present their plans at EPA meetings. Different activists offer their feedback based on their previous experiences. The presentations can be supported by documents such as the proposed budget, proposed themes or a call for actions. These documents usually are present on the entrance and also a representative distributes them to everyone in the meeting. Some of such documents are also sent via mailing lists. In order to foster knowledge sharing around ICT dimension of the forum, a team of volunteers (Web-Team) tries to help new organizing committees to (re-) establish the ICT infrastructure. They act as a bridge between different organizing committees so that consistency could be achieved, but often a lack of technical skills, volunteer presence and missing funds hurt this process. Partial information about previous events is available on the official website, but it is not comprehensive and complete. In particular information about the organizing process which would be of high interest mainly for starting a local committee is missing on the website. Most of activists and volunteers working in different European networks and the Babels group have also prior experience since they participated in earlier fora. Thus, they also play an important role in knowledge transfer on problems in previous for and how they could be dealt with.

5.2 Knowledge Transfer from Athens to Malmo

As new set of actors take over responsibility of organizing tasks every time, they need to understand quite a bit about the usual activities of the ESF in general and the specific activities of the former ESF organizers in particular. Some NOC members tried to benefit from the experiences of Greek activists who organized ESF 2006. Since there was not a standard knowledge sharing procedure in place hence the members of NOC have different perceptions of knowledge transfer based on their personal experiences. One member from NOC's work group responsible for building the program described his experience as follows:

"In general what I have been talking to my colleagues is that there was not enough contact and that we didn't learn enough from the Greek experience. We had a very short report when they gave us advice before we started, but I think that was not enough information and we think maybe many problems could have been avoided if we had more contacts and more exchange of experiences."

Another activist working in the Nordic Organizing Committee described her practice of getting information from Greek organizers in the following way:

"I think we knew some people already from the meetings that we have been to. We just asked them, the Greek people, and they told us that this person was dealing with this and that person for that and ask him about the program and ask him about visas and things like that. So, we were kind of referred to people by the organizers not only the Greeks but also the other people and I think even before we made the proposal for ESF some other people were in contact with one guy and we arranged to meet in Lisbon where it was decided that we were going to do the next ESF. And we had a meeting basically where we sat down and talked and also had a meeting with web people and we sat and talked together to know what are the websites and what is our responsibility and what we do need to think about and what to do."

She further described her experience with regard to support from the Greek organizers:

"Basically we had a lot of help from the Greek organizers. In the beginning, every EPA meeting that we went to, we made sure we went to them [Greek Organizers] and talked together and ask questions that we were wondering. For example we got a budget from them, we got hints on what to think of and what mistakes not to do and things like that,...it was really valuable for us in the beginning to have their information and we also invited one of their key persons to come to Malmo and talk to more people, than the people who could go to EPAs. There was also quite a lot of email contact with some other people, especially in the beginning so we had a lot of help from them in the onset. They were saying that we were lucky because they did not get any help at all from the previous organizers of London ESF

because they just kind of disappeared so that was really good and really important for us."

Another Swedish activist responsible for mobilization activities in the NOC described the knowledge sharing process as follows:

"Well, of course there were supposed to be people who knew these things, who have gone to European Social Forum [ESF]. I have never been to a European Social Forum but we found out all the time that information is firstly not simple and the contacts are there - no question about that. Then some people are not critical enough when they try to find things out; they live in a romantic world."

One member of the Greek organizing committee described the information transfer process from her perspective:

"We tried to help e.g. we have some meetings trying to explain to them how we prepared the budget or how we arranged the space or what kind of problems we faced relating to the solidarity fund or the program and also we tried to transmit technical information."

5.3 Organizational Problems in the Malmo Forum

When organizing such an event, there are always issues that can go wrong. Some activists attributed these problems to the limited experience of the NOC. One activist described:

"I think that the biggest problem in the Malmo [event] was about the committee, they were all new people involved in the process. There was not a lot of experience from previous ones [ESFs]."

In the following lines I will discuss some of the problems that occurred during the organization process of the Malmo event.

5.3.1 Financial Deficit

At the end of the ESF event the Nordic board (body of NOC to make financial decisions) was bankrupt, having a financial deficit of about 180,000 Euros (mostly being in debt to Babels, interpreters, cultural workers, individual activists, and different small to large organizations). This was mainly the result of the lower number of registrations than expected and low resale of radios and ALIS equipment. Furthermore, an insurance company owned by trade unions and cooperatives did not donate a promised 9,000 Euros [Cijvat et al., 2009]. After the event a legal body was founded to acquire funding for this debt. One member of the organizing committee explained that they did not receive information on the exact number of participants from the Greek people that was also a reason for this problem.

"Well, one of the problems was that I don't think that they [Greek Organizers] had the exact number of attendees. So, we were calculating a bit too high there, which made the financial deficit we have in the end."

She further described one major reason for attendees not paying their registration fees.

"Since we did not have enough volunteers there were not enough people checking doors and the registration was too slow so a lot of people never actually paid."

Another member of NOC described it as follows:

"The whole budget of the NOC was based on the assumption that there were 30,000 paying participants in Athens. Greek organizers still claim that this is true but I found out six months too late that there were very different opinions about [this number]."

5.3.2 Failure of the Translation System

A large number of activists participating in ESF cannot speak English, therefore, translation setup is an important issue. NOC was suggested to use the ALIS system (developed by Greek activists) for translation facilities during ESF. It is very interesting that one member of the Greek organizing committee said that they were aware in advance that there would be problems with the translation system.

"For our part from July we knew that they [NOC] could not work [with the ALIS system]. Of course it is their responsibility and we could not go out making declarations that it would not work. It's a technical system; you need to have technically aware people to support it. [...] The main problem in Malmo was that they did not manage to setup a support team. There were few, if any, people that would know how to setup, test, and repair the equipment. From our part we offered to send an experienced technician one month in advance to do testing and repair of equipment and to teach other people but, for financial reasons, they did not accepted it. So they were left with the equipment that they did not know how to install and how to work."

Furthermore, there were problems among interpreters and NOC as well. One activist described the problem in the following words.

"There were conflicts between Babels and the organizing committee. The conflict arose from practical issues; for instance interpreters were promised that they would be reimbursed the travel expenses during the forum but in fact we did not have the economic resources to do that. The majority of them could get reimbursements after the forum and actually to this date there are many volunteers who have not been reimbursed."

5.3.3 Scattered Venues

The event was held at many different locations and it was very difficult for non-local participants to get used to the city routes and attend the seminars of their interest. One member of the Greek Organizing Committee commented on the preparations carried out by the NOC as follows:

"The Greek Social Forum gave a lot of information and our experiences to the Swedish colleagues to organize Malmo but they did not take so much care about it, so they dispersed it all over the city of Malmo... They told us at the beginning that it would be at one venue, one big venue, but they dispersed it. After they dispersed it over the city, it was very difficult and it needed a lot of people to organize it and they were very few to organize at all these venues."

A similar problem had already occurred with the organization of the second ESF in Paris. This event was distributed across three rather distant areas. Moving between the areas took 'half a day' according to another Greek activist.

5.3.4 Problems in Setting up the Website

A Swedish software company offered NOC to develop the ESF 2008 website for free. Additionally, the Greek organizers offered to extend their website and use it as ESF 2008 website. Nevertheless, the Swedish developers in the company were not capable of dealing with the Plone system with which the Greek website had been implemented. Thus, the company started developing a new website from the scratch. This website was used initially to post information but later on there were delays in extending the features. So NOC decided to hire the Greek developer who made ESF Athens website to extend it for the Malmo event. This changing of websites also resulted in some information loss about proposed activities. NOC members had to resubmit the missing data into the new website (see section 6.5).

5.4 Knowledge Transfer from Malmo to Istanbul

After the ESF in Malmo, the next EPA meeting was held in Istanbul, Turkey where members of Nordic Organizing Committee arrived to present some evaluation of the Malmo forum. One Turkish activist described his hopes for this meeting as follows:

"On this meeting we will try to exchange information, as you know all the decisions in the ESF are taken by EPA and there will be people from NOC and even before that Greek organizing committee so you will have chance to exchange information."

When a new organizing committee takes over responsibility, in an initial phase the knowledge transfer process can suffer from lacking awareness of the problem domain, a significant need for learning and under-specified responsibilities within the newly constituted team. This was the case during this EPA meeting as well. One member of the NOC commented on it as follows:

"We were already in Turkey for the first EPA after the Malmo ESF and we were invited by the Turkish organizers and there we had first of all a bit of an evaluation and then we were supposed to have meetings with Turkish organizers to go through and basically do the same thing as the Athens people did. But somehow it did not really happen. I am not quite sure when that's going on. But they are planning to invite few people to explain different things about the process and kind of transfer the knowledge that way."

Another member of NOC presented similar views:

"My expression is that Turkish organizers are not ready, interested, or willing to have exchange with us. I was in Istanbul preparatory [EPA], so I

think there is problem with and most likely amongst the Turkish organizers in organizing the structure; I think they maybe need to do that first."

When the new Turkish organizers later on really needed the information, the NOC members weren't attending EPA meetings any longer. Thus, the Turks used their own experiences as participants in previous fora and had some discussions with members of the Greek Organizing Committee. One activist from the TOC described this as follows:

"Actually we don't have much information about what happened in Malmo and also we don't get too much information about Malmo."

Situated basic conditions (like availability of financial and human resources) change from one ESF organizing process to the next, which also makes learning from available knowledge difficult. The Turkish activist further said that they had less human and financial resources than Malmo. Thus, even if they had access to former experiences it would have been difficult to replicate them, so they tried to organize the event in their own way. Unlike the Nordic organizers, the Turkish organizers were quite active at the ESF processes already before actually hosting the event. As a result they had acquired some organizing knowledge by taking part in the previous ESFs as participants. One Turkish activist described this in the following way:

"I guess it is bit easier if we had more information about the previous ESF but it is not a big problem I guess. We are doing it in our own way, we don't have too much budget, we don't have too much resources etc. like Malmo anyway."

The regular attendees of EPA meetings have the knowledge about previous ESF events by participation. Despite this there is a limited knowledge transfer during these EPA meetings, because often the main focus is on "what" should be done instead of "how". The Turkish organizer described this in the following words:

"None of these meetings are actually helpful because you just get the things, how can I say like customers and shop owner, there people come and just complain and don't just try to help."

On the contrary, they found the European level joint work groups quite helpful. In these joint work groups not only the activists from the host country are present but also the activists involved in organizing previous fora, providing a means of active knowledge transfer. The Turkish organizer described his experience as follows:

"If there had been more European wide work groups on different organizational issues it would be more helpful, right now it is very good to have European work groups like program work group because [the involved activists] always know the every issue [from past] and we need someone to tell us if it is going right or wrong, not of course like a teacher but someone to guide us."

5.5 Organizational Problems in the Istanbul Forum

To analyze the effects of successful or lacking knowledge transfer, I further explored the particular organizational problems occurring during the ESF 2010 event in Istanbul.

5.5.1 Failure of the Translation System

As the problems at the former ESF event in Malmo 2008 have shown, language and translation support is an important organizational issue. In November 2008 at the EPA meeting in Istanbul the Turkish organizers stated that the ALIS system would not work in Istanbul due to missing available radio frequencies (because there are lot of radio stations around). As a result they were discussing to use private translation systems. The participants at the EPA meeting insisted that it would be better to use the cheap ALIS system instead of any expensive private system. Thus, two people from the Greek ALIS team visited the venues, performed some technical tests and found that the system would work fine. However, as already mentioned, the TOC could not afford the required radio equipment in time. Therefore, the ALIS volunteers backed out of the preparation process.

Similarly, the Babels group refused to participate in the ESF 2010 organization after bad experience during the ESF 2008 event at Malmo. Due to budget problems in Malmo many interpreters form Babels were not reimbursed travel cost and this created a huge de-motivation among them, although European activists paid them back after more than a year. Babels offered that TOC could use their mailing list and make personal calls to interpreters. This increased the task of TOC because they had to manage the interpreters as well which in previous fora were managed by Babels. A Turkish activist in the following words mentioned this problem:

"We are having the problem in organizing the translations because in previous situations we have a Babels network but now they are not going to take part because of the previous problems, that's one of the problem and also at the previous ESFs there was an ALIS work group so instead of using it they say that they wouldn't be able to help us on technical development of ALIS equipment."

At last a Turkish company offered to develop translation equipment, but it was too late. Therefore, at the ESF event in Istanbul translation equipment was missing. Furthermore, there were only few interpreter volunteers available for support. Only some Turkish organizations managed to bring some private conference translation systems in their seminars. The Turkish activist described the problem as follows:

"There was translation equipment and actually it was working but the problem was the radios actually. So we did not have enough radios to distribute to the people, we helped them to buy their own radios, we should have bought them before hand and should have distributed them to the people actually."

5.5.2 Problems in Setting up the ICT Infrastructure

In the first stance, the Turkish organizers wanted to (re-) use the website of ESF 2008 and even one person from the Turkish committee already was in contact with the responsible persons before the 2008 Malmo forum. For necessary adaptations of the website, the source code was transferred to the TOC members by the developers. It was decided that the website should be hosted for free on a German University server and

that the German research group on Information Systems and New media would help the TOC with the adaptation of the website.

One main feature of this website is the electronic submission function for activity proposals. Specifically, after collecting all proposals, a "merging" function on the website should allow for sorting proposals according to similarity and merging different activities into one to reduce the number of activities, based on the available resources (rooms etc.). However, although the submission function was working, the merging function did not. Due to a complex and somewhat sloppy coding style of the original programmer and because of a missing technical documentation it was impossible to accomplish necessary adaptations of the merging function in time. The Turkish organizers therefore, mostly sent all information to a European mailing list where nearly 900 people are registered, instead of publishing this important information on the official website. Some German activists noticed this lack of public information and took the data from the mailing list to publish it on their own blog and on a Facebook group. To make things worse, later the TOC set up another website to publish the program for the ESF event, instead of using the already existing official one. The responsible Turkish activist did not know the Plone content management system in which the official website was realized and he had problems in updating the website. He felt it easier to setup another Joomla-based website and he described that it was much easier to make changes on this website. One German activist commented on the situation in the following words:

"In Malmo, information access was much better than Istanbul. I thought questions got answered and information on websites was published more quickly."

5.5.3 Limited Participants

The total number of people attending the Istanbul ESF event in 2010 was approximately 3,000, which was even smaller than the Malmo event participants (though the Malmo event itself was smaller in comparison to former ESF events). One organizational reason for the low participation might be found in lacking mobilization activities (see section 4.7). Although it was many times reiterated during the EPA meetings, that the program should be finalized well before the event, which should guarantee enough time for mobilization, the overall delay in the planning process impeded a timely completion. Therefore, the final program was finished only one week before the event itself. As a result not many mobilization efforts could be carried out in the different European countries before the event. TOC did not have any work group for mobilization and there was no communication with the mobilization groups who were previously engaged in the fora.

5.6 KM Process Weaknesses

The information, which was gathered by NOC from the Greek organizers, was helpful but quite often it was not detailed enough. On the other hand, in case of the ESF event in Istanbul there was not much knowledge transfer from the former NOC to the TOC at

all. After describing some of the main organizational problems during Malmo and Istanbul events, now I try to analyze how they were related to weaknesses in knowledge sharing processes and practices.

5.6.1 Difficulties in Information Sharing

As it was also observed, there were some serious problems in communication between the Greek organizers of the Athens event and the NOC members. One member of the NOC commented on this in the following words:

"Sometimes it was difficult to get hold of people, I mean some people didn't answer email but I am sure it is the same now with the Turkish organizers. They [would be] wondering [about] a lot of stuff and nobody answering the emails."

Another member of NOC gave an additional example of problems in information transfer. He had difficulties in getting a list of email addresses of all organizations that participated in previous social fora:

"There is a collection of all email addresses of all organizations that have organized seminars at earlier European Social Fora. That is to me an obvious participant resource. The first thing I started to wonder about as sort of very interested in European mobilization how to get all email addresses. Nobody informed me that there was such an email address list. [...] I heard only rumors that somewhere one existed. It took three months from when I heard in November until February to find it."

When organizing an event on such a large scale, ad-hoc solutions have to be found for many problems. Thus, for new organizing committees knowledge about tackling these issues could also be very helpful. One member of NOC gave example for this as following:

"One find(s) out very, very late much pertinent and important information. For instance, officially it's always a fee for central and east Europeans to come to European Social Forum but in reality they never have paid anything. So it is very hard really to find out what has actually taken place or not. This is of course partly because that one wants to avoid the setup of European bureaucracy which I say is good but also means that you get adhoc solutions every time."

After the ESF 2008, activists involved in NOC were not active in the ESF process anymore and these knowledge holders were no more accessible. One Turkish committee members described this as follows:

"There is no contact and also right now there are not many people from the NOC around, they dissolve the committee [NOC], but we talked with the people from the Greek Social Forum and we have some experiences from Athens ESF etc."

One Norwegian activist described this situation as follows:

"One of the reasons I think is because when the ESF is moved to the next country then there is no good information between the old organizing

committee and the new one, and there should be, because the ones who had the last ESF, they know a lot about how do we have to do things, which mistakes did we do and how can we start with and everything which are worth transferring to the new organizing committee and they would spend less time on making mistakes. But I don't know it is just like when a new ESF is about to happen then a new organization committee is so focused upon their task that maybe they just forget."

5.6.2 Conflicting Interpretation of Information

People in this specific network of networks stem from different organizational backgrounds, having varying experiences in different working environments and having different political point of views. This fact could lead to problems in collaborative work, especially if the information is not documented and if nobody has access to all information of communication structures. This limited information access leads to appending personal perceptions with information, which further affects the successful knowledge transfer. Regarding the Swedish ESF event in 2008, the new members of the NOC did not know much about the European Social Forum process in general; they only sometimes received information from local actors who were involved in the process before. They typically could not verify this information, which at times turned out to be inaccurate later. One Swedish volunteer described such a situation in the following way:

"So all the time there is vagueness and you can never really trust figures and there is a sort of elite claiming that certain things are specific and you have to follow it but then in the end you can find out that this is not so true, that there are other kinds of information and so on. It's both politically and practically totally impossible to trust anyone."

According to the WSF declaration, no political/armed organization is allowed to participate in social fora. In giving this example, Swedish volunteer further described information vagueness problem:

"The claim is that the ESF has adopted WSF declaration. Thus, everything politically has to go according to WSF declaration. This is false, [...] we found out that this privileged information, some key persons claim to have, was not correct. So in Greece, for instance, the Greek organizers, when we finally could meet them, claimed that this is not at all true. They have stated at EPA that Greece is very close to the Middle East, and thus, it will be necessary to invite Hamas and Hezbollah and, if you don't accept that, there will be no ESF in Athens, which is totally contrary to WSF declaration. So they did and Hezbollah was at ESF in Athens. [...]For some reasons it seems like the first Swedish people that were claiming that they had knowledge never asked critical questions. So they never got these things. This is what we found out afterwards."

On the other hand Greek organizing committee members contradicted this statement by saying that Hamas and Hezbollah did not participate. However, some actors were

present who belonged to these organizations but effectively represented other social organizations.

Similarly with respect to the ESF event in Turkey 2010 there was lack of information and communication between the former NOC and the new TOC. Some problems occurred when initially one involved organization left the TOC and the organizing process and some stakeholders assumed that this retirement affected the university's decision to refuse their place for the ESF event. Besides these knowledge transfer processes from one event to the next, there are additional communication obstacles regarding the relationship of actors within an organizing committee. Due to different political, cultural and ideological approaches, there are some remarkable differences between involved organizations, e.g., between [large and resource-rich] trade unions and grass root organizations. Very often these perceived differences even lead to elements of mistrust or competition instead of cooperation. This was evident when the Turkish organizers set up a moderation committee consisting of five trade unions and huge discussions at the EPA meeting started. Several other European activists and organizations were concerned that this union dominated structure will cause problems for an open process. Furthermore, differing perceptions and disappointed expectations were leading to conflicts within the organizing bodies: At the last EPA meeting before the Istanbul ESF event the issue of translations was heavily discussed and the Turkish organizers promised to hand over the radio-based system next week. But the representative from Babels insisted that they had been hearing this "next week" for some months and they do not believe in such promises anymore. Finally, because they did not think that the interpreting system would be ready for the forum, the Babels members had decided not to participate in the preparation process and the ESF event 2010 any longer.

5.6.3 Uneven Distribution of Information

Relevant information was not equally available to all the actors in NOC. Certain members of the different work groups did not have the money to attend all EPA meetings. The lack of supporting artifacts enabled attending members of better access to certain information although all work groups had created mailing lists to share information with each other. Furthermore, absence of artifacts resulted in lack of information, which sometimes created doubts and misinterpretations, too. One activist described the following example from ESF 2008 to highlight this problem:

"Not everybody in our organization had access to information. I think it was especially hard to access useful information. It took a very long time for our Babels coordinator before she really got in contact with Babels and could get the help she needed [...] An abundant amount of information came really early on and then people who were there from the beginning retained it. Though sometimes not everybody was there and had it, [...] i.e. they didn't have access to same contacts, unless they asked, of course. By then it was also like, yeah, you have been working on something for a long time and you kind of developed your own knowledge and then people don't ask

where it comes from. They just assume that it is there for some reason and they don't think about it is from previous organizers."

In the case of TOC only one person was mainly working on the organizing process that was supported by eight more persons during the last month; the urgency of the tasks at hand was overwhelming. They had to perform the tasks without knowing about the history behind the development and just working with the sparse resources and information available. Some of the people in the organizing committee were new to the process and did not really know how the process works. This was evident when in a preparatory meeting some members of the TOC did not know the role of the EPA and the structure of the EPA meeting. There were discussions on the format of the opening ceremony and the TOC proposed at the EPA meeting that there should be two speakers: one Turkish and one Greek. During the EPA meeting there were many suggestions about this and one of the Turkish members announced that they would decide on this question in their next Turkish meeting. That was before some activists told them that the EPA meeting is the decision-making body for the ESF planning, being a European process.

These examples highlight weaknesses in the knowledge management process and some of those deficiencies could be overcome by better designed technological systems. In the next chapter I discuss the evolution of ICT infrastructure at ESF and discuss the results of human centered evaluation of European wide mailing list and OpenESF website collaborative usage.

6 Technology Usage at ESF

In this chapter I take a historical look at the technology infrastructure since the inception of ESF. Although technology usage has remained part of ESF since the very beginning, the virtual dimension of the ESF is not very well structured, as the involved activists mostly lacked technical skills to carry out the tasks themselves. Moreover, a general lack of financial resources means that ESF organizers cannot easily hire the services of ICT professionals. One Austrian activist described his perception about use of technology in the ESF process in the following words:

"We use these internet tools of course, there are website, email lists and whatever is like all this, ... We are not too good at that, I have to admit, and we have always lot of delays on installing things, because, I don't know, it doesn't work very well."

An Italian activist who participated in the discussions about setting up technologies for ESF also described a similar view:

"Without these technologies it would have been impossible what has happened in terms of connections and communications and development of a global network of organizations and people. Then strictly speaking about the website of European fora, well there have been tools that facilitated in some cases the work but it never took off in terms of allowing a more sophisticated and continuous form of interaction and collaboration etc."

6.1 Technology Usage during 1st European Social Forum

In order to support organizing process of 1st ESF in Florence, a website was established to collect activity proposals and to publish information about the forum. Furthermore, the proposed activities could be registered through the website and online payment mechanism was also supported by the website. This website is not active anymore. One of the Italian volunteers involved in the website development described this process as follows:

"It was prepared by a group of people, there were people from Indymedia, Milan and then there were some people from my organization [one world net, the Italian portal], and then some other volunteers, so it was a group of 7-8 people and we used French open source software SPIP and the registration was done by my organization with online payment system with the Attica bank."

Describing the functionality of the website he further commented in following words: "There [one could] only register the activity and then this activity would be visible to other people, what the program would be, but there was no facilitating the merging kind of thing."

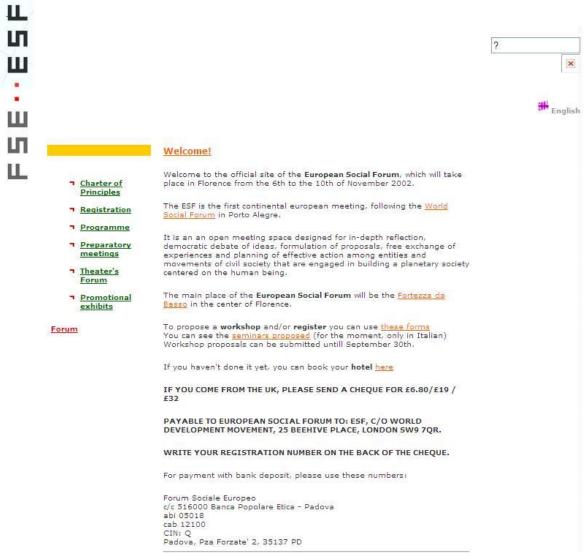


Figure 8: A Snapshot of ESF 2002 Website

The merging (process to minimize the number of activities) and allocation of rooms to the program activities were carried out by volunteers manually, without the support of a website:

"There was a work group who has to manage the logistics, so which rooms and which places to assign and then each organization was contacted and given some options, and so it was all done by the group dividing the places which were available and the translation as well as the whole interpretation system."

In order to document the proceedings of the forum a project named "Scriva" was launched. In the framework of this project another website was developed where the content about activities was uploaded, again this website too is not available anymore. A French activist described about this project in following words:

"... people, basically students going in seminars making notes and putting them online ... and I don't know why it disappeared, if you go on the website of ESF France, oh it has disappeared, it does not exist anymore."

Due to the volunteer nature of the work, tasks are carried out in such distributed manner that all actors do not have information about all the happenings. The Italian activist, involved in the event website development process of the forum has a different view about preserving of forum contents:

"There have been few publications which came of it and there were a few media, who was created there and who reported what was going on but there was no systematic approach."

In order to facilitate communication among organizers and other social activists, a mailing list (fse-esf) was used during the forum [Fuster-Morell, 2007]. This mailing list is the only technology artifact which has existed from the start of the forum until today and it is still active.

6.2 Technology Usage during 2nd European Social Forum

In the context of the website there was some continuity, as the website of previous ESF was reused by the organizing committee of 2nd ESF. Describing the transfer of the website from Florence to Paris, one Italian activist commented:

"It was not developed by a company, it was still a group of volunteers, who had worked with the Italians because they were associated with a group of volunteers Babels [Volunteers doing translations during the social fora] that has formed in the World Social Forum, they already knew each other and they have already worked together."

In order to preserve the contents of the forum, the organizing committee planned to store audio recordings of seminars. One French activist described in following words how they planned to archive the proceedings of the Paris forum:

"What we did was at first try to record all the plenary sessions, the official ones, but audio recording did not work for different reasons but one of them being that we did not have required equipment to do so."

Once this plan failed, there were further discussions on how to carry on this activity. He further said:

"We thought to have some volunteers in each of the sessions and volunteers would make notes, write them down, formalize them, and we could put them online as the resume of the activity and some of the members of the organizing committee said that we couldn't have such a process because it could only be the voice of the speakers and there should be no external people writing the resume so we let this idea up, and came to the process that organizers themselves sending us rational before the seminar and resume after the seminar."

All these collected reports were accessible on a website, which went offline. Later all these reports have been uploaded to the official website of ESF, which are accessible till

now. Similar to the first ESF, the mailing list (fse-esf) was used for the communication among activists [Fuster-Morell, 2007].



Figure 9: A Snapshot of ESF 2003 Website

The organizers of the forum got very late funding so they decided to invest this money on establishing the archive of the Paris forum and termed it as memory project. Thus, the organizing committee told the participating organizations that if they have any project proposal, they could tell them. The organizing committee got a lot of proposals but they were unable to decide which projects should be funded due to lack of technical skills. This selection took a long time without reaching a decision. So the organizers invited all who proposed projects in a meeting. In the meeting the organizing committee members decided to accept all proposals and merge them under one big project. ICT artifacts realized under the umbrella of this memory project were not completed till the next ESF and were used partly during the 4th ESF in Athens.

6.3 Technology Usage during 3rd European Social Forum

The continuity of the ESF website was not visible during the 3rd social forum in London, as the organizing committee of London forum outsourced website development to a private company, which later became a source of conflict among activists. The Italian activist described this as follows:

"In London there was really no connection, so they [organizing committee] done it with a company. [Development of] the website was given to a company and they started a new process."

One British activist described the following reason for not extending the previous website to the London forum:

"They [organizers] wanted something to be bit more professional, and they were not sure whether the website would be secure enough because the registration would happen online and people should pay for the registration online. So saying that we need a secure website and they thought that giving it to a company would ensure that, while they didn't really trust [volunteers] and it was a big political problem in the London process. There were lot of conflicts within the London process and that [website development] was a part of conflict. Between some activists called horizontals, it was one of the sources of conflicts that how the organizing committee dealt with the website. They gave it to a company, so they paid someone to do the website. It was pretty much quite one way website, providing information it was very clearly designed and it was clearly targeted to the people who haven't been to the event before and they want some authoritative information about what is event for, where they could register, mainly offering information, but it wasn't interactive enough to do the organizing, to organize the social forum you need some other tools and they didn't have that on their website."

One British activist who was investigating use of email lists during the organizing process of the London forum commented on the website transfer process as follows:

"I interviewed people on this from the organizing committee and the horizontals and also the activists who were responsible for the Paris website, trying to find what happened there, the organizing committee the people from vertical were saying that the handover of the website from Paris to London was very bumpy. It was very difficult and there were some problems of communication there. The people from Paris were saying that it was problem with the organizing committee because they did not trust us and they did not want to use the software that we have created and people from horizontal had the same view, that it's organizing committee's problem because they did not really trust the volunteers, you know open source, open access way of dealing with the net."

As a result of this conflict, activists who were called "horizontals" developed their own website with the support of one activist. One British activist described about her experience with this website as following:

"They have wiki pages, they have a lot of discussion lists, people could make an account and start creating their own pages, and upload content, so it was very much bottom up way of using the internet/the web, while the official web was more top down."

She further said:

"I know people who have launched it and who were managing the alternative website. They wanted to have links with the official one but they were not granted. Basically in London you have different people using different websites according to their need, it was the reflection of the political situation."

Describing her experience with this website another British activist commented:

"It was really good, the wiki website, it was just growing naturally, just by people participation but in the end we lost the server and the whole thing went down which was terrible."

Both websites developed by organizing committee and "horizontals" are now offline.



Figure 10: A Snapshot of ESF 2004 Website

The proceedings of the London forum were not archived systematically; however, some text reports emerging from seminars are accessible through ESF official website. In order to support the communication mainly three mailing lists were used. Firstly, the European list (fse-esf), secondly, a mailing list used for coordination among British activists (esf-uk-info) and thirdly, a mailing list (democratiseESF) operated by "horizontals". Other than these three mailing lists there were some other mailing lists too e.g. mailing list of program work group. These mailing lists were not used by majority of the activists and mainly used for internal information dissemination [Kavada, 2009].

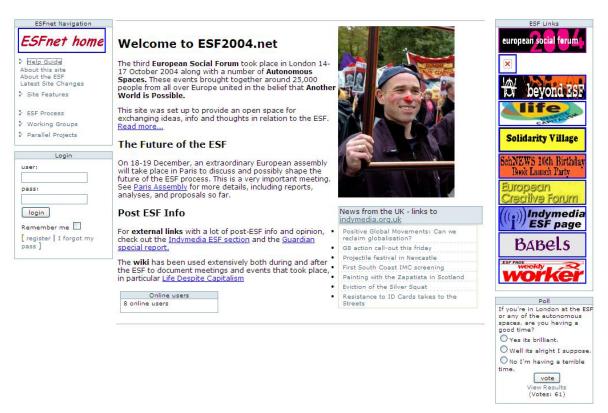


Figure 11: A Snapshot of the ESF 2004 Alternative Wiki-based Website

Due to the problems at the London ESF, the European Preparatory Assembly launched a group called "Memory and Systemization" with a mandate to manage information on web sources generated within the process. So it was decided for the next forum that there should be an event website and a separate collaborative website. One activist described this as follows:

"What is interesting that in the ESFs that followed what they were trying to do was actually combine the two different types of websites because with one is good for different goals so in a way the official website that we had in London was very good for people who had not been to ESF before because it was quite clear what it was about it was offering clear and authoritative piece of information how to get to the event and all that so it was very good at your first point of contact with the ESF and the more interactive website could be used then as a workspace for the people who are already involved with organizing the ESF and who are more familiar with structure of ESF and they know how things work. So what they have tried to do is actually have first page as clearly designed as the London one."

6.4 Technology Usage during 4th European Social Forum

As a result during Athens ESF there was an event website and an associated collaborative workspace. One activist commented about it in the following words:

"In Athens they tried to have one website so you have like an external page again very clearly designed for the people who know about the ESF and then you could register and provide your details and then enter to a secure part of the website where you could have your profile pages, wiki pages, etc."

The collaborative website was a result of the memory project where one subproject was to develop a collaborative workspace to help the merging process. One French activist described the need for such application in following words:

"At the beginning it was a small group we wanted to make a collaborative tool to help the merging process because this is in relation with what I said at the beginning of the interview when people visualize they need to inform people of what other people are trying to build as activity they tried to find a solution to put in touch people you are in an organization in Pakistan and you deal with human rights I am in France I deal with human rights how to make us informed that you exist, I exist and maybe we can do something together. It was the first point which decided that we need a collaborative tool."

This collaborative workspace allowed organizations to register but this initiative was not very successful, as the activists did not use it much during the organizing process of the 2006 European Social Forum. An activist described the late launch of the website, another factor in the low response. He commented as follows:

"It was too late and it was not very well conceived, so people didn't use it at all."

In order to develop the event website for Athens, the organizing committee hired a developer. He described his involvement in the following words:

"I have been involved in Indy media, I have been involved in the activists circles so the organizing committee knew me, when the forum was getting very closer they didn't have a website and registration system they asked me to do it so they hired me and I did it."

Describing the technical requirements of such websites he said:

"First you need the website, a multi lingual website with content about the event providing participants the necessary information. It has to be easily editable by the people without technical skills first requirement is this then it is useful to have all sorts of forms like volunteers that want to help or for people that want to offer solidarity accommodation and couple of other forms were used for Athens as well like collecting data from different kinds of people managing those data and then you have registrations first for individuals that will be participating in the forum then for the organizations and then for the activities, some sort of this system for registering the activities, the final program is being formed and has to be published in a useful way, so it's a complex process."

Other products from the memory project were also available during the organizing process of this forum. There was a website (http://www.euromovements.info/directory) which had a listing of organizations who have participated in the previous fora, making

access to those organizations easy. Another website (http://www.altermundo.info) was also available having an archive of photos of previous fora. There was also a website (http://www.openelibrary.info) which could be used for file sharing such as articles, books, bibliographic references, photos, videos, audio interviews relevant to interest of ESF activists [Fuster-Morell, 2007].

ESF and surroundings Directory Search This is the directory of collective and organizations participating at the European Social Forum and Surroundings. It contains more than 5000 entries with information of collectives and the organizations. The ESF and surroundings directory had been develop by the Action Research Network for the ESF confluence process, as one of the contents of its project the Guide for social transformation in Europe. The continuity and further development of the ESF and Surrounding directory is in charge of the "Social forum tools and memory European project" and the working group depending on the European group for archive the information, communication and knowledge generated by the ESF process (Abbreviation: Systematize group), depending on the European Preparatory Assembly of the ESF. Anyone or group that would like to participate on building it is welcome!!!!. Also if you have any comment to perfection the directory it would be very appreciated if you could send it (e-mail: directory@fse-esf.org). The main information source of the ESF and surroundings directory is the database of organizations registered and other databases coming from the ESF at Florence, Paris and London. The Action Research Network for the ESF confluence process hopes that the ESF and Surroundings is an helpful and useful tool for developing the potentialities of the ESF networking process!!!!! Search by categories Free search View all

Figure 12: A Snapshot of Collection of ESF Participant Organizations

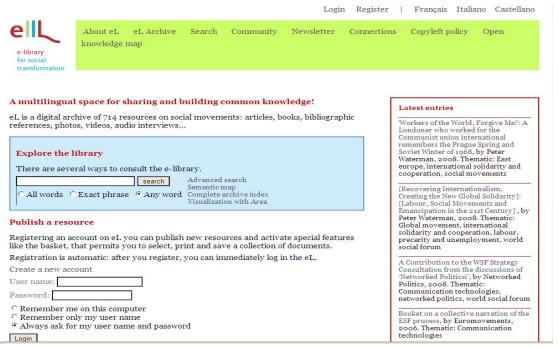


Figure 13: A Snapshot of the E-Library Website



Figure 14: A Snapshot of AlterMundo Website

Different visualization tools like SEMAMAP, NETWORKS, MAPOMATIX, NEWSLETTER, CHRONUS, CASUAL and AREA were also applied on the ESF data in the context of memory project [ESF Tools, 2007]. Most of these tools were open source applications highlighting data in visualized format as shown in figure 15 where AREA software is applied on the e-library database.

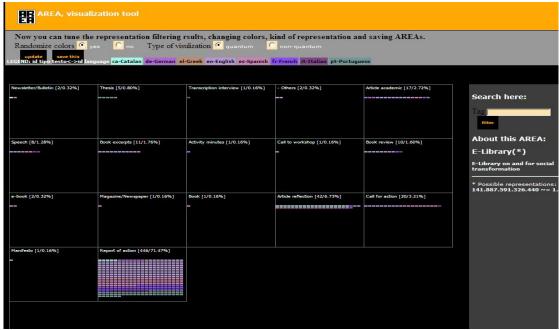


Figure 15: A Snapshot of Visualization by AREA

These applications have not been much used by activists and further data is not populated in these databases to make it sustainable. One activist described this in following words:

"There were projects for data visualizations and people have developed quite impressive data visualization tools, but most of them haven't really been used in ESF."

He further said:

"They are not extensively used as far as I know, well it maybe that some people used them but most people do not even know about them."

Another subproject of the memory project was to develop a radio-based interpretation system. An interpreting system (ALIS) was established which was successfully used during Athens ESF. Describing the design of the system, one Greek activist described:

"I went in January 2005 to Porto Alegre [World Social Forum], they showed how they manage their alternative interpretation system, and it was called "Nomad", and I collaborated in the team that built the system. That system was a complete failure. It did not work, but the experience was very important. I used this experience to build our own system [ALIS]."

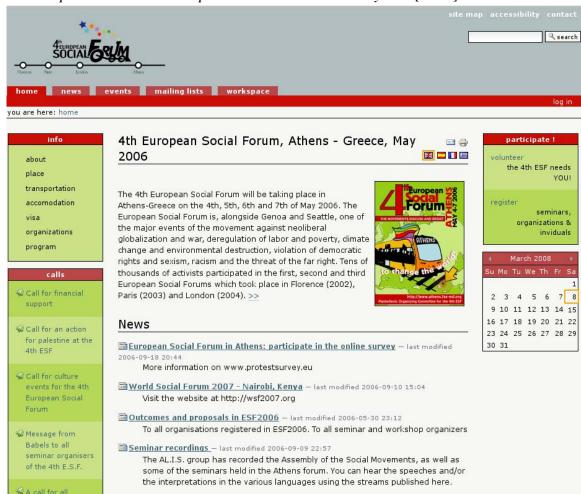


Figure 16: A Snapshot of ESF 2006 Website

In order to disseminate information mainly the European mailing list (fse-esf) was used and to facilitate discussions around each program theme 16 different mailing lists were created.

6.5 Technology Usage during 5^{th} European Social Forum

During 5th European Social Forum in Malmo three different websites were present: One was the official website of European Social Forum (www.fse-esf.org) [FSE, 2010], which had been established as a permanent space for information dissemination about the ESF activities. The second website was dedicated for ESF 2008 registration and program building, whereas a third website was available for collaborative work. Describing the differences of the websites one activist described the following.

"Well these are different projects, different initiatives. Fse-esf.org is the official site of the European social forum where you can find the information what is the European social forum and news about what is coming in the next EPA. Open ESF is an open website where anybody could go and register themselves and register their projects and use the available tools and this is to support the ESF process but it is not the official website."

The official website and the mailing list were managed by EPA, whereas all other activities specific to an ESF event were the responsibility of the local organizing committee. Since there was not any assigned Webmaster, a volunteer sometimes updated this official website depending on his availability. As a result it often failed to deliver updated information. It had links to websites of previous ESF events. Different documents like minutes of EPA meetings and newsletters were also saved there. The setup of the website for logistics was a complex process. The information work group of the NOC came across a social software development company which promised to help by setting up a website for free. The transfer from the previous Athens ESF did not happen as the people in the company were not familiar with using the Plone content management system with which the Athens ESF website had been realized. As the people in the information work group were not sure of the requirements of the website, they contacted volunteers from the Web-Team. Thus, a whole new website was developed from scratch and people started to propose activities for the forum using it, but there were conflicts on further enriching the functionality of the website. Some interviewees reported on communication problems between the information work group and the company. One member from the information work group described the situation as follows:

"I think they did not really understand what kind of work load it would mean for them and how much we would be dependent on them, because none of us in the group was actually capable of building websites by [him] self."

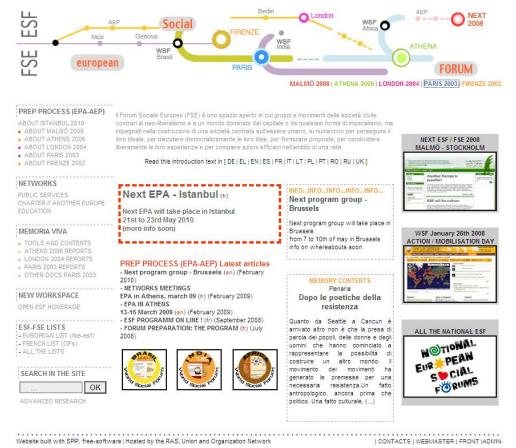


Figure 17: A Snapshot of Official ESF Website

In March 2008 this matter was proposed to the NOC board and it was decided to ask for the services of Greek developer to extend the website of the Athens forum. As the Greek developer was already aware of the ESF process based on his previous involvement, his engagement resulted in a better coordination and more effective work. The activities which were already proposed on the old website were re-entered to the new website by the NOC members. One member of the information work group commented on this in the following words:

"I had very good contacts and he was very quick in answering and he was also quite fast in putting it up [website]... It was a lot easier, because he also knew the ESF and he knew the program process so he kind of instinctively knew what I was after and could come up with his own ideas."

The functionality of the website was enhanced from the Athens forum and a module was developed to support the merging process through the website. It was the first ESF in which merging was done using the website. Another Swedish volunteer extended the website to include an outcome module. He described it as follows:

"Later on we also implemented this outcome scheme on the webpage but this was not the part of the initial requirement. It was later added."

The Greek developer who developed the event website for ESF 2006 in Athens met some volunteers from WSF and the same collaborative application was cloned for the 2008 World Social Forum event. On the basis of his experience he proposed to use a

new platform for ESF, because there were many problems in that application. The main problem was that the website was based on an older version of Plone. Secondly, the workspace was modeled in UML by a tool "Gentleware Poseidon" and code from this model was generated by ArchGenXML tool. The code was extended by doing manual changes in code or by changing the model. Gentleware Poseidon was not open source and the people who developed the workspace used a free of charge version of the system, which expired in 2006. Furthermore, the UML model cannot be exported to any other modeling tool from this proprietary software [Moraitis, 2007]. One French activist working in the Web-Team described this in the following words:

"When we decided to leave the 1st workspace and having this new one [OpenESF], it was first of all in Lisbon in March 2007. We showed the results of our work and tried direct evaluation with participants and the majority of the participants said we do not want it, it is not useful, and it is too complex. So when we had EPA in Stockholm in September 2007, we officially decided within the Web-Team group to leave it, to abandon the workspace and to create a new tool from free software, small, simple and people feel it is more useful."



Figure 18: A Snapshot of ESF 2008 Website

The Greek developer established an initial website for free to give people an impression of the system. This website was based on the "OpenPlans" system, which is an open source system developed by the Open Planning Project [OPP, 2008]. The objective of

this website was to support collaborative discussions in merging and other organizing processes and also to serve as a communication platform in between the two events. Since voluntary networks are mostly short on finances and try to employ cheap available alternatives, one activist of the Web-Team sums up the evolution of this platform as follows:

"OpenESF was not developed, it was copied. It was copied from Open Core because we do not have the capacity to develop anything."

The website was launched on November 27, 2007 and there were 197¹ projects and 946 registered users at the time of my evaluation. This web system was supposed to support the ESF but not to serve as the official website. The system was called OpenESF. The server was Linux-based and all of the software was open source. It was an open website where all participants could register themselves and register their projects. Every project could have multiple mailing lists, wikis, blogs and mapping tools to have collaborative maps. Every user had a profile page where he could give his basic information, picture and a list of all joined projects. The profile page also showed the activities of that user on the OpenESF system. The system also allowed sending an email message to that user once you were logged in. By opening any project page one could join the project, browse wiki pages, summary, mailing lists, task lists, list of members and contents. On the other hand the third button "Start a Project" allowed creating your own project. A snapshot of the system is shown in figure 19.

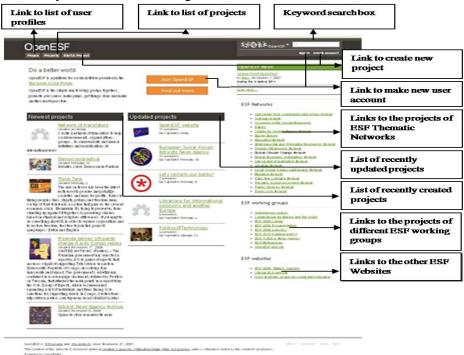


Figure 19: A Snapshot of OpenESF Website

There were 30 private projects whose data was only visible to the administrator. So in this thesis I will discuss the statistics of only 167 projects.

The OpenESF was promoted through information on different mailing lists of social activists. At the EPA meetings in Berlin and Kiev volunteers helped activists to make their accounts and showed them how to use the system. It was also advised to describe a website for all the proposed activities at the Malmo forum to promote OpenESF but not many organizations used it effectively.

In order to facilitate information exchange among activists, mainly the European mailing list was used. However, different work groups established their own mailing lists associated with the event website. When the event website was needed to be developed again these work groups created mailing lists on OpenESF website. Similarly the ALIS system was tried but could not work (see section 5.3.2).

6.6 Technology Usage during 6th European Social Forum

The realization of ICT infrastructure for 6^{th} ESF was also quite complex. After the Malmo forum the official website of the ESF was not updated for almost a year, because the volunteer stopped working on it. The EPA meetings were taking place regularly every three to four months, but there was no information about it on the website. One activist, who worked on ICT activities for the ESF, described the following reason for not updating the official website:

"I think the last webmaster was "XYZ" and she just stopped doing this, because at some point she was doing a lot on a voluntary basis and she had no money to go to EPAs. She said 'Ok, you want me to be the webmaster, but then, at least, if you don't pay me, give me the possibility to come to the meetings.' So she stopped."

After almost one year, other activists noted outdated information on the website and brought up this issue on the mailing list; the activist who was maintaining the website stated that the people in the ESF had no interest in the website. Therefore, she decided to stop updating and waited for a response. At that time the control of the website was handed over to another activist who did minor updates on the website.

Similarly the collaborative website (OpenESF) which was used during the ESF 2008 was no longer used during ESF 2010. The Greek designer who had developed it, wanted to have a regular income for the maintenance and the server costs. However, the TOC did not have any money, so the site went offline. One member of the Turkish committee described this in the following words:

"We do not have many financial resources. So we cannot finance anything and we cannot even finance the printing of our documents. As you see we had some problems even to finance the event website. So I guess as organizing committee of Turkey we will not be able to finance the OpenESF."

The realization of an event logistics website for ESF 2010 was also quite bumpy. One member of the Turkish Social Forum was in contact with the Greek developer since the Malmo forum and was interested in using this website for the ESF 2010 because they did

not have enough financial resources to setup a new website. The member of the TOC described their plans in making the website functional in the following way:

"I guess we are going to use the help of people who prepared that website, I know "X" from Greece and also some people from Sweden maybe and we are going to change the language actually a bit and that website will work in Turkish, English and maybe some other languages."

Another Turkish activist gave similar comments too:

"We had a European Preparatory Assembly in Istanbul, where people from Sweden came up and it is not decision of organizing committee but we are thinking to use that, because it is already made and it is easy to use that."

Similarly members of NOC were also keen to transfer the website to the new organizing committee. One member of the Nordic Organizing committee commented in following words:

"We know organizing committee of Turkish forum, we have some contacts, with some Turks it is very informal we would like Turks to take into account the site, either clone it or improve it, keep it and extend it and also maintain the OpenESF. At the moment it is not clear."

Due to this unclear situation the developer who established the website for Athens and Malmo was also not sure, how things will turn out. He commented in following words:

"The cost of the server was covered by Nordic Organizing Committee until December 2008, Since December I am paying through my credit card and I am trying to find some people from next organizing committee to see if they want to reuse this technology both OpenESF and technology behind esf2008, we could copy it and setup a new site."

The TOC had a website of the Turkish Social Forum which they used to publish some initial information. The University of Siegen offered to provide server space for hosting the website of the ESF 2010. The initial installation was done in September 2009 and the TOC wanted the website to be functional before December 2009, but it was not realized as the TOC members were busy in other organizing activities. So when TOC finally contacted the Greek developer at the end of February 2010 to ask for help with some changes in the installation, he did not want to do them on a voluntarily basis. Instead he offered to ask an employee of his company to conduct these activities for a flat sum of 4.500 Euros. The TOC did not have the money, so they tried to look for volunteers in Turkey who had some expertise in Plone. In the meantime, one activist from the TOC also started to learn Plone to do customization. However, it did not really work out. Eventually registration procedure for seminars and workshops was running late and people from all over Europe were very concerned. At that point, the University of Siegen helped out to carry out some changes in the website forms to enable the registration of activities. As a result, the website was, quite a bit behind schedule, ready to receive submissions of activities. When the activities were registered, it turned out that the activity merging feature of the website did not work due to programming errors in the code.

As a result of the initial empirical work with ESF 2008, I had intended to develop a prototypical feature (details in chapter 7) to make the merging process more transparent to those who had registered proposals. This feature would have enabled to merge activities via the website by involving those remote activists who had submitted the activities. When I tried to fix the above-mentioned errors and implemented the new merging feature, the absence of documentation and the lacking structure of the given code implied that it was easier to rewrite the application.

Finally, due to these problems, to increasing time pressure and the considerably lower number of registered activities, the Turkish organizers did not fix the website's problems and merged the activities manually.



Figure 20: A Snapshot of ESF 2010 Website

The Turkish organizers did not update the result of the merging process on this website, as the responsible activist found it difficult to deal with the Plone-based website. In order to publish the program and other relevant information, the activist configured a website using the Joomla content management system as he had expertise in that. When he was asked to describe the reason for setting up this additional application he said:

"This is just an informational website, it has a different objective than the other one and it is much easier to make changes on this one. The esf2010.org is for registering activities etc. but it does not have much information on it. But the new site is just for giving people information

about the ESF [ESF, 2010], especially to people who heard about the ESF for their first time."

This lack of information on the official website prompted a group of activists from Germany to set up a blog where they put information acquired through mailing lists. A German activist described her reasons for developing the blog as follows:

"The idea for the blog was the result of a process of research for information on the ESF 2010 in Istanbul. On official websites, interested people could not find updated information. The websites were full of old and confusing information. A colleague and I joined the ESF-mailing list. Since then we have published all important information on our blog. On the other hand, I try to diffuse the information on the mailing list to the Facebook group for the ESF 2010."

As a result multiple websites originated to provide partial information, one Plone-based website was used for activity registration, a second Joomla-based website was used for publishing the program and collecting the participant's registration fees, and a third blog-based website provided day-to-day updates. Beyond these three there were even more websites run by different European activists (see quote below). Finding relevant information in the presence of these multiple website was quite a challenge. An activist from Norway, who participated in the ESF 2010, described this in the following words:

"I found five different websites for the ESF 2010, which is a lot, and one is, of course, the fse-esf.org which has been the main working site for the ESF for several years. I do not like that website it is not easy to find what you are looking for. And then there is esf2010.org, which is the registration website. There also is the esfistnabul.org which I believe is the main website for the ESF 2010, but I am not sure. There is another website of the Turkish Social Forum, but there is not much in English. It is a bit confusing, but yeah it is there and the last one is a blog, the esf2010 blogspot, which the Belgium trade unions use; it has been putting out information for the preparatory assemblies for a long time now, because they do not find the information. So they made this stuff, which has been useful for me at least."

The European mailing list (fse-esf) was mainly used for communication. Furthermore, there were also couple of mailing lists such as used by European program group and other work groups of TOC but they were not used actively. The ALIS system also could not work in this ESF (see section 5.5.1)

Given the dislocated nature of the network's activists, ICTs could have played an important role in overcoming some of these problems. However, the opportunities of an appropriate ICT structure were not met for some of the same reasons from which the overall organization process suffered. In the following, I analyze the participant interactions with couple of ICT artifacts in more depth to better understand users' problems.

6.7 Usage of European Mailing List

As we have seen in the previous section that the European mailing list (fse-esf) is the most important and old channel of communication among ESF activists. Important activities related to ESF initiatives and EPA meetings such as announcements about the program, venue, times of the meetings etc. are mainly accessible through this mailing list. It was initiated in 2002 during the 1st ESF but due to some technical problems the archive is only available from December 2005 onwards. The current number of activists subscribed to this mailing list is 875; among them 740 subscribed for receiving individual email messages whereas 135 subscribed for receiving grouped messages. The monthly number of messages and unique senders are shown in table 9. The statistics highlight that traffic on mailing lists is associated with real world activities. The number of messages increases just before or just after the EPA meeting and the ESF events. Due to the multi-lingual background of the activists, most of the communication is carried out in English language. However, people were still able to send messages in any other language. A practice, which was followed, especially at the start of the mailing list, is that once the message is floated on the mailing list, someone will try to translate this message into different languages and forward it to the list. People that are fluent in several languages could also forward the message using their multiple language abilities. A Swedish activist described the importance of the mailing list in the following words:

"There is no need for anything else than this email list, that's perfect, it works perfect, and that's what people look at. Now more and more I see that grand Internet website things do not work and people go back to make email lists and stuff, because everybody opens the email box, but people don't go up to a website to find out things."

A Hungarian activist described the objectives of his usage of this mailing list in the following words:

"For sharing information, to put news, important news which is connected or linked to the ESF organization or sometimes just an information e.g. if there is a strike or there is an action of solidarity, so it's put on the mailing list and people can join, people can organize it or if there is a document or something which is issued e.g. either by Turkish comrades who had a strike in Turkey ... we use it for sharing information and also if somebody needs help or to join an action, so it's used for that."

Another Norwegian activist described the importance of the mailing list in the following words:

"I think it is very important actually, I think it's the main source for information, like if you cannot participate in a preparatory assembly meeting then the only way you can get the information is through this list, so it is very important."

It was interesting to observe that people make classifications of these messages. A Norwegian activist described her practice of locating old information from this list in the following words:

"Some of them [emails] I have in my mail box, so I have different categories, so I have one category for ESF and emails there which I think are important, I put them in this box and if I don't think it is important then I delete them so I can go back, if I need them."

An Italian activist described the use of the mailing lists from the ESF in the following words:

"You can ask and you can give information e.g. we can put a document, we can ask information generally also in this list, problem is how many people work really inside because there are people that stay in the list everyday so they put messages and messages and in a sort of way they dominate the list and there are other people that maybe read the list one time every week and so they remain behind and so it's not like that all the people go at the same speed but generally you can use it for everything, they are the closed list, I mean you can join if you want, you can send the message and you can receive messages."

This fact can be verified by the statistics in table 9. Only a small fraction of people distributes messages on the mailing list whereas the majority of them only benefits from this information and remains passive.

| | 2005 | | 2006 | | 2007 | | 2008 | | 2009 | | 2010 | |
|-----------|----------|---------|----------|---------|----------|---------|----------|---------|----------|---------|----------|---------|
| | Messages | Senders |
| January | | | 168 | 74 | 29 | 20 | 82 | 47 | 137 | 86 | 92 | 38 |
| February | | | 93 | 51 | 35 | 22 | 104 | 50 | 76 | 43 | 80 | 27 |
| March | | | 170 | 79 | 66 | 41 | 48 | 28 | 61 | 32 | 98 | 33 |
| April | | | 214 | 96 | 41 | 16 | 57 | 30 | 17 | 8 | 115 | 64 |
| May | | | 192 | 90 | 58 | 39 | 66 | 40 | 53 | 26 | 156 | 58 |
| June | | | 66 | 38 | 72 | 41 | 82 | 45 | 67 | 40 | 148 | 52 |
| July | | | 108 | 58 | 37 | 26 | 72 | 38 | 21 | 14 | 85 | 34 |
| August | | | 29 | 18 | 41 | 28 | 67 | 30 | 14 | 11 | 48 | 23 |
| September | | | 23 | 18 | 99 | 44 | 95 | 57 | 65 | 31 | 76 | 35 |
| October | | | 56 | 30 | 52 | 33 | 63 | 35 | 48 | 21 | 97 | 46 |
| November | | | 75 | 47 | 80 | 34 | 76 | 35 | 56 | 26 | 82 | 26 |
| December | 184 | 86 | 37 | 21 | 61 | 27 | 120 | 66 | 48 | 22 | 38 | 16 |

Table 9: Monthly Traffic at European Mailing List

In order to better understand the usage details of the mailing list I classified the messages based on their content in the following classes.

6.7.1 Information Sharing

The majority of the email messages were posted to disseminate information about different calls and initiatives carried out in different regions by ESF participants or other civil society actors. As an example of such messages, see the following email sent by an Italian activist in March 2009, who wanted to describe the initiatives planned in Italy, against the G20 meeting in London on 28th March 2009.

"In Italy on the 28 March some networks and "Mr. XYZ" will send a delegation to participate in the London demonstration 'Put people first' at the occasion of G20. In Rome there will be a national demonstration organized by "Mr. ABC". On 4 April there will be a national demonstration organized by "Mr. XYZ". An Italian delegation of different groups will participate in the Strasbourg-Kehl activities. The movement is plural!"

This message highlights how activists could report their activities to other European partners and announce their own initiatives to get support of other activists.

6.7.2 Solidarity Support

Some email messages were used to forward appeals and receive support from other activists. This could be a letter of support, signing a petition etc. An example of this kind of communication is the following message that floated on the mailing list on 5th November in 2009.

"... Below and attached you will find an urgent action call-out from the "Mr. XYZ", San Luis Potosí, Mexico to send to Mexican and Canadian authorities demanding the application of the law and the immediate departure of "Mr. XYZ" that has been operating in the Cerro de San Pedro since 1996. The project has engendered severely harmful environmental and social impacts despite the fact that not all of their permits are legal. ... Thank you for your solidarity. To send your letter to Mexican and Canadian authorities, please go to: http://weblink XYZ

More information: http://weblinkABC

History of Cerro de San Pedro' resistance: http://weblinkDEF and http://weblinkXYZ"

6.7.3 Information about Other Fora

In order to remain aware of the activities of other social fora, email messages containing information about activities of other social fora (such as world/national/regional) is also floated on this mailing list. An example is the following message where an organization participating in the preparatory phase of the WSF 2011 in Dakar posted this information on the ESF mailing list.

"Dakar launches a public consultation on the thematic axes for 2011. See the axes and send your contributions: http://weblink XYZ"

Another example of such communication is the following email message where an activist informed about the Polish Social Forum meeting.

"The declaration of founders of the Polish Social Forum. On the 26 June 2009 in Kielce the first meeting of the founders of the Polish Social Forum took place. The goal of the PSF is, like other regional and European fora, to create a common space for groups and social movements which oppose the neo liberal economy, the domination of capital in social life and all forms of imperialism, and instead look to create a society which puts people first. The founders of the Polish Social Forum wish it to become a platform of common action and free exchange of thoughts, new ideas and experiences. Polish Social Forum"

As a result, activists who cannot be active members in all the fora can also get information about the state of the affairs.

6.7.4 Content Sharing

Mailing list is also used to share important content, such as declarations, interviews, etc. with each other. The following email dated on 2nd July 2009 is an example of such kind of message.

"Dear Friends, I wish to draw your kind attention to the interview with "X", Vice Chairman of ATTAC Hungary. The interview was published in the International Socialist Journal: http://weblink XYZ"

The archive of this mailing list containing rich sets of information can become a powerful organizational knowledge base.

6.7.5 Collaborative and Coordinative Work

Sometimes mailing list is also used to carry out collaborative work in the ESF process. The most common example is planning of the agenda for EPA meetings, or other joint documents. One activist may create the initial points of the agenda and others give their feedback in order to realize a final version. The following message describes how an activist sets up the deadline for submitting correction in the meeting minutes.

"Please send any correction for the minutes by tonight, so that I can send the list, final version. Thank you "XYZ" for your help. Bye."

6.7.6 Organizational Issues

Another major use of mailing lists is to discuss organizational issues about planning EPA meetings or ESF events. People could raise their queries, which can be sorted out by respective organizers. A good example for this is the following message from an activist requesting some information from the organizers of the ESF 2010 to share it on the Facebook group she was managing.

"Thank you very much for your great effort ["final" timeline]. Now 10 days before start of the ESF 2010 - no final program could be found on the official website. I'm sorry, but I couldn't understand this fact. There are many questions [program, payment etc.] on Facebook too, and a lot of people want to know where and when the seminars / workshops are going to take place? When will the final program be published? Another important question: A journalist asked me today, where he can make his accreditation

for the ESF. Is there any place for that, can you tell me [and us] yet? Thank you for answering the questions!"

6.7.7 Decision-Making Support

As the EPA meetings takes place only every 3-4 months, sometimes need may arise for decision-making during this period, as things may not be going according to the plan. So sometimes mailing list is also used for decision-making. This means that someone sends an email with a proposal and other activists either support or reject it through their follow up emails. During the organizing process of the ESF 2010, a meeting was scheduled in Brussels in April 2010. The proposed objective of the meeting was to come up with suggestions for merging different activity proposals in order to shorten the program of ESF 2010. During ESF 2010 proposed activities were not too many, so Turkish organizers proposed to cancel the meeting at all. An Italian activist proposed not to cancel it, but connect it with the EPA meeting already planned for Istanbul in May 2010, as can be seen in following email excerpt.

"... Thus, my proposal is: 20th May all day long merging group
21st May in the morning [if necessary] merging group; from 14h on,
Networks meeting
22th-23th EPA
And, please, in the future let's try to have a good dialogue more often than

now...."

Other activists accepted this proposal by sending emails and as a result the Brussels

6.8 Usage of OpenESF

meeting was merged with the EPA meeting in Istanbul.

In order to analyze the success of computer supported collaboration, it is important to understand whether social activists need to indulge in collaborative activities in their work practices. As the core objective of organizing a social forum is to learn from the experiences of other organizations/activists in anti-globalization campaign and to take part in joint activities (demonstrations, protests, etc.) for the future, this makes collaboration an important activity for the activists participating in the process of ESF. Describing the objective of collaboration between the social activists, one of the interviewees described a similar perspective:

"A national and international cooperation is very important for us. It is to exchange information, to share experiences and to do common actions."

Describing the importance of collaboration in the European social forum process, one Greek activist described as follows:

"The most important in the ESF is to collaborate with different organizations ... it was not so obvious before for a lot of organizations, to put themselves together with the other and try to find common solutions and to organize common activities."

Furthermore, as the organizing committee of ESF keeps on changing, there is a need to transfer knowledge around organizing activities. This results in collaboration among the

current and previous organizing committee members. There are also different thematic networks which are constituted by different activists around a specific theme like education, public services etc. to coordinate common activities around its theme. One activist who carried out a workshop at the ESF 2008 in Malmo described the collaboration practice as follows:

"We make new collaborations, especially with organizations we know; we have contacts in the movement I work, and we know a lot of international organizations, some we met and become connected in World Social Forum or in European Social Forum... and we have an exchange of information not only in the social fora but it [European Social Forum] is a [one] possibility to meet and to exchange experiences and planning."

It was also observed that trust is an important parameter before indulging into the collaboration activity. Describing the collaboration practices one French activist mentioned:

"This is the common use I won't get in touch with you without any recommendation; I am in France and interested to work in Pakistan for instance, for instance in women rights, but I don't know your organizations, though maybe you have a website. Ok, I can go to your website, but I don't know who are you? Which relationship you have with government etc. I don't know. So I only begin to work if some other organization which is already in my network says this is a good organization."

6.8.1 Appropriation of OpenESF

As this platform is open for everyone to join, initiate and participate in a discussion, a member of Web-Team described the OpenESF in the following words:

"OpenESF is a space which can be used by a lot of people; they can organize groups, they can organize discussions [and] they can organize meeting, so it is very important to use it."

Different European thematic networks like antiwar, public services etc., which focus on specialized themes, present their projects on the website to describe their activities. One activist participating in antiwar network described that they are using this platform as an information publishing tool, but sometimes due to the sensitivity of information it is not possible to write everything here. He cited that they organized discussions against war in Georgia during ESF but it was not possible to put all that information online. He described as follows:

"There is some information about NATO stored there and we will try to provide [information about] the activities against NATO ... First of all we have to collect the information, especially the appeals and what is proposed in the European Preparatory Assembly meetings and then we can make documentation about this [at OpenESF]."

Different thematic networks and work groups created their projects on OpenESF website providing information about their activities. This was quite helpful when one

could not participate in all of the physical meetings. One activist from Turkey described the advantage of OpenESF as follows:

"I found different networks and work groups over the website. I found it very good because I did not have the chance to join many of them; I can see what is going on in the work groups."

Different work groups of the Nordic Organizing Committee opened their separate projects on OpenESF and used this platform to coordinate activities. The volunteer work group launched a project on the OpenESF where volunteers could socialize with each other before the forum so that they could work in a better and more coordinated way during the event. One member of the organizing committee of the 2008 event described the use of OpenESF during the merging process that was coordinated by the program work group:

"What happened, which was really cool, when there were proposals about to be merged, they [the organizations] never met before and they started communicating well before the forum. They formed an OpenESF project and they already formed the network before the forum, which, I think, it what's really cool to see, because I mean one of the aims with ESF was to make new networks and contacts for future action and then if you already see this because of merging process."

Since most of the activities organized at the ESF were managed by more than one organization, some activists used this platform to prepare for their seminars/workshops at the forum. They discussed the pattern and structure of their seminars. As the next European Social Forum was going to take place in Turkey, there were some spaces being used for planning and coordination for the next ESF. There were also many projects opened on specialized political debates like energy poverty and consumers' rights, Feminism and neo-liberalism, eastern experience, financial crisis seminars etc. There were also different country chapters of social fora like the Hungarian Social Forum, London Social Forum and Romanian Social Forum on OpenESF. These described specific information related to their geographical location. One activist from the United Kingdom described that UK social forum was going to use this platform as a tool to coordinate the activities in UK.

"We are planning to use OpenESF as a wiki now because we could develop and make a project on the OpenESF website and then put it on the other [official] website when it is finished. For example, when we have a meeting we can put the minutes on OpenESF, then people can edit the minutes and then after a certain amount of time it could go to official website."

As one of the objectives of setting up this space was to provide a platform for continuous discussion in between the social fora as well, it was interesting to monitor the activities of users over a period of time. I analyzed the joining pattern of new members and the creation of content at OpenESF on monthly basis. Table 10 describes the number of new members, projects and mailing lists created every month. Since ESF 2008 took place, the maximum number of new people joined the OpenESF platform at

that time. Contrastingly not many people joined the forum after ESF and also there was not much activity in terms of creation of new content, presumably because there was some time left until the next forum which was scheduled to take place in July 2010. So these statistics showed that the creation of new content still revolved around the physical event and its objective as a communication platform in between the event was somewhat lacking.

| Month | New Members | New Projects | New Mailing lists |
|----------------|-------------|--------------|-------------------|
| December 2007 | 80 | 11 | 14 |
| January 2008 | 43 | 7 | 10 |
| February 2008 | 84 | 28 | 28 |
| March 2008 | 93 | 15 | 13 |
| April 2008 | 70 | 21 | 24 |
| May 2008 | 54 | 18 | 20 |
| June 2008 | 88 | 23 | 23 |
| July 2008 | 72 | 9 | 8 |
| August 2008 | 90 | 9 | 10 |
| September 2008 | 130 | 9 | 10 |
| October 2008 | 58 | 7 | 6 |
| November 2008 | 24 | 3 | 7 |
| December 2008 | 15 | 4 | 4 |
| January 2009 | 10 | 0 | 0 |
| February 2009 | 13 | 2 | 2 |
| March 2009 | 13 | 0 | 0 |
| April 2009 | 9 | 1 | 1 |
| Total | 946 | 167 | 180 |

Table 10: Monthly Statistics of OpenESF

I further investigated the users who were already using this platform, how often they participated in discussions and activities. At the end of each month the statistics were analyzed in three categories. Firstly there were "active users", who logged in at least once in the last month, whereas "inactive members" were those who never used their account after first 24 hours. The third category was of "dormant members" who were active users at some point in time and later they became inactive. As the following graph shows after September 2008 when the ESF took place, the number of active users kept on decreasing. On the other hand a major number of users were inactive since the start. They made their accounts once and never returned back while in the case of dormant users, the curve is not as steep as is the case with inactive users.

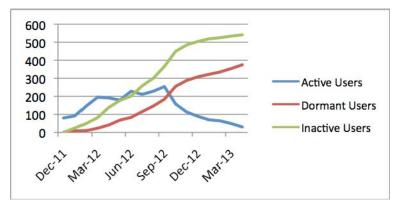


Figure 21: OpenESF Members Statistics

The next point of investigation was to look at the presence of activity at OpenESF, as users might be interested in participating in pre-existing projects rather than creating new projects. So similarly projects were also divided in three categories, "active" modified in last one month, "inactive" not updated after first 24 hours of project creation, and the "dormant category" showing projects which remained active for some time but then turned into inactive. The graph in figure 22 again showed that there were many active projects before the forum and June 08 being the month where the maximum projects (64) were active. After the ESF event, activity has turned to almost zero, despite the fact that regular EPA meetings took place regularly and the preparations of next ESF by Turkish the organizing committee were also under way.

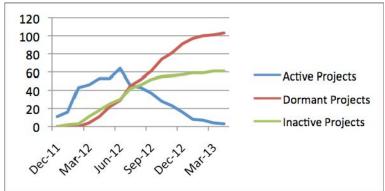


Figure 22: OpenESF Projects Statistics

During the empirical studies it was observed that activists were more accustomed to using the mailing lists and there were also instances where only the mailing lists were used instead of using other features like wiki pages, blogs etc. So I also monitored the activity on the mailing lists present on the platform. The following graph describes the status of mailing lists, which were again distributed in three categories. "Active mailing lists" being the ones having at least a single message in last thirty days and "inactive" being never used after first 24 hours of creation and the "dormant mailing lists" are also shown. Here again the similar patterns persisted and after the ESF 2008 not many active mailing lists existed.

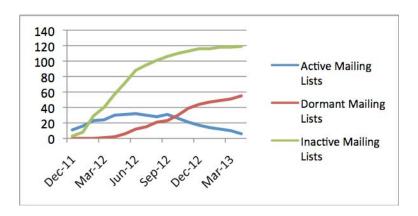


Figure 23: OpenESF Mailing Lists Statistics

The usage statistics show relatively low traffic on the platform and even the users who joined this system were in a somewhat inactive mode. Most of the initiatives taken by creating a user account or creating a project/mailing list could not really be followed up and ultimately never used beyond the 24 hours after creation. Moreover, the relationship between the number of users who took part in the events and the use of this space was very weak. For example there were nearly 13,000 participants at the last ESF, but the number of people who actually used this platform was much lower. The Greek developer who developed this website associated the lack of activity with the lack of parallel physical activity, weaknesses in platform and the low skills of activists:

"There were last month [February 2009] probably 650 people who logged into the website and there are like 900 visits per day. So around 900 people visit website everyday and some of them actually use it but, yeah, there is not too much activity I guess but it has to do with the fact that there is not parallel activity."

He further said:

"Most of the people involved in the ESF process are not used to such tools or haven't been using it. I think this is a cultural problem and of course there are some technical problems or bugs which can be discouraging to people and they have to be fixed. There is also a need for more new functionalities to be developed."

6.8.2 Problems with OpenESF

As the activists participating in ESF activities come from quite diverse cultural, political and organizational backgrounds, it was interesting to find out about their perceptions of technology. Some activists found the technological support for the ESF very important. One activist who was also participating in the Web-Team described her perception as follows:

"I think it is a good tool but is underutilized - not everybody in the process is using this tool, not everybody knows how to do it and at the end of the day it is more that when we meet, we say things and not during the time when there is not an EPA.... People are afraid of using something like this or they

don't know how to use it but we have done so many demonstrations. It's not very difficult to use. Now it's very open stuff and maybe it's at the end of the day, speaking is always better but as we are so far from each other we have to start using this kind of things."

Another French activist who was also participating in technological support commented in the following words:

"The technology can help us to simplify the necessary work the people want to do. So first you have to know what people want to do exactly and then you find the simplest technology because they don't want to be bored with technology. They only want to click, click and that's all."

A Greek activist raised technology acceptance concerns. She described her personal experience while arranging an EPA meeting in March 2009:

"Sometimes, even now, I receive phone calls from colleagues and friends and hear 'you didn't call me to inform me that European preparatory assembly is taking place' and when I said, 'but it's on the website,' they respond with 'but I don't see that; I was waiting for your phone call'."

Describing the reasons for this behavior one volunteer of the Web-Team described the following:

"I think it is a generation gap. Here the people are quite old and they don't know how to use technologies. It is not that they don't want. I mean for example my mother; it is not that she does not want she does not have skills to use it."

In order to find the problems in the system I tried to find the experiences and problems faced by activists in their interaction with the system. One of the criticisms of the system was less content creation in the projects and that most of the projects do not have meaningful, updated information after their start. One Swedish activist described this situation as follows:

"There is a phenomenon with the Internet and I call it the wardrobe phenomenon. You never create large enough public space for people to be able to participate and it becomes sort of specialized in a very small corner. If you look through the OpenESF.net, you find that there is very, very little participation in the different projects."

As it becomes difficult to access people when there is no response on the emails or discussion fora, he recalled his previous communication practices and said:

"Before, immediately when something started, address lists with telephone numbers were immediately produced so everybody could reach each other; now only email lists are produced and it is very hard to get into contact with the people because telephone numbers are not reachable and you can't get direct contact with them. And they do it by these emails and with the emails you never know if they will respond or not because only a few respond, creating a very different kind of culture in terms of knowing what is going

on and people are less interested in really preparing a meeting, deciding on a meeting and following up."

Another important factor contributing to the low adoption of this platform was the digital divide among the activists. Activists, especially from eastern European countries, had low accessibility to computers and, furthermore, a significant number of activists had language problems while communicating in English and they preferred to initiate discussions in their native languages. One activist from Turkey described his perspective in the following lines:

"I personally use OpenESF but we are not using so much as a general social forum of Turkey... You need to have very good connection with the Internet and the language, because OpenESF is in English but in Turkey [there are] not many people who can use English on the website."

Another activist from Hungry while discussing the potentials of this platform raised similar concerns:

"It [OpenESF] can improve [our working] but it is a slow process. It means people must learn foreign languages or another alternative is to have good translations, good people who are ready to translate Hungarian material into English and back and this is one point, and other point is people should use the Internet but people who are poor have no access to this fancy thing."

As the number of projects grew, some activists reported difficulties in finding interesting projects, although at the main user interface the list of recently created and updated projects were shown. One German activist described the problem that she faced with the interaction with the OpenESF system as follows:

"In my view there is no comprehensible navigating system; the only way to find something is the function "search" and under the list of projects by alphabet letters... There is no real structure. It is like a big sum of information but it is very difficult to find the information and many organizations opened projects and there is nothing in the project and. ... There is no visible and understandable structure. It is a summary of anything and everything."

Another Swedish activist raised similar concerns:

"I think it is difficult to find the spaces that I am interested in. What if I search a specific topic, specific region or specific country? It can be quite difficult to find. You have to search by index, by the first letter of the name of the space and there are also many spaces that are not active so that becomes discouraging in that not so much is going on. I think the front page could be much better; I think the explanation on how to use it could be better and more visible."

She further described her preferences for user interface as follows:

"I would like to have information on how to navigate the web pages, how to find what I am interested in and how to use it. The spaces with more members or more active spaces should be on the first page."

Another activist described that she would like to see a list of projects in which her friends are collaborating, so on the basis of those suggestions she may choose to join them. The heterogeneous nature of the organizations and activists involved in the process has also implications on the acceptance of the system. One activist who has participated in ICT initiatives described the reasons for not using the collaborative application as follows:

"The problem in my opinion is cultural. We have here big networks and they only exchange [information] by email and send documents etc. and sometimes they use phone, but the two mentors are meeting [Physical] and email, so they don't see what decent use we bring to them first. The second thing is that those tools are very useful for individuals and used by individuals, but here we have two logical [identities]. We have one logical [identity], which is individual. How can I myself with my culture and my technological background and can I use the electronic tools? But on the other side I am not only an individual, I am also part of an organization and as part of the organization I cannot do what I want, i.e. put text in the wiki. I cannot, because my organization is behind me and you cannot combine the two logical [identities] ... and they cannot solve this problem and they leave it."

Another Swedish activist raised similar concerns:

"OpenESF is supposed to be a decentralized process where any person can participate, but if you are representing a trade union or an organization you can't just write what you want, you have to check with your organization."

On one hand activists were interested in providing everyone equal chances to create and initiate a political discussion, but on the other hand some activists were skeptical and thought that this was the main reason for the lack of interest of people in this platform. One French activist described this in following words:

"As an individual you have no legitimacy. I mean in a political sense you can be somebody whom I appreciate, I can like you. There is a difference in you as an individual and you as a member of an organization."

An activist involved in the NOC described his opinion as follows:

"If you will look through it [OpenESF] there is an enormous amount of projects started by one, two, or even three people and nothing happens again, so the whole process seems to be fragmenting rather that creating/accumulating, because you never know if it is an individual saying something or if it is an organization saying something ... for me as a public movement person I am totally uninterested in starting individualistically nice and cute discussion for a myself because I know that this is not the way it works. So to start a discussion forum it has to be a lot of organization's

interest in doing it, so then it could become some kind of general political debate ... They don't even understand the problem because they believe that every individual takes his initiative and then the question whether there will be a response on that or not has only to do with quality of the initiative, if it is good quality then it develops, otherwise it will disappear but this is a market concept; this is the newly created world market culture, which is totally against any kind of responsibility for the process, and it doesn't work. So that's also why you have this... In terms of knowing how much effort is behind a certain initiative, then it becomes important to know what it is and what it is not."

Another activist raised similar concerns, too:

"The process of the social forum does not have to be this because the idea is that people come here, they discuss the things and they do things together, but there are still people who come here, who always talk with their organizations to understand what they have to do. This is not the spirit of the social forum, but yes, there are people here who think that it is very important. I think that we have to remind ourselves all the time of the real spirit of the forum.

As the majority of the activists in this community are not expert users of computer systems, it is very important that the technology deployed should be simple and easy to use and that it has a clear objective. Some of the activists were not clear enough about the objective and the focus of transforming this space into a platform for continuous interaction among the European Social Forum events. One German activist described this in the following words:

"... The OpenESF is not connected to the movements; therefore, the movements filled in information before the ESF, but they don't use it as an information source and network tool and database. There is no input about the current activities against the NATO summit, the finance crisis or the G20 Summit or local activities connected to social forum movement. The OpenESF is in my view a tool that the Swedish organizers demanded to use, but the social movements do not use it. Activists are looking anywhere and everywhere to get information, but not in OpenESF."

Another activist described the reason for this behavior as a conflict between the social for itself. She described that some people/organizations were not sure whether it is a continuous process or just an event that takes place after every two years.

The human centric evaluation of mailing list and collaborative application (OpenESF) highlighted that there is severe need for appropriation efforts to align technology artifacts with work practices of social activists to better support this heterogeneous network. In the next section, based on empirical findings, I discuss findings and propose design implication for future technological artifacts that could improve the working of activists participating in ESF network.

7 Discussion

In the long-term field study of the European Social Forum I analyzed the development, appropriation and use of ICT tools in the organization and knowledge transfer practices. The problems, challenges and limitations of the usage of different tools provided some hints for improvements and design recommendations. Furthermore, analysis of ICT usage shed light on the high complexity of the involved organization, coordination and knowledge management tasks. The observations and interviews brought some insights into the highly complex conditions of organizing ESF events. Given the international and intercultural setting and the high diversity of involved [groups of] actors, the whole process would not work without the support of ICTs (such as mailing lists, websites, newsletters). According to my research questions and the empirical data, I first discuss findings with regard to the structural conditions of ESF organizing and associated knowledge transfer process. Secondly, I focus on the practice of ICT usage during the organizing process and discuss some design recommendations and possible improvements.

7.1 ESF Organization as a Meta-Coordinative Activity

Although Stoll et al. [2010] already looked at coordination aspects among non-profit organizations; they did not focus on holding political gatherings. Collaborating initiatives to support victims of human trafficking can be hampered by different political agendas and priorities of individual organization [Stoll et al., 2010] the findings indicate that scheduling large scale gatherings which discuss political directions, plans and initiatives are even more vulnerable to such issues. Holding ESF events is a complex political endeavor in which the success of organizing and coordinating activities seems to be highly dependent on particular social, cultural and technical settings. In contrast to welldefined communities, ESF organizing processes have to deal with a large number of different participants and organizations, following their own interests, agendas, profiles and strategies. The involved actors are highly disparate in their structures and cultures; they differ in local and historical background, in experiences and competencies, in personnel, infrastructure and resources. Being a gathering of very different NGOs and civil society actors, ESF events cannot be characterized as community meetings focusing on a shared goal or practice, but as a network of events for very diverse individuals, groups, organizations and networks. The continuous scheduling of the ESF with a new set of organizing actors also affects the sustainability and learning with regard to organizing tasks. The new set of actors each time responsible for organizing the ESF may not have been previously involved in ESF activities, so they may lack knowledge about past activities.

CSCW researchers have looked at different aspects in non-profit settings such as the inter-organization collaboration in field settings [Stoll et al., 2010], information

management [Iverson & Burkart, 2007; Voida et al., 2011] and technology management [McPhail et al., 1998; Farooq et al., 2005; Merkel et al., 2005; Merkel et al., 2007; Goecks et al., 2008], but there is no comprehensive study describing coordination practices when all of these different tasks merge in conducting a large scale gathering. Organizing the ESF does not mean to deal with one collaborative practice but has to do with coordinating a diversity of social and cultural practices facing the challenges of:

- personal and organizational discontinuities
- informal processes and a "hidden leadership"
- "nomadic knowledge" transfer (see next section)
- lacking financial and human resources
- lacking technological infrastructure
- scattered information sources
- a high diversity of ICT applications and communication channels
- missing documentation and lacking transparency of [decision-making] processes

Due to the lack of resources, organizational complexity and political nature of work, the whole process is full of tension that leads to long discussions and debates. Furthermore, over the different ESF instances and across the respective responsible (regional) committees, the ESF as a whole lacks a binding "shared history" or common story to frame its collective identity. The shortage of financial resources hinders ESF activists to invest in dedicated ICT support. Kavada [2005] came to a similar finding. She further highlighted that ICT usage is influenced by cultural factors and organizational goals.

Compared to traditional work settings the cooperation within the ESF is mainly limited to holding periodical events, creating political manifestos, exchanging information, learning and coordinating distributed political activities. However, the ESF's inherent diversity and its lack of resources lead to coordination practices of a rather unique type. As Schmidt [2011, p. 298] points out: "what we, in the context of CSCW, focus on are computing technologies at the 'level' of cooperative work practices". These cooperative practices are determined by the division of labor (and therefore, by coordination mechanisms) and by control functions [Schmidt 2011, pp. 299ff.]. With regard to Schmidt's understanding of "coordinated cooperative work" [Schmidt & Bannon, 1992; Schmidt & Simone, 1996; Schmidt & Wagner, 2004; Schmidt, 2011], such sophisticated pattern of co-operations could probably be found on the level of certain (local or regional) political activities of social activists. In this thesis, I focus on the meta-level of organizing ESF events as gatherings of political activists and organizations to promote political discourses, to facilitate discussions and agenda settings. Having said that, there are two different levels of coordination: Schmidt's level of "coordinated cooperative work practices" and the mentioned meta-level of organizing opportunity structures for such cooperative practices. In the next paragraph, I elaborate on the ESF organization to be understood as a "meta-coordinative" activity.

ESF offers a structure to facilitate the establishment of cooperation, the discussions on strategies, and the planning of activities and concrete political projects. These activities would be realized as "collective actions" [cf. Tarrow, 1994] in the sense of different

kind of protest activities (such as street protest rallies, political events, flash mobs, campaigns, petitions, sit-ins, blockades). Usually, these collective actions are supported by efforts for mobilization, campaigning, agenda setting, lobbying etc. Crucial preconditions for the success of political collective actions are "Political Opportunity Structures (POS)" [Kitschelt, 1986]. These POS are e.g. an identifiable political party that is the addressee of protest, that is responsible for a particular grievance or imbalance, an opportune public opinion, a public political agenda that is sensitive for the respective protest issue, some resources (such as people, know how, engagement, money, posters, media contacts) [Kitschelt, 1986].

In this sense, ESF meetings can be understood as a facilitating meta-structure. ESF is organizing a process of political discourses and a structure (loosely-coupled network of actors, social movements, NGOs, Civil Society Organizations, activist networks) for discussing and planning activities (preparing collective actions). Therefore, organizing ESF events might not be "coordinative cooperative work" per se in Schmidt's [2011] understanding - because it is too fragmented, poorly institutionalized, characterized by very informal division of labor, fluid and barely regulated, hardly planned or controlled [cf. Schmidt 2011, pp. 383f.] - but instead organizing these ESF events might be described as a "meta-coordinative practice". This meta-coordination is focusing on organizing a process and a structure to facilitate [the planning of] collective actions by collective actors - but might not be primarily a coordinative effort for direct collective action (in sense of cooperative work) itself. Organizing an ESF event would mean to facilitate collective action by creating political opportunity structures (POS). Moreover, since responsibilities for ESF organization are moving from one organizing committee to the next, it can be characterized as a fragmented process. ESF organizing, then, could be seen as a fragmented process of meta-coordination focusing on facilitating political collective action by creating [political] opportunity structures for collective actors and social activists.

Furthermore, organizing an ESF event is highly influenced by political incidents, or more precisely: a complex interplay between political incidents and local responses to them. Some topics are politically very important for some regions and not so for others. As an example the problem of migrants is very important for activists from Greece and Italy but the Eastern Europeans do not have such big problems and on the other hand racism is considered to be a more important topic for them. The program of 2008 ESF in Malmo focused on issues such as the wars in Georgia, Iraq and Afghanistan while the program of ESF 2010 in Istanbul was more focused around global crisis. So, political incidents can have an immediate impact on the selection of topics and activities during the event as well as on the conditions for mobilization. While most members of ESF follow long-term political strategies, their joint actions are shaped in a complex interaction between their strategies and given incidents. Davis & Zald [2005] describe, ICTs have changed the grass roots organizing practices. However, it was observed that despite the considerable role of ICTs, traditional mobilization mechanisms such as physical meetings and personal and organizational networking were also quite important.

7.2 Nomadic Knowledge Management

The investigation has shown that the weak organizing process of ESF events often hampers the efficient organizing of the fora. The complexity of knowledge transfer process affects the learning of ESF organizers (esp. the organizing committee). The Turkish and Nordic members have acknowledged the importance of this knowledge transfer alike. Learning from earlier instances of the event may not always be possible in case local conditions differ. The Greeks based on the Paris experience advised NOC to hold the event at only one location, but finding a single big place was too difficult because of many factors such as availability, suitability and costs. Accordingly, gained knowledge needs to be restructured and realigned.

Organizing an ESF does not have an explicit structure; there are only few explicated rules that apply across different meetings. So the level of codification of the knowledge is low in the explored case. Some of these rules were even quite drastically reinterpreted locally, e.g. rules with regard to the fees of participants from Eastern Europe. To gain legitimacy, local reinterpretation referred to those of earlier events. Still, these reinterpretations of rules were not well documented or publicly accessible.

In the absence of structured, sustainable knowledge sharing practices, knowledge seeking strategies focus on personal contacts as well as on the retrieval of documents. However, document tracking lacks a solid historically grown base, as it was observed in the case of email address list of the participating organizations in previous fora. The problems with organizing the ESF cannot be solved by technological means only. One possible reaction is to strengthen and support knowledge sharing continuously. This approach is being followed to a certain extent, which manifested in the meeting structure in between the events. But due to the low level of professionalism and the high member fluctuation, the main challenge remains.

This knowledge mainly 'travels' as it is used frequently on different occasions, but rarely used by the same set of actors again. On every occasion, the knowledge remains resident for some time and addresses crucial aspects of the activities the [current] actors are involved in. This description already points at challenges for maintaining this specific type of knowledge and for supporting its transfer: It is a rather unfamiliar type of knowledge the actors get exposed to at the occasion and it needs to be adapted and contextualized to become useful. Furthermore, it becomes almost useless to the actors once the occasion has passed by – while becoming important to actors getting involved with another instance of the occasion. The situation is coined by an [idealized for illustration] imbalance between actors having the knowledge/experience (but not necessarily the need/interest to share it) and actors that need the knowledge, but have no or few prior experiences. This pattern is visible in exceptional situations (e.g. all activities that actors need to do to in order to cope with a power outage) as well as periodically recurrent situations (e.g. the organization of events like a scientific conference). This specific knowledge is termed as 'nomadic knowledge', and its detailed definition is given in next section.

7.2.1 Nomadic Knowledge Definition

Miller's [2001] notion of nomadic knowledge, where he attributes the knowledge possessed by nomadic people and Lyytinen & Yoo's [2001] interpretation of knowledge generated in nomadic information environments is quite different to my interpretation. My understanding of nomadic knowledge is constituted by the following characteristics:

7.2.1.1 Community-bound Nature

The knowledge has a purpose that is constituent for a community of practice (e.g. organizing an event).

7.2.1.2 Urgency to Act

The knowledge is necessary to master a specific situation or condition of importance. The practices upon which the knowledge is based and within which it will be used in a later instance, require the full attention of the actors involved and imply typically time-critical decision-making (urgency).

7.2.1.3 Disruptions and Discontinuities in Practice

Knowledge providers and knowledge seekers come from different communities of practice, operate at different locations and have their high time of interest in the knowledge at significantly different points in time. The knowledge is of little interest for those people acting in that situation once the occasion is over, and, as a consequence, actors easily forget about details and there is little interest in investing additional work to conserve that knowledge.

While extending the definition of nomadic knowledge, it is the tension between the urgency to act and the diverging interests and attention patterns of knowledge providers and knowledge consumers that makes it so interesting to look at practices of transferring nomadic knowledge, and to discuss implications for the design of technical support.

The discontinuity of organizational cultures, local settings, and communities of practice, when moving from one instance to the next, affects the knowledge transfer process. Normally the disruption on the time dimension does not enable direct person-to-person knowledge transfer. While current members of the organizing committee assimilate knowledge, the next set of actors does not participate in this process. Furthermore, changing sets of actors have a disruptive effect on the usage of artifacts. Every organizing committee will have a different level of technology adoption and usage of artifacts that also hampers a smooth flow of knowledge. Moreover, the actors are nonprofessionals and the practice of organizing an event is discontinuous. This is not the case of mobile workers, nomadic workers or traditional organizational settings. Furthermore, knowledge generated in conventional network organizations very often is focused on efficiency, best practices, optimization and continuous improvement of business processes, while in this case knowledge is neither continually present at one location nor applied by the same actors. Instead it is instantiated to particular settings (one ESF summit) and then this knowledge becomes important for another set of actors at a different place (the next ESF summit). These characteristics of nomadic knowledge make externalization and codification of this knowledge difficult. As a result transition of nomadic knowledge requires well-defined procedures and supporting technologies.

| Organizational settings | Spatial setting of knowledge enactment | Temporal structure of knowledge enactment | Collective of actors enacting knowledge |
|---|--|--|---|
| Traditional organizations and network organizations | Stable | Continuous | Stable |
| Mobile workers | (Partly) Mobile | Continuous | Stable |
| Nomadic workers | Changing | Continuous | Changing |
| Nomadic knowledge | Changing | Discontinuous | Changing |

Table 11: Properties of Knowledge Sharing

Table 11 clarifies the differences between traditional and nomadic knowledge sharing. The collective of actors indulging in knowledge sharing within and between traditional organizations, remain typically rather stable, even in case their work is mobile. In the case of nomadic workers, the actors move between organizations, still the knowledge stays continuously with them. This is distinct from the case of 'nomadic knowledge' where actors organizing the events are not moving instead new set of actors take over organizing tasks every time to carry out a task which moves around.

From the point of nomadic knowledge, organizing an ESF resembles other scenarios such as coping with emergency situations or managing unusual situations in professional work life. After the end of an event there is a hibernating period before the new organizing committee takes over its role fully. During this time knowledge sources fade away from the process and people with limited firsthand knowledge take over. This was highlighted by the limited readiness on the part of Turkish organizers to directly take over fully after the Malmo event. Even in case there was an opportunity to share knowledge appropriately, spatial segregation and limited financial resources became a hindrance. The problems in transferring knowledge to operate the ALIS system illustrate this point. Conflicting interests may additionally impact these structurally fragile knowledge sharing practices. To be regarded as very successful, the Greek organizers had a strong interest in communicating a [too] high number of paid participants, which made the Nordic committee overestimate incoming registration fees. A lacking information flow, inconsistent interpretations and conflicting interests within the local organization committees affected the transfer of nomadic knowledge. Dealing with Hamas and Hezbollah is an example of this issue. In this case, the way the WSF declarations were applied was understood differently within both the Malmo and the Athens organizing committees. This confirms findings from the knowledge management literature [Davenport & Prusak, 1998] that knowledge transfer between different communities is not only a logistic problem, but may also be hindered by differing interests or value systems.

The nomadic knowledge transfer process can be classified into three categories that are: (i) active actor based transfer, (ii) artifact based transfer and (iii) passive actor based transfer. (i) Active actor based knowledge transfer process requires willingness form knowledge seekers and knowledge holders and a possibility to get in contact to engage in knowledge sharing. In case of ESF the active knowledge sharing could take place among new and old organizing committee as well as the EPA members. (ii) In case of artifact based knowledge transfer, knowledge seekers and knowledge holders may not directly get in contact with each other but instead the [shared] artifacts could be a source of knowledge transfer. If the artifacts are prepared with the intention that they will be used as a tool for knowledge exchange later on, this could be termed as knowledge push and if knowledge sharing perspective is not considered at the time of creation but still the artifacts are used actively by knowledge seekers for knowledge transfer, this phenomenon could be termed as knowledge pull. (iii) The third type of knowledge transfer neither requires artifact exchange nor information exchange among knowledge seekers and knowledge holders, but instead actors acquire this knowledge based on their previous participation in the process. If EPA and organizing committees involve the members of the upcoming ESF organizing committee in the organizing activities, this could be termed as knowledge push and in other case, where active involvement of the upcoming organizing committee members is not facilitated actively but still these members participate in the ESF event to get some knowledge for future use, this could be termed as knowledge pull.

| | Active actor | Artifact based | Passive actor |
|-------------------------------|----------------|----------------|----------------|
| | based transfer | transfer | based transfer |
| Knowledge push by EPA | Yes | _ | _ |
| Knowledge push by previous OC | Yes | _ | _ |
| Knowledge pull by current OC | Yes | Yes | _ |

Table 12: Knowledge Transfer Means during ESF 2008

The members of the upcoming organizing committees usually visit EPA meetings regularly to report on their work and to get feedback about their preparations. This is an important means of knowledge transfer. If the preparation phase of ESF 2008 is recalled, NOC was informed about the website of the Greek social forum and the developer who designed it, but they refused to use the services of this developer as they had a free of charge alternative. Later on, when this alternative did not work out, they connected to the old developer again and website was (re-) designed. Similarly the organizing members of previous ESF and the members of NOC had meetings for knowledge sharing and they also provided the artifacts to their successors from TOC. The preparation of ALIS equipment for interpretation and the advice regarding the urgency to gather volunteers for ESF are examples of knowledge push actively initiated by the old organizing committee. Similarly, NOC members were equally interested in getting more knowledge about the former organizing process. The initial contacts of NOC members with Greek organizers were intended to learn about the problems, issues

and structure of the forum, this is an example of knowledge pull from NOC. Although the NOC never really got the detailed budget of the Athens forum and that created a huge financial deficit but still they benefited from a short report of Athens ESF and also the email address list of participants of previous ESFs were the examples of artifact based knowledge transfer. While looking at the reasons for lacking passive actor based knowledge transfer and artifact based transfer, I found two particular hints: Since the majority of the NOC members were new to the ESF process, the means of getting passive knowledge were limited. Furthermore, the organizing activities were carried out in an ad-hoc way that means that detailed artifacts were not prepared.

| | Active actor | Artifact based | Passive actor |
|-------------------------------|----------------|----------------|----------------|
| | based transfer | transfer | based transfer |
| Knowledge push by EPA | Yes | _ | _ |
| Knowledge push by previous OC | _ | _ | _ |
| Knowledge pull by current OC | _ | Yes | Yes |

Table 13: Knowledge Transfer Means during ESF 2010

In the case of knowledge transfer during the organizing process of ESF 2010 there was not much knowledge exchange between the NOC and the TOC. There was some knowledge transfer pushed by the EPA. After the bad experience in Malmo, the EPA attendees wanted to have venues in close proximity. In order to ensure this, they also carried out physical visits of venues during one of the EPA meetings in Istanbul, although these venues were changed later. One TOC member described how he learned of expenditures by analyzing the budget document of Athens ESF, which highlights the knowledge sharing by artifacts. Furthermore, the successful transfer of the Malmo website for ESF 2010 is another example of artifact based knowledge transfer pulled by the TOC. The members of the TOC have participated in Athens and Malmo ESF. Therefore, they knew about the basic structure of ESF events that highlights the passive actor based learning.

Analyzing the framing conditions for better or worse transfer processes of nomadic knowledge, the first factor affecting the learning was the presence of respective activists in EPA meetings even after the hosting of the ESF events. Members of the Greek Organizing Committee participated actively in EPA meetings even after the Athens forum in 2004, whereas the members of the Nordic Organizing Committee did not show up regularly at EPA meetings after the ESF event in 2008. Therefore, the absence of common meetings reduced the chances of active actor based knowledge sharing between NOC and TOC. Furthermore, in the case of ESF 2008 the number of people carrying out the organizing activities was bigger than the organizing committee in Turkey, where one individual carried out majority of the work. The size of the organizing team also affects the knowledge transfer process. As organization of ESF is a quite complex task, too few people in organizing team would not have the liberty to indulge in knowledge sharing and to carry out tasks in a well-planned manner. Instead they will focus on tasks at hand which are more important for staging the ESF than

conducting them in an optimal way. TOC members were very few so they were primarily focused on the urgent tasks at hand and did not have enough resources to inquire previous knowledge that could have been provided by the NOC. One member of the TOC was in contact with the developer of ESF 2008 website even before the start of the organizing process, so this early contact resulted in successful transfer of the website. The third important factor playing part in the transfer of nomadic knowledge is prior participation in previous ESF meetings and events. The NOC members were new to the ESF process, so they experienced more misunderstandings regarding information they had gathered from different sources. Knowledge transfer process among NOC and TOC members was weak than the knowledge transfer process among Greeks and Nordic organizers. But contrary to NOC, members of TOC were participating in the ESF process for a long time so they were able to carry out tasks with some organizing deficiencies.

Accordingly, nomadic knowledge needs to be restructured and realigned. The Istanbul committee was able to learn from Malmo and they managed to find three very near-by places to host the event. Another important lesson that TOC members learned from the Malmo process was not making expenses when they do not have money at hand. This was evident when they did not use the services of the Greek developer for setting up the event website even though they were late and badly required it. Another example of learning by TOC was visible when they paid the traveling expenses in advance of interpreter volunteers to reestablish trust that was lost before during the ESF 2008 in Malmo where interpreters did not get reimbursed their travel expenses (ticket costs). An example of failed learning for TOC was the setup of the interpretation system. TOC wanted to use the ALIS interpretation equipment; the ALIS team asked them to buy radios earlier so the system could be properly evaluated long before the forum. Since TOC did not have money at that time, they did not buy the required equipment, which caused the ALIS people to back out of the organization process. Thus, the TOC had to approach another Turkish organization that promised to develop a free radio-based system for them, though in the end it did not work.

7.3 Implication for Design

Based on discussion in the previous section I would like to reflect on some recommendations that could help to cope with the identified organization, coordination and knowledge management challenges in this particular setting. Firstly I focus on requirements for technical support with regard to ESF organization and associated knowledge transfer processes. Providing ICT tools of this type would be a crucial success factor for a transparent and democratic ESF coordination process. Furthermore. I chalk out design guidelines for appropriating mailing list and collaborative workspace (OpenESF) according to the needs of social activists of ESF.

7.3.1 Supporting Organization Work

With regard to ICTs appropriation in the ESF process, the findings indicate that an improvement of the technological system(s) alone will not lead to more efficient and

stable practices. Instead it is the availability of appropriately designed tools coupled with human actors capable of applying and tailoring these tools which may enable better coordination and higher transparency in the process. Lacking technical competency and financial resources made the Malmo ICT infrastructures unavailable in Istanbul. This fact led to a different set of practices in organizing ESF 2010. The merging process, which was carried out by using the web-based system in Malmo, was handled in Istanbul by emails and Microsoft Excel files. The practice resulting from the poor computer support introduced problems such as the loss of information. While the ICT resources were not optimally employed, still the activists managed to organize the forum. However, problems of meta-coordination, already existing in Malmo, got more severe. Participants complained about problems of limited information availability and lacking transparency. At this point this finding is in line with earlier findings that looked at the way practices changed when their technical infrastructure vanishes [Pipek & Wulf 1999 and 2009]. However, earlier finding still pointed to the fact that there is a certain moment of stability in practices even beyond the existence of a given technical infrastructure. In this case study, the moving nature of the ESF organizing process diminishes the stability of these practices. While ICT could play a stabilizing role with regard to the organizing practices, its very existence is, at the same time, threatened by the mobility of the process. As a result of the study, I will, in the following, identify design requirements for technological support of fragmented meta-coordination in networks of political activists. The ESF process suffered from lacking tailorability of the tools central to the organization process [Lieberman et al. 2006; Wulf et al. 2008]. It was evident that the organizers of the ESF 2010 tried to deploy the Plone-based content management system. However, they were not able to even modify the event specific texts and data. Therefore, they found it more convenient to set up another application which they had some experience with and that they could adapt to their needs. If the Plone-based application had been better designed for tailorability, this would have had a positive impact on the whole organization process.

The setup of the websites at both events highlights the similar set of problems that require a sustainable technological solution. It was evident that the application in the current state required the efforts of a software developer to even carry out minor changes in the web-based forms. Furthermore, the code writing style and the absence of technical documentation made code changes extremely complex. So the first technology requirement is the establishment of a logistical website which is easy to maintain and for each event its setup phase could be carried out by end users instead of software developers [cf. Lieberman et al., 2006]. Since the majority of the logistics tasks required during the social forum remain the same (except for basic changes such as themes, organizing committee names etc.), these changes could be dealt with by end users. To design for a tailorable website in the appropriate dimensions, a case study covering different instances of the ESF is required [Stevens et al. 2006].

Despite the inherited shortcomings of email communication, it is still the main ICT application used among ESF activists. This was even the case with ESF 2008, when

other collaborative applications, such as OpenESF, were available. This finding is similar to the observation of Torres-Coronase et al., [2010] who found that activists tend to adhere to a known technology despite its problems. So, it is worthwhile to think of features improving the coordinative usage of mailing lists. Looking at the local organization committees, it was found that physical meetings played an even bigger role than email communication that is in agreement with the findings of O'Donnell [2001]. Furthermore, the language issue is quite important for political activists in transnational networks. This result is in line with the findings from Mclver [2004; 2004a] who found free, multiple language support and legally equivalent translations to be a relevant feature for technical support in multilingual civil society organizations. It was observed that during ESF 2010, the inability of the Turkish organizations to propose activities through the website was mainly due to their limited proficiency of English. In order to have a functional website, it is important to set it up in a multilingual way, so that activists from many countries are able to access the information. Machine enabled translations [Yamashita & Ishida, 2006] could be a solution to better involve activists from diverse language backgrounds. Furthermore, a better report generation mechanism should be supported by the website, so that activists could customize information content based on their choice and interests for their discussions in physical meetings. Since not everybody interested in the ESF movement can join the gathering and meetings, a documentation mechanism has to be revived to increase the visibility of the activities. Repository-based approaches could be employed to store information about ESF discussions [cf. Huysman & Wulf, 2006]. In earlier ESFs different approaches were tried. In one forum volunteers attended seminars and made notes and those notes were compiled at the end. In another forum, workshop organizers provided information about their seminar beforehand. Afterwards they created a summary of what went on during the forum. This type of information could be updated for those activists who cannot be physically present at the forum. Beyond that, a wiki could be added to the website containing the program in which people who attended the seminar, presenters, collaborators and discussants, could document aspects of the discussion [cf. Farooq, 2005]. Web 2.0 applications, such as Facebook, Twitter, and YouTube, could be appropriated by setting up an organizational profile and by continuously spreading information through them. This does not involve additional costs and is not technically difficult to do, but it could be important in mobilization. For both, ESF 2008 and 2010, some activists created event pages on web 2.0 applications, but not much information was provided. So this channel for information dissemination could be strengthened. It is attractive to the ESF movement since it is easily usable and does not require maintaining an own ICT infrastructure.

The agenda setting is one of the main activities in preparing for the forum. Activists in this heterogeneous network, involved in different application areas, different regional and political issues, with different political ideologies are involved in this process. It is vital to have transparency in the procedure to create trust among the stakeholders. This was an important point, especially in the preparation for ESF 2008, when the proposed

number of activities was larger. Some activists were worried that big organizations and people participating regularly in the program group meetings had a better chance to keep their activities unaffected by potential mergers. This concern could be better dealt with in case the merging process was more visible so that everyone could see what is happening in different thematic areas. The lack of information to the people who were not present in the preparatory meetings makes the process look suspicious. If there was a kind of visualization that highlights the relationship between the proposed activities and the finally merged activity, activists could better understand how the whole process happened and it will introduce more transparency in the process.

While ESF attracts actors from the anti-globalization movement, the findings indicate a certain lack in wider participation. The selection of the main themes of ESF 2008 was open to participation since everyone could make suggestions via the web. In case of ESF 2010 only people present at the physical meetings in Turkey were able to have their say in the initial proposals. Furthermore, the draft writing procedure for the manifestos was quite closed, since initially only selected activists knew who could contribute in writing the sample text. Web-based tools have the potential to make these processes more transparent and include more actors. A representation of the writing process in the program and wiki functionality on the website could have enabled to wider participation. However, the appropriation of such tools could have an important, though maybe undesired by some, impact on the out coming manifestos. Anyway, such a process transparency and opportunity for participation would have prevented heated discussion in the thematic subassemblies and the final plenum. ICT infrastructures play an important role in preparing for the ESF gatherings. They allow for meta-coordination, mobilization and information dissemination around ESF events. They have, moreover, the potential to make internal decision processes more transparent and democratically legitimized. Whether these potentials will turn out finally depends on the pattern of appropriation within the heterogeneous network of political actors. The investigation indicates lacking technical capabilities combined with bad documentation of the code and missing tailorability to be serious obstacles in appropriation work [cf. Pipek & Wulf 2009].

7.3.2 Supporting Nomadic Knowledge

Modern information technology tools could support the knowledge management and transfer process significantly [cf. Milton et al., 1999; Robertson & Reese 1999; Shadbolt et al., 1999; Mack et al., 2001; Zdrahal, 2007]. The described problems in organizing an ESF and the temporal and spatial distribution of the actors seem to indicate certain space for technical support. Huysman & Wulf [2006] distinguished four classes of ICT support for knowledge transfer: member-centered communication spaces (supporting personal communication between members of a community), topic-centered communication spaces (supporting communication around a specific topic), repository approaches (storages of possibly structured explicit information, maybe combined with knowledge mining tools) and social mapping tools (expert recommender systems,

expertise awareness systems, analytical tools to uncover social ties e.g. for social network analysis).

Generalizing the study along the characteristics of nomadic knowledge, one can derive framing conditions and requirements for technological support. It is the *embeddedness in community practice* of this knowledge (e.g. local interpretations of the WSF declarations which already resulted from local negotiations among the organizers that would have been difficult to transfer between the sites) that makes externalization of the knowledge so problematic, and purely repository-based approaches less likely to work. Social mapping tools could be helpful to find participants of prior discussions in order to understand and learn from the construction of knowledge.

It is the *urgency* of the knowledge (importance; actor's attention bound to getting things done; time-critical decisions), exemplified in this study with regard to e.g. the knowledge about calculating the ESF budget appropriately, or the knowledge about organizing translation services, that hinders possible knowledge providers to invest a lot of work into the conservation of knowledge gained, and that motivates knowledge seekers to invest a lot of energy into reconstructing and contextualizing nomadic knowledge. Simple tools for knowledge providers e.g. to highlight particularly important contributions in communication spaces could improve the conservation of knowledge for the next event. But tools for knowledge seekers may provide a greater benefit, and here searching and data mining tools may help with repositories, but again social mapping tools, particularly expert recommender systems [McDonald & Ackerman, 1998; Reichling & Wulf, 2009], may offer the fastest access to the right information at the right level of detail.

It is the *discontinuity* aspect (e.g. the general temporal and spatial distribution of the communities of practice) that may be most problematic, because it prevents learning to happen via enculturation into an existing community of practice. The problems described in the sections 5.3.4 and 5.5.2 illustrate this point. With regard to knowledge transfer between the communities, this aspect hinders a purely communication-based solution. The incongruent interest patterns of providers and seekers regarding the knowledge transfer may lead to less willingness (once the job is done, providers ability (When the knowledge is needed, the practice that produced it does not exist anymore) of the knowledge providers to communicate appropriately (which became visible e.g. in the information delays described above).

Focusing on a repository-based approach, Bieber et al [2002] presented a community knowledge evolution system. But with regard to nomadic knowledge one deals with expertise that is highly embedded in the event's community of practice. In order to generalize and externalize this highly contextual and situated knowledge, the relevant context, environment and framing conditions of the upcoming ESF event have to be identified. Furthermore, since each new ESF event has a different ICT setup, these different infrastructures may most probably not be interoperable with each other. Thus, a mainly repository-based approach would not be appropriate for this kind of nomadic knowledge transfer. The disappearance of experts after the event makes the use of a

repository-based approach difficult, without knowing relevant background/context information. De-contextualized information may lead to misinterpretation and misunderstandings.

Similarly, purely communication-based approaches are hardly appropriate for nomadic knowledge transfer processes in such an environment. The major hurdles for communication-based expertise sharing are urgency of information needs, lacking availability of experts and discontinuity of actors' engagement. As it has been observed, organizing committees only start to do work actively quite near to the upcoming ESF event, leaving them short of time for the organizing process. Furthermore, the urgency of many tasks at hands does not allow for time-consuming communication procedures; many time critical decisions may be delayed. In order to be successful, purely communication-based strategies require active involvement of experts from former events who are not available.

Therefore, with regard to the described nomadic knowledge transfer scenarios, I propose a combination of repository-based and communication-based strategies. In the current state every new ESF event sets up its own infrastructure of mailing lists, websites etc. This case study brought evidence for a need for pooling up and integrating these distributed ICT resources. In the empirical work it was observed that the complexity of reinstituting existing websites for the new event is a major obstacle for sustainability. New organizers of former ESF events should be encouraged to setup ICT artifacts and infrastructures could be managed and re-used easily. As one strategy the End User Development [Lieberman et al., 2006] paradigm (EUD) could help in modifying and adapt ICT resources according to new contextual requirements. In order to find the relevance of information temporal aspect is quite important and a time stamp associated with information would be quite helpful. This could be carried out by developing a timeline visualization associated with information to categorize "old" and "current" information at a specific point in time.

Appropriate search engines and crawlers that operate on the 'old' information infrastructure should become an integral part of the new infrastructure. The 'old' information structures should be visualized, but the 'new' actors should be supported to create their own clusters of remembered pieces. Furthermore, a shared map of persons and their expertise supported by expert recommender technology may be an approach to make the complex network more transparent [cf. Ehrlich & Shami, 2008; Reichling & Wulf, 2009; Shami et al., 2009].

Moreover, this case illustrates that the discontinuity - also with regard to ICT infrastructures - makes it less likely that there could be just *one* tool supporting the knowledge transfer, and it is difficult that a routine usage of possible support tools can be developed, which calls for very simple, easy-to-use tools (attractive also for casual users). In repository approaches, the creation and transfer of metadata on the documents and communications (indices, automatically generated folksonomies/ontologies) stored from prior events could improve the services for the information seekers when they navigate in the repository. However, changes in the ICT platforms did not let a large

document repository emerge. So, social mapping tools that help in finding experts from prior events that could actually assist in the recontextualization processes among knowledge seekers look most promising. But, to identify experts certain historical data representing an actor's expertise may be required.

7.3.3 Improving Mailing List

Although the mailing list is the main channel for information dissemination at the ESF, the empirical data identified some significant problems. In this section, I briefly describe findings from this case study. The storage of old emails for future use is in line with the finding of Mackay [1988] who states that emails are used for information retrieval as well. This helps activists to re-use information. On the other hand, it is true that individuals who are not members of the mailing list are able to access the email archive, but finding information according to their needs is difficult. One has to navigate through each email to find useful information from the archive, as search for emails and contents related to a specific theme/keyword is not possible.

The tracking of email responses becomes difficult when one uses it to collaboratively prepare a document. This was evident especially when activists sent emails to support some initiative or when the agenda of the EPA meetings was written. It was observed that contributions from some activists could not be added to the final version of the document, due to the oversight of the email. As a result, they had to constantly raise their reservations via email. If initiating activists had not carefully crosschecked that their contributions are present in the final document, then the final document may lack their contributions and they might have misinterpreted it in a way that it was left out intentionally. This means a more thorough revision of the finalized document is required, which, of course, is rather time-consuming.

Since this is a loose network with no defined responsibilities, people tend to help each other with as much information as they have. Hence, sometime they may pass on rather incomplete/old information causing several misunderstandings. A good example is of accommodation requests for ESF 2010. A member of the Greek social forum posted on the mailing list to ask if someone already knew details about free accommodation during ESF 2010, as he had no response from the TOC. A German activist, helping to float the information about the ESF 2010, thought that this member from the Greek social forum had not registered for accommodation and advised him to ask for accommodation at an email address. The Greek activist felt angry and thought that someone was making fun of him, as he had already contacted this email address, but left without any further response. Similarly, in another case an Austrian activist kept sending emails in German language to which an Italian activist objected that less than one percent of the people understand it - so why send messages in German? At this moment a French activist intervened and explained that in early 2003, when they were setting up mailing list, everyone was allowed to write in his/her own language and interpreters helped in translating the message into various languages. He thought this practice should be adopted instead of just using English as a universal language.

In another instance, a Polish activist sent around a website address for other members to read an article about the struggles of Poland. A Russian activist commented that the web link belongs to a political party and political parties are not allowed in social forum. The Polish sender responded that he did not send the link to promote it, but to give information about articles highlighting the social struggle in Poland, which, of course, could be interesting for many activists. In terms of extending the technical requirements for ICT support, some technical requirements are quite evident.

7.3.3.1 Automatic Website Updating

The mailing list is an important source of information, however, the members of the mailing list constitute a closed group and despite the availability of websites the information is often not forwarded to them. Mathieson [2006] pointed out factors that influence volunteers to update a website using a content management system in order to help voluntary organizations in finding new members. To find volunteers for longer periods of time is difficult and an automatic updating mechanism of the website based on the mailing list can help to establish a better information flow so that new activists could be won for ESF processes. As soon as a new email message floats on the mailing list, this information is replicated as a thread on the website so that everybody can view the information from the website.

7.3.3.2 Recommending and Visualization Mechanisms

The archive of the mailing list contains extensive information about the ESF process and related activities. This historic information can be used for identifying experts in different political domains covered by activities of the ESF. An email based expertise recommender system could help in identifying actors to indulge in cooperation across national and workshop boundaries [Reichling et al., 2007]. This way, the visibility of even those activists can be strengthened that do not attend EPA meetings on a regular basis. In order to improve information access towards the email archive, text mining and visualization algorithms [cf. Rohall et al., 2001] can be employed. Such functionalities would then make it easier to extract the required information and also messages can be clustered visually based on time sequence, thread structure or content. Consequently, the mailing list could develop into an important resource for knowledge sharing.

7.3.3.3 Multi lingual Support

Since language is an important issue in ESF communication and the practice of translating content with the help of volunteer activists does no longer work in an efficient way. All activists may not understand email messages other than those in English language so a machine based back and forth translation [cf. Yamashita &Ishida, 2006] of email contents could help to overcome this problem to some extent.

7.3.3.4 Feature Enhancements

Despite being helpful, there are considerable problems with emails concerning information management [Whittaker & Sidner, 1996]. Using mailing lists as a central

collaborative tool mainly bears the problem of overlooking important contributions. To cope with this problem a rich mailing mechanism for collaborative messaging can be employed, grouping relevant messages. Similarly, in order to better support the decision-making process, a voting system should be integrated into the mailing list [cf. Davis, 2003]. For certain types of issues, such functionality would introduce more transparency as compared to email-based decision-making. Furthermore, in order to provide a better background for the communication within the mailing list, a profile of the users and their involvement in earlier discussions can contextualize contributions and highlight the involvement level of the actor.

7.3.4 Improving OpenESF

The empirical findings from the presented ethnographic case study of OpenESF collaborative website seem to be quite useful in deriving some design requirements which I discuss below.

7.3.4.1 Improving User Interface

Since most of the activists have limited ICT skills it is important to optimize the user interface of OpenESF. As some of interviewees described that the language barrier is resulting in low participation, user interface in major European languages could facilitate the activists in using OpenESF. Furthermore, some of the interviewees also reported problems in finding interesting projects. Instead of just displaying the lists of recently launched and updated projects on the main user interface, a list of projects the user may find interesting based on his previous involvement in different projects could be helpful in locating interesting project spaces at OpenESF. As it is visible in the user interface snapshot that some of the user interface elements are redundant, multiple user interface elements point to same pages, and hence add confusion to the users. Furthermore, while browsing through some pages users could get lost because there is no way to navigate back stepwise, so one has to either use browser back button or skip to the main interface; thus, a redesign of the user interface is required.

7.3.4.2 Designing for Multilingual Collaboration

As it was observed that a majority of activists need native language support while communicating, a mere interface in multiple languages is not sufficient. There is a need to carry out automatic translations of the contents so that the information could be localized and collaborative work could be carried out in multiple languages. Yamashita & Ishida [2006] looked at the effects of machine translation on collaboration. While perfect machine translation is not available for practical and theoretical reasons, the functionality of existing online tools could be integrated into the OpenESF website. Computer supported back and forth translation could increase the quality of the translated items. The number of languages which need to be supported by the system is a complex issue, as the ESF focuses on activists all over Europe. Additionally, whenever ESF moves to a new location the participation of activists from host countries increases, the need for translation and that specific language becomes important. So as a

first phase at least major European languages need to be supported by automated translation features.

7.3.4.3 Supporting Recommendation and Enhanced Searching

As the number of projects increases, it becomes difficult for the distributed actors to keep an eye on all proceedings. A major problem resulted from the complex structure and the limited search functionality of the www-site. The search capabilities could be enhanced by employing a tagging mechanism, so whenever a new project is created, it could be associated with different tags and also managed within a tag cloud. Furthermore, when the search results are displayed, a visual grading mechanism of the searched projects on the basis of their relevance to entered keywords could be helpful. Moreover, it could be helpful to have a recommending system which could give suggestions to join certain projects based on the personal network analysis of individuals. Email is the most commonly used tool among activists and they prefer to work with collaborators with whom they have [indirect] personal relationships. Therefore, a social networking tool linked to their email address book could be beneficial. It could be used, for instance, for recommending projects which most of their contact persons have joined.

7.3.4.4 Personal and Organizational Profiles

A further domain to explore technical support is making the institutional and personal background of the different activities more transparent. Although organizational directories [cf. Prinz, 1993] and yellow page systems [cf. Ehrlich, 2003] have been extensively employed in CSCW projects, these functionalities need to be tailored to the specific needs of the ESF. In OpenESF there is not any mechanism to distinguish among organizational and personal content and this could be one of the reasons leading to low participation at the site. At some point it is important to understand whether an organization or an individual initiates certain content, so there is a need for establishing organizational profiles as well in OpenESF. The individual profiles could map to these organizational profiles to show their affiliations and to deal with certain ambiguities between institutional and personal standpoints. Specifically in fluid structures, such as the ESF, organizations and the organizational personal background or actors may change; new actors become part of the process and leave again. Therefore, techniques for semi-automatic profile generation need to be explored [cf. Reichling & Wulf, 2009].

8 Conclusion

Social activists are an important section of society due to their involvement in advocacy and campaign work on behalf of the deprived individuals in society. In today's world where the legitimation of traditional means of political representation is questioned, there is an intense need for these social groups. In order to be more effective, these groups need to be coherent in their work to act as an effective pressure group. ICT research in voluntary organizations is an important area not only due to scientific challenges but also due to societal relevance of this sector. The characteristics of weak organizational structure, limited technical background of the volunteers and the shortage of financial and human resources to design and maintain ICT infrastructures differentiate this sector from other traditional organizations. As these organizations become more diversified in their structure and functioning, ranging from grass root organizations to professional transnational NGOs, it is very important to look deeply in their organizational structures and practices to achieve technological appropriation. As a result this application domain has recently gained special attention from CSCW researchers. Information management, technology sustainability and inter/intra organizational collaboration are major challenges in these settings [cf. McPhail et al., 1998; Pilemalm, 2002; Rohde, 2004; Farooq et al., 2006; Stoll et al., 2010]. This thesis takes a step further and looks how coordination and knowledge transfer happens into multi-cultural and heterogeneous political environments while organizing political gatherings. The empirical evidences are gathered by carrying out a detailed analysis of work practices of the European Social Forum, which is an important platform for social movements and civil society in Europe.

8.1 Summary of Findings

The first finding of the thesis is highlighting the challenges of conducting fieldwork in heterogeneous network of social activists. As most of these networks rely on a volunteer work force for their functioning, their shortage of time and high turnover may not allow for the development of a structured organizational memory and most of the organizational knowledge resides in some individual brains. The participation in these networks is mostly based on personal interests and if these "knowledgeable" individuals leave the organizational process, they also take away core organizational knowledge with them. Furthermore, the information flow among all actors is usually not balanced and as a result locating knowledge holders and indulging them in knowledge sharing becomes further difficult. As a result, access to the field, uneven information access, immature work practices, skepticism about technology and language issues are especially challenging for fieldwork in transnational activist settings. Researchers have to be well aware of these problems and develop strategies to deal with these issues in advance to do successful planning and yield meaningful results.

ESF provides a platform to activists for carrying out collective actions. In order to make this a successful event extensive mobilization, campaigning, agenda setting and logistics arrangements are required. Considerable coordination activities are required to optimally manage these cooperative tasks. In collected empirical data it is observed that ESF organizing work does not specifically define the work distribution as defined by division of labor concept. Hence coordination efforts in such settings take place at metalevel where explicit tasks, roles and responsibilities of actors are not well defined.

Another finding of this thesis is the concept of 'nomadic knowledge', and the specific challenge it poses for ICT support. I look at the framing conditions which affect the nomadic knowledge transfer. Since the reusability of knowledge is important for the sustainability of the process by setting up knowledge based systems [Richards, 2000], my focus is on technologically supporting this knowledge transfer process. There have been different interpretations of nomadic knowledge [cf. Miller, 2001; Lyytinen & Yoo, 2001], but my interpretation of nomadic knowledge differs from these interpretations. The typical characteristics of discontinuous and distributed nature of event organization, networks of civil society actors and shortage of professionalism and resources make this interpretation quite specific. In the CSCW literature most studies of expertise sharing in network organizations [e.g., Pipek et al., 2003; Reichling & Veith, 2005] focus on knowledge management processes in much more stable organizational environments, where knowledge creation and reusability processes are carried out in the same settings and professional nature of knowledge helps in optimizing practices. In order to successfully organize ESF, knowledge sharing and lessons learned could help to improve the organizing process. In this thesis I have looked at the nomadic knowledge transfer practices at two different instances among different set of actors. It was observed that active actor-based knowledge transfer mechanisms are effective but this may not work at each instance. As the knowledge holders may have limited interest in remaining active in the ESF process once they become free of the organizing of the event. This inactiveness will not provide a meeting point with the knowledge seekers to indulge in knowledge sharing. It was observed that artifact based knowledge transfer could be helpful in this kind of environments but this needs to be supported by occasional communication. The organizing process of ESF does not generate well defined and extended artifacts. The limited details in artifacts could create problems e.g. the lack of detailed budget of Athens ESF resulted in financial problems of Malmo ESF. The passive knowledge gained by participation in previous ESFs also helps new organizing committee which was evident in Turkish case and lack of participation of Malmo organizers in previous ESF's led them to problems like the adherence of ESF charter and the dealing with Hamas/Hezbollah. The case shows the potentials and problems for technical support and for transferring nomadic knowledge: the specifics of the network setting and the particularity of the current practices require us to consider solutions beyond a 'one tool' approach, and show a need for flexibly connectable ICT infrastructures that are manageable by end users. It is neither the structure nor the content/domain of the knowledge that defines the requirements for the tools needed;

rather the specific framing conditions of the production/consumption situations define these requirements.

Similarly, design improvements are proposed for mailing list and OpenESF to improve the communication among ESF activists. Empirical data highlights that the email list is the most preferred tool for activist communication and coordination of their activities. It was observed that accessing old information becomes difficult and hampers collaborative work as important responses may get over sight. Furthermore, sometimes misinterpretations arise due to ambiguous text of email messages. Based on the communication problems found in the field, I propose generic guidelines for developing new functionalities in order to improve mailing lists. There has been extensive work on the use of emails in organizational settings and for personal use [cf. Schmitz & Fulk, 1991; Markus, 1994; Takkinen, & Shahmehri; 1998]. This study re-affirms that emails are still appropriate for a variety of innovative tasks [cf. Mills, 2011]. Similarly empirical analysis highlights the benefits of using the OpenESF system by some activists, but the quantitative and qualitative data show that most of the projects were only created and there was no further discussion. Though this platform was also supposed to serve as a platform for continuous discussion, the data show that no new users are joining the system since the event held in September 2008 in Malmo and also the members who have already joined the forum became passive. Although there are regular EPA meetings, many different mobilizations initiatives and preparations for the next ESF by the TOC are going on, there is no active visibility of these initiatives at OpenESF. The problems faced by the activists in interacting with the system have highlighted some design deficiencies, which need to be improved to facilitate activists. Although there were some cases when the sensitivity of the information and lack of technical skills hindered the use of technology, some positive use of OpenESF advocates that if the design issues could be dealt with, this could act as a major discussion point for the ESF community. The empirical data suggests that distinction among organizational and personal identity is important for some activists while collaborating on the web. It is also important to find interesting projects joined by the people in one's email network that could provide suitable choices and tags associated with different projects, improving search results. Furthermore, multilingual interfaces and automated content translation could attract a larger majority of activists in collaborating on the web.

8.2 Future Work

This thesis provides a better understanding of activists' practices and appropriate design requirements for technological support. Other fora working at different geographical levels could benefit from these findings when working on their ICT strategy. Furthermore, this ethnographic study highlights some design scenarios which could improve and facilitate the work practices of this civil society network. This study showed some of the hindrances and obstacles for the use of ICT systems during the ESF preparation process. The study indicates needs for a better understanding of the specific

needs of ad-hoc community of CSOs, movements, networks and activists in order to identify appropriate design requirements for technological support. The analysis of the work practices of the ESF community brought insights in the collaboration between different activists spanning all over Europe and led us to a better understanding of their practice of appropriate, adopt and use ICT for their support. With regard to the design of ICT for Civil Society Organizations (and especially with respect to transnational cooperation in CSO networks), CSCW research still lacks a sufficient body of knowledge, particularly analyzing their specific needs. Following a socio-technical approach [cf. Wulf et al., 2011], the presented ethnographic analysis of the ESF community marks a starting point for developing appropriate support for this particular transnational CSO network. The next steps could be to use these findings as a baseline for the definition of specific design requirements. In order to realize these design requirements in prototypical systems, participatory design approach could be employed. These prototypes shall be evaluated in practice by the social activists to evaluate their effectiveness and maybe to further adapt them to their specific needs.

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