Co-designing collaborative care work through ethnography

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Abstract. This paper focuses on instances of ethnographically-informed design of collaborative systems as they emerge from two European projects that aim to develop sociotechnical infrastructures based on more just collaborative practices. We outline a number of issues emerged related to the role of language, the relationship between digital and physical public engagement, and commonality, and their impact on design processes. Our contribution aims to uncover how ethnographically-informed design can support caring-based practices of social collaboration in different contexts.

1 Introduction

The term 'Sharing Economy' has been used in recent years to label a variety of initiatives, business models, forms of work and governance that have sparked increasing attention. Critical views are questioning some of the discourses that have characterized the promotion of commercial platforms – such as the rhetoric of socially-driven initiatives – in order to unveil the mechanisms through which they exploit social collaboration (Huws, 2015). In this respect, an increasing number of researchers and practitioners – such as those involved in the COST Action "From Sharing to Caring" organizing this conference – has called into question the rhetoric of 'sharing economy' in order to unpack the mechanisms by which such platforms exploit social collaboration (Avram et al., 2017). Such an approach has been inflected into several shapes and fields of social life: as digital platforms designed to foster autonomous social cooperation (e.g. Bassetti et al., 2019), as sustainable societal relations beyond the immediate design of objects or services (e.g. Light and Akama, 2014), or as technologies supporting workers in their daily conflicts with employers (e.g. Dombrowski et al., 2016; Irani and Silberman, 2013).

A common thread running through these examples is the adoption of a caring-based sharing approach (Belk, 2017) that relies on "relational assets", rather than financial rewards, that offer an ecology of situated mutually-supportive systems. Light and Miskelly (2019) have recently explored this issue through the concept of 'meshing', that is the layering of local sharing initiatives, developing and maintaining local collective agency through their aggregation. The interesting aspect conveyed by the idea of 'meshing' is a commitment to designing *beyond* sharing economy, in order to promote a different economic mechanism from trade as it focuses on generating caring interpersonal ties and a sense of community (Puig de la Bellacasa, 2017).

Communities have been located at the "core of collaborative consumption" (Albinsson and Yasanthi Perera, 2012: 305) and, in general, communities are increasingly relevant characters in Participatory Design endeavors (DiSalvo et al., 2012). Cibin and colleagues (2019) recently underlined the complexity of this social construct and proposed the use of the concept of 'grassroots community' to overcome the distinction between 'communities of place' and 'communities of interest/practice'.

Against this backdrop, this paper focuses on instances of ethnographically-informed design of collaborative systems as they emerge from two European projects that aim to develop sociotechnical infrastructures based on more livable collaborative practices. We compare two case studies in order to unpack the ways whereby the co-design of collaborative systems through ethnography can support grassroots communities in (1) elaborating and spreading forms of social collaboration starting from local needs and desires, and (2) constructing spaces for informed reflection and public deliberation within small and isolated areas. In doing so we ask *what kind of issues emerge from the formation of collaborative subjects through ethnographically-informed design interventions, and how can ethnographically-informed and caring based design of platform co-produce collaborative subjects*.

By putting these two case studies in conversation, we will outline a number of issues emerged from such ethnographically-informed design interventions related to the role of language, the relationship between digital and physical public engagement, and commonality, highlighting their impact on design processes. Our contribution aims to uncover how ethnographically-informed design can support caring-based practices of social collaboration in different contexts.

The paper is organized as follows: a discussion of the concept of 'community' and the emergence of the notion of 'grassroots community; a description of the two case studies; the illustration of ethnographic data and the emergence of related issues; a discussion on the role of language, the relationship between online and offline spaces, and commonality; a conclusion outlining potentially fruitful research trajectories.

2   Defining communities

The concept of 'community,' real or imagined (Anderson, 2006), and its interaction with technology (Tufekci, 2014) is increasingly central in the debate about the design of collaborative systems (DiSalvo et al., 2012). The literature outlines two main kinds of this social construct. From one side, the *geographical community* or *community of place* (Cabitza et al., 2015; Fernback, 2007) describes a group of people defined by the sharing of physical boundaries. On the other side, the bonds connecting people in a *community of interests* concern the pursuit of a shared process or goal. These definitions of community are not exclusive; indeed, in many collaborative systems they may overlap, as in the case of a local section of an online marketplace, or the "missed connections" category in Craigslist. A particular specification of community of interest is the concept of *community of practice* (Lave and Wenger, 1991): in this context, people not necessarily belonging to the same organization share similar activities in a framework that allows their evolution from peripheral participation to the full membership.

Cibin and colleagues (2019) show how in the design of community-based technology for social innovation it is necessary to re-discuss the just mentioned "space vs interest dichotomy": the groups of people engaged in these processes cannot be described merely as pure geographical communities or communities of practice, but they are the result of the continuous interaction between these two notions. To stress the analytical relevance of this interconnection, the concept of 'grassroots community', outlined by Kuznetsov and colleagues (2011), has been advanced as an "often spontaneous, non-hierarchical and volunteer-driven" group of people engaged in shaping the context in which social activism takes place, often in contrast with "the power structures implemented by traditional top-down organizations" (Kuznetsov in Cibin et al., 2019: 2). For this reason, grassroots communities "face unique challenges, risks and constraints, which shape designs and appropriations of interactive systems" (Kuznetsov et al., 2011: 2).

The adaptability of the concept of 'grassroots community' and its connection with the formation of collaborative subjects will become more evident in the next sections through the comparison of two European projects, one aimed to support communities of interest and the other one involving communities of place.

3   Commonfare and Grassroots Radio

The case studies treated in this paper pertain to two European projects – named Commonfare and Grassroots Radio – based on the collaborative design of ICT technologies for emancipatory aims.

The Commonfare project (2016-2019) is a European participatory design project seeking to respond to societal challenges within the European Union relating to

precariousness, low income, poverty and unemployment. The project is being piloted in three countries with a number of different populations (see Tab. 1). The goal is to support "communities of interest" (Di Salvo et al. 2013) through the improvement of accessibility of welfare state provisions as well as the connection of people and groups engaged in grassroots welfare practices through storytelling and digital currency tools developed through a platform called commonfare.net.

Grassroot Radio (2018-2021) is a European civic technology innovation. It is based on the use and development of RootIO (Csíkszentmihályi and Mukundane, 2015, 2016), a free/open hardware and software platform that supports the creation of a low budget and low-power FM radio station (Dunbar-Hester, 2014), without the need of a studio. The aim of the project is the creation of local Community Radio stations to support citizen collective action, community deliberation, media pluralism and the free flow of information in rural geographic communities across Europe.

Table 1 outlines the main features of the two projects as related to a number of salient categories considered such as target populations, areas of intervention, and technologies.

Project	Countries Deployed	Scope	Initial target populations	Areas of intervention	Technology
Commonfare	Croatia, Italy, Netherlands	Welfare	Precarious, freelancers, non-Western migrants, unemployed youth	Urban areas	Web platform
Grassroots Radio	Portugal, Ireland, Romania, Uganda, Cape Verde	Media pluralism	Geographical communities	Rural areas	Web, telephony + FM radio

Table 1. Summary of the two European H2020 ICT projects

In what follows we address a number of issues emerging from research activities consisting in focus groups, semi-structured interviews, public meetings, informal conversations, participant observation, whose transcripts and elaborations have been collected in documents both internal and public. These issues pertain to language, physical interactions and commonality which will be described and cross-compared in the following sections. These themes are relevant to the research question investigated here in that they play a significant role in the

articulation of the process of *meshing*, thus in the creation of caring interpersonal ties and a sense of community ((Light and Miskelly 2019, Belk, 2017) beyond the "space vs interest" binarism (Cibin et al., 2019; Kuznetsov et al., 2011).

3.1 Handling sensitive issues: the importance of language

The Commonfare project aims at involving different populations (see table 1) located in countries (Croatia, Italy, The Netherlands) that present several differences, but also unexpected similarities, in terms of political and cultural history, economic and labor policies (Fumagalli et al., 2017). Institutional agencies usually define these individuals "the poor" or people at risk of poverty or social exclusion (Eurostat 2019). Such labeling reflects their subalternity and is often associated to a 'lack of' a fundamental property (such as lack of human or financial capital), or a 'dependency on' something else (such as welfare provisions) (Bassetti et al., 2019; Sciannamblo and Teli, 2017). The use of such language in the project turned out to be experienced as a form of stigma – that is "a special kind of relationship between attribute and stereotype" (Goffman 1963, p. 4) – by participants. In early focus groups most people define themselves "*neither poor nor rich*", despite their economic difficulties (Bassetti et al., 2017).

Moreover, rather than passively accepting what it was perceived as a paternalistic definition, several research participants responded by recognizing values such as social relations, wealth of time and knowledge, out of the capitalist logic of labor-wage.

These findings led the whole consortium to engage in significant discussions regarding the role of language in building sociotechnical projects, to the consequent re-definition of the project communication, starting from its initial name: PIE News (see Figure 1). The consortium used the "PIE" acronym pointing to the three social issues confronted (Poverty, lack of Income, and unEmployment), yet participants rejected the word 'poverty' as a stigmatizing label. As a result, the consortium decided to change the name of the project into 'Commonfare', which refers to the "welfare of the Common" (Fumagalli and Lucarelli, 2015) as a concept inspiring the whole project since the very beginning (Sciannamblo et al. 2018).

COMMONFARE AND PIE NEWS: TWO NAMES FOR ONE RESEARCH AND CO-DESIGN STORY

by pienews | Feb 21, 2017 | News

In mid January we, the Commonfare consortium, met in Zagreb to discuss what we did so far and to organize the next phases of participatory design activities. There, we worked with Croatian participants on the design of the platform and we engaged in collective discussions about the research activities that pilot partners are carrying out in Croatia, Italy, and The Netherlands. A pressing issue arising in several contexts concerned the language we adopt to describe the project, its goals, and its ethical and political aspirations.

Figure 1. News on the change of the name of the project on the project website

The decision to change in Commonfare was aimed at emphasizing the positive aspects characterizing the project: doing things together. This orientation has also informed the name of the platform – commonfare.net – as well as the claim it displays: "We have so much in Common".

3.2 The relationship between online and offline relations

The issue of language articulated in the previous paragraph can be considered an example of *meshing* (Light and Miskelly, 2019), namely an effort to build mutual commitment within communities located in different spaces by developing and maintaining local collective agency. Another issue in this regard concerns the need to generate participation towards the commonfare.net platform, one of the main objectives of the consortium since the beginning. To reach this goal, the consortium focused on the organization of a significant number of events not only in the pilot countries, but also in neighboring countries. This strategy has served to pursue both dissemination and design goals since the beginning of the project, as specified in the grant agreement: "24 PIE News Networking Events will be organized, to present the project's results (even preliminary ones) to invited stakeholders in order to keep on adapting PIE News focus and stay fixed on the most important challenges for the specific stakeholders' community, based on their feedback".

The arrangement of 24 "networking events" was managed by pilot partners through a subcontracting formula, so as to directly engage like-minded organizations in the activities of the project and build diverse publics around the platform. Moreover, the organization of these events have been linked to the articulation of the co-design activities in order to make the project itself a "matter of concern".

The organization of networking events in different geographical areas has proved to be a successful strategy able to aggregate and meet different needs. This has been exemplified in the final report dedicated to the account of the events.

"As we progressed through our research and design phase through a participatory approach, it became clear that certain communities, those most affected by the "PIE conditions" of poverty, lack of income and unemployment, were often least informed and least mobilized to act. For example, in Croatia, a country with one of the highest rates of youth precarity, PIE focus groups uncovered that the majority of youth were not even familiar with the concept of "precarity", and few had heard of a "universal basic income". As a result, our target audiences grew ever larger over the project, as the unmet need for informing, organizing and mobilizing collective action to preserve the commons is an effort for all citizens".

3.3 Supporting the emergence of grassroots communities in local areas

The Grassroots Radio project's Grant Agreement states that one of the project goals is: "to deploy networked community radio stations in six remote locations across Europe".

Curral das Freiras is a Civic Parish of 2000 inhabitants situated in the center of the Madeira Island, in a valley isolated from other communities. The first research step in this area was knowing the people belonging to this place and supporting the emergence of a grassroots community. Therefore, the project team organized various meetings and started to attend local events. At the initial project presentation, few representatives of the community raised issues about responsibility, conflict management, and reputation, as exemplified by the next quotations: P1: "What if someone will say something bad on the radio, speak badly about other people, whose responsibility will it be? How we can control that?"

P2: "What if the station fails?"

The RootIO technology was described in the following meeting with the representatives of local groups. Through the engagement of these actors in a participatory design workshop, they became more aware of the potential benefits of this platform. Some topics for radio shows emerged: folklore, storytelling and the local language; integration of Venezuelan returnees/migrants; management of natural emergencies; religious rituals.

In the following days, the local librarian contacted the research team to express interest in a collaboration. Another local woman – a teacher with an interest in communication and one of the most engaged in these activities – approached the team expressing her will to participate. The local priest knew the project from the librarian, and he introduced the radio station to a significant portion of the community during Mass. He "baptised" the station with the name *Rádio Comunitária do Curral das Freiras*. Frequent contacts between the project team and the people involved fostered a change in the relationship both between

themselves and with the technology. The librarian, introducing the project to a person not involved, described the radio as "our community radio".

During another meeting, people started the design of some radio programs based on the different issues emerged. Someone said, "I am looking forward to embarking on the project together, in collective form as colleagues".

3.4 Care in a Community Resource

As the Grassroots Radio project is only at its halfway mark, we draw from a previous two-year deployment (Mukundane and Csíkszentmihályi, 2016) of the platform to describe ways in which evidence of community caring was fostered in Northern Uganda, a region recovering from decades of civil war.

FM radio is tightly regulated, so community stations must be owned by a single legal entity. In Patongo, Uganda, a local Community Based Organization (CBO) named Gwokke-Keni expressed interest in hosting the community radio station, as their work – HIV/AIDs awareness, destigmatization, and the distribution of antiretrovirals – benefited from community outreach. Run primarily by widows, Gwokke-Keni accepted that though they bore legal responsibility for the station, it should be a community resource open to many actors.

The Patongo station management made key choices that manifested an ethos of community care. This included focusing on voluntarism rather than a paid staff, and choosing to make death announcements, commonly paid for on radio, free of charge. As one participant in a focus group said, "This radio broadcasts specifically for Patongo. It is not the case with the other radios. Gwoke Keni which is hosting the radio is a not-for-profit organization. If the radio was profit driven, it would may be not be covering community issues like we do".

This effort for the community had a noted benefit for the host organization as well. As another focus group participant put it, "The radio has increased visibility for Gwoke Keni. This has now become a meeting point. People say "let's meet at the radio".

Station owners in other communities did not successfully balance their own needs with those of the community. This resulted in far fewer incoming calls, far less station revenue, and eventually disinterest in volunteering and listening. This may stem in part from the nature of the organizations: one unsuccessful station was a local branch of an international NGO, rather than a CBO, and focused more on delivering top-down information than promoting community communication. Governance, ownership, and other organizational issues are thus a major focus of the current Grassroots Radio project.

4 Discussion

We have started this paper by raising two related research questions – concerning issues emerging from the formation of collaborative subjects through ethnographically-informed design interventions, and caring-based design of

platform can co-produce collaborative subjects – and we have discussed examples related to two design projects, Commonfare and Grassroots Radio, both involving grassroots communities as well as technological design and adoption. Although the projects share a similar perspective and organization of work, they differ substantially, not only in terms of goals, locations, target populations, and technologies, but also in terms of the relation with the grassroots communities involved. If in Commonfare the goal had been to co-design and implement technologies supporting already existing grassroots communities engaging in caring practices in their mutual recognition and in building networks, in Grassroots Radio the aim is to favor the formation of bonds and ties in geographical communities through the design process. In this way, we can see how the different communities involved approached the issue of *language*: in the case of Commonfare, already existing collaborative subjects rejected the label imposed on them by the project and by the official statistical label, forcing the designers to re-shape the language; in the case of Grassroots Radio, the concern has been to allow the use of minority languages, and also "to baptize" the radio with a name that was recognizable by the local community, so as to support the process of having a voice in one's community as a part of civic action (Reuter et al., 2019). Equally, the dimension of *physical interaction* is different: in Commonfare physical events and physical interactions have been crucial for the adoption and use of digital technologies; in Grassroots Radio this happened too, but in a very situated manner, so that specific needs that enable a specific community (such as Gwokke-Keni) to develop a sense of collective ownership may be exclusive for other communities (Bidwell, 2016).

Finally, the issue of *commonality* can be stressed: How does one foster a sense of collective ownership and communal resource? In Commonfare, the refusal of the project initial name has suggested a further step to undertake in order to achieve a sense of commonality; in Grassroots Radio, when the radio has been appropriated by the people involved in the project, it has become "our community radio".

These emerging issues – *language, physical interaction,* and *commonality* – let us reflecting on how design can contribute to the emergence of collaborative subjects, that is to trigger and recognize potential controversies (such as the potential stigmatization in Commonfare), and to support the emergence of face-to-face interactions allowing people to tackle these potential controversies. Moreover, the networking events planned in Commonfare and the series of local meetings held in Grassroots Radio, together with the relational snowball activated in both cases, suggest that platform design should aim at designing not only the digital platform, but it should also focus on *meshing* the physical infrastructure for the creation of caring interpersonal ties and a sense of community (Light and Miskelly 2019, Belk 2017).

5 Conclusion

In this paper we have explored a number of issues emerging from the formation of collaborative subjects in two large-scale co-design projects. The issues emerged have ultimately shown that the role of ethnographically-informed design interventions supporting practices and ethics of care (Belk 2017; Puig de la Bellacasa 2017) serve not so much to collect inputs to be translated into language to code online sites, but rather to create the conditions of *meshing* (that is layering local interactions and agency) based on discussions about taken-for-granted labels as in the case of Commonfare, controversies, and local interests as in the case of Grassroots Radio.

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