

Designing for Self-Organization: Macro and Micro Perspectives in ConflictIT

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Abstract. In this position paper, I propose addressing both macro- and micro- conflicts in ConflictIT research and design efforts to support collaboration within communities. Motivated by our research with a local voluntary community in Syria, I argue that macro conflict (wide-scale armed and political conflict) induces special conditions marked with the demise of institutions and services, and under these circumstances, local initiatives sprout in an attempt to address the growing needs, making them especially important to reestablish the grounds for macro stability. I further suggest that ConflictIT research, with its know-how and attention to causes, dynamics, and effects of disagreement and conflict, can also study and design for micro conflict within groups, which poses considerable challenges in the face of local communities' attempts to self-organize, and thus challenges the growth of local seeds of macro stability. Finally, I briefly illustrate some of the conceptual and methodological implications derived from this double interest in macro and micro conflict.

Macro conflict and governance in local communities

The escalating armed conflict in Syria since late 2011 has resulted in wide destruction of infrastructure and civic institutions, leading to shortages in services and denial of rights and opportunities: from water to health care, and from education to communication (e.g. Syrian Center for Policy Research, 2015). This has created a massive void, and numerous local initiatives have sprouted in different parts of the country in an attempt to re-organize and provide alternatives

to these services (Bosman, 2012)¹. In the recent four years, Syria has witnessed an increase in the number of active NGOs, voluntary communities, and local initiatives to address some of the growing demand. While conflict in Syria has been described as “the most socially mediated in history” (Lynch, Freelon, & Aday, 2014), the use of social media is not restricted to the continuation of the conflict on the cyberspace (through political debate, news of events on the ground, and recruitment campaigns). But also, with the increase in the number of community initiatives and NGOs, a large number of these initiatives have been progressively adopting and refining their use of Internet and social platforms for various purposes: pleading for donations, reporting on progress and achievements, and for communication and coordination among team members (for a brief overview, see Halabi, 2014).

Within this context, the low cost of establishing groups, getting in contact with others, and broadcasting to a large number of people have made the Internet and online social platforms possible alternatives for local initiatives to assemble, coordinate and spread the word. Several researchers have pointed the links between local community development, security and stability (e.g. Colletta & Cullen, 2000; Fearon, Humphreys, & Weinstein, 2012). This leads to questioning the potential of ConflictIT in contributing to this by examining whether technology can be adapted further for contexts that are characterized with the demise of public services and civic institutions, and for providing means for grassroots reorganization and self-control. Relevant research interested in self-organizing communities is concerned with massive online collaboration over Wikipedia, and with the development of open source software (Forte, Larco, & Bruckman, 2009; Van Wendel de Joode, 2004). Interestingly, these efforts pay explicit attention to issues of conflict and how authority, rights and governance are configured, which offers valuable inspiration. However, community self-organization in areas marked with political and armed conflict is concerned with more than the governance of online content and software code. The different context, scale, intensity, and consequences thus require a balanced attention to the effect of macro conflict on the demise of institutions and authority, and the capacity of IT to provide possibilities for communication, collaboration, community building, and establishing authority. For sure, it is hard to expect that ITs could provide full alternatives, but the already existing adaptation of tools and platforms, which were in many cases not intentionally designed to support self-organization, points to a latent potential that can be explored through ConflictIT to support grassroots reorganization.

¹ The initiatives and conditions vary widely in different areas. These include initiatives by local community councils, services provided and taxed by local armed brigades or government officials and militias, and highly priced local businesses. They should not be idealized since a sizeable part of them is governed by a war economy based on maximizing profit with little collectively-decided measures to protect consumers (Turkmani, Ali, Kaldor, & Bojicic-Dzelilovic, 2015).

From macro to micro conflict within communities

The above perspective that considers the effects and implications of macro conflict (e.g. armed or widely spread political conflict) tends to be dominant in studies considering conflict and the design of technology (e.g. Best, 2012; Hourcade et al., 2012; Zancanaro, Stock, Eisikovits, Koren, & Weiss, 2012). However, being a natural part of human interaction, it is agreed that conflict is a widely spread phenomenon during collaboration. There incurs shift in focus from the effects of macro-scale conflict to micro-scale conflict (i.e. within the group and between its members). While conflict within groups can be productive for creativity and production, it can also hinder collaboration, stress members, and lead to the dissolution of groups (Easterbrook & Beck, 1993; Jehn & Mannix, 2001). The quest therefore is not to hinder the occurrence of micro conflict, but to find ways for IT to help in processing conflict in ways that lessen its negative effects on members and communities.

Communities attempting to self-organize within areas affected by macro conflict face unique challenges related to the very nature of the problems they are attempting to solve (the demise of local institutions). The lack, the rapid reconfiguration, and the multiplicity of emerging authority structures (legal, social, governmental, economic) challenges self-organization towards stable relationships. For instance, these conditions prevent local communities from benefiting from the services of local institutions (space and equipment), hinder establishing legal frameworks in case groups needed to formalize their organizational structures, and increases the possibility of diverging goals and internal interests among members as the circumstances rapidly shift. Due to this, micro conflict within such emerging communities can be especially tricky to handle and poses a serious challenge to self-organization, which is what we have recurrently witnessed through the accounts of local activists, participation in local voluntary communities, and through observing the relative quick dissolution and re-establishment of these communities (Halabi, forthcoming). In other words, micro conflict is both encouraged by and contributes back to macro conflict.

Several research strands focus on conflict within groups, including studies on intragroup conflict (e.g. Jehn & Bendersky, 2003), the design of groupware for professional groups (e.g. Rohde & Wulf, 1996), and studies on online collaborative communities (e.g. Elliott & Scacchi, 2004; Matei & Dobrescu, 2010; Smith, 1999). However, they are concerned with contexts (e.g. professional groups; governance of content production) that differ from those of communities in areas affected by macro conflict. With the interest of ConflictIT in the effects of macro conflict on local communities and the role of IT, it sits in a privileged position (as it has the knowhow and the sensitivity) to also consider micro conflicts within communities living in areas affected by macro conflicts.

Conceptual and methodological implications

A double attention to macro and micro conflicts requires adopting a broad conceptualization of conflict that can accommodate a wide variety of causes, scales, actors and effects - from wide-scale armed conflict to quarrels between colleagues working on a project². This however does not deny the researcher the capacity to focus on a certain level of conflict as required by the project, and will therefore be required to instantiate such a broad conceptualization to the particular level of observation and design.

This approach in ConflictIT prioritizes the local; it reflects an interest in the effects of macro and micro conflicts and the (potential) role of IT in the capacity of individuals and communities to self-organize. This requires methods that make it possible to get closer to the local, such as ethnography and participant observation. Analytical frameworks to interpret observations and inform design need to encourage building up from field observations and of describing conceptualizing several levels of interactions among people and groups, and accounting for aligning and diverging interests during collaboration (Halabi, Sabiescu, David, Vannini, & Nemer, in press; Heeks & Stanforth, 2015). For instance, these include ethnography as a practice of interpretation and writing (e.g. Wulf et al., 2013), inductive analysis in sociology (e.g. Becker, 1963), grounded theory (Glaser & Strauss, 1967), and actor-network theory (Latour, 2005).

Several challenges can face this type of research, and good number of them is shared with other strands in ConflictIT and efforts concerned with designing for and with communities. First, it has been well noted that conducting research in dangerous zones raises concerns about access, distance, partnership building, and power differences between researchers and communities. Additionally, and as we have experienced in our research, the very nature of the interest in local micro conflict means working in a contested arena (Halabi, forthcoming). This means that actors are necessarily divergent on the observed matter, and this challenges the ability of participatory research and design approaches to facilitating the convergence on common design goals. In this contested arena, difficult choices will have to be made and clarified. An issue related to this is also the challenge of welcoming and equally representing various sides and divergent points of view in local conflicts equally, both in writing and in design.

Conclusion

ConflictIT can bring together researchers with a wide set of skills to examine the effects of armed and political conflict on the lives of individuals and

² For reviews on various definitions of conflict, see (Easterbrook & Beck, 1993; Schmidt & Kochan, 1972).

communities, the role of IT in such charged settings, and the potential for designing and appropriating IT systems to foster collaboration. ConflictIT research can therefore contribute to self-organization in local communities, which is an important component for addressing dire need to recover from the demise of local institutions. Additionally, the same set of skills and resources also qualifies ConflictIT to address micro conflict within emerging groups and local communities – an issue that is a considerable challenge in the face of recovery through self-organization.

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