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Chapter · June 2018

DOI: 10.1007/978-3-319-73374-6_3

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Chapter 3
Autoethnography in Human-Computer Interaction: Theory and Practice

Amon Rapp

Abstract Autoethnography is an ethnographic method in which a fieldworker's experience is investigated together with the experience of other observed social actors. Over the years, Human-Computer Interaction (HCI) research almost exclusively produced "objective ethnographies", attempting to generate accurate descriptions of the "world" and the individuals inhabiting it. However, recently HCI community started exploring different forms of observing and describing reality, making the ethnographer regain visibility, and produce reflexive first-person recounts of her work. Autoethnography might be precisely inscribed in this movement, whereby it explicitly attempts to recount the fieldwork from the fieldworker's point of view, situating the ethnographer as the protagonist of the ethnographic narration. In this chapter, I will outline the anthropological roots of the autoethnographic method, and describe its potential implications for HCI research.

3.1 Introduction

Ethnography was originally incorporated into Human-Computer Interaction (HCI) methods to understand how people utilize technology in real contexts of use, moving away from laboratory settings. The laboratory, at a certain moment, started appearing somehow artificial and insufficient to account for designs addressed to satisfy people's situated needs. Dourish (2006) retraces the use of ethnography, on the one hand, to the emergence of Computer-Supported Cooperative Work, which aimed at gaining knowledge about the social forms of organization of work activities; on the other hand, to the rise of the Participatory Design movement, which valued methodological approaches capable of making people's voices heard. Since then, HCI ethnography almost exclusively yields "objective ethnographies", attempting to produce accurate descriptions of the "world" and the individuals who inhabit it, where the figure of the ethnographer is presented in an impartial, distant,

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M. Filimowicz, V. Tzankova (eds.), *New Directions in Third Wave Human-Computer Interaction: Volume 2 - Methodologies*, Human–Computer Interaction Series,
https://doi.org/10.1007/978-3-319-73374-6_3

and impersonal voice. In this chapter, I will outline the distinctive features of the autoethnographic method, contrasting it with the more common – at least in HCI – paradigm of the objective ethnographies. Sect. 3.2 provides a historical account of autoethnography highlighting its utilization in anthropology and social sciences. Sect. 3.3 underlines some relevant theoretical and methodological aspects that differentiate autoethnography from the "objective" ethnography, connecting it with reflexivity. Sect. 3.4 outlines the practice of autoethnography in Human-Computer Interaction. Sect. 3.5 describes an example of autoethnography based on my personal experience, emphasizing some methodological and practical issues. Finally, Sect. 3.6 concludes the chapter. Conceptually and theoretically, third wave HCI expands the cognitive to the emotional and focuses on experience (Bødker 2006). Exploring ways of doing ethnography that value the emotional and experiential role of the fieldworker becomes essential.

In recent years HCI started exploring different forms of ethnography, in which the objective stance might make way for more subjective takes, and where the ethnographer regains visibility, producing reflexive and first-person recounts of her work (Rode 2011). In this vein, autoethnography found a place even in HCI. Autoethnography is an ethnographic method in which the fieldworker's experience is investigated together with the experience of other observed social actors. The researcher's personal account is considered valuable on its own and worthy of reporting in the ethnographic recounting (Tedlock 1991). This makes autoethnography similar to the autobiographical genres of narration: the fieldworker exposes her intimate experiences to the reader and produces a version of reality painted from a first-person perspective. However, such an ethnographer's personal "story" is not disconnected from the social and cultural contexts in which the autoethnographer is immersed: instead, the individual, social and cultural levels of description are tied together to produce a complex and multilayered recount of reality (Ellis and Bochner 2000). The autoethnographer uses self-observation as a starting point of reflection on the social and the cultural, and then returns to the self and to the interpretations of what has been observed: "Autoethnography requires that we observe ourselves observing, that we interrogate what we think and believe, and that we challenge our own assumptions, asking over and over if we have penetrated as many layers of our own defenses, fears, and insecurities as our project requires" (Jones et al. 2013: 10). Goodall (1998: 2) emphasizes how autoethnography "completely dissolves any idea of distance, doesn't produce 'findings,' isn't generalizable, and only has credibility when self-reflexive, and authority when richly vulnerable… When it is done well, we can learn previously unspoken, unknown things about culture and communication from it".

3.2 Autoethnography in Anthropology

The first autoethnographic work can be traced to Jomo Kenyatta's study (1938), an anthropological account of Kikuyu people of central Kenya made by the first President of that country (Hayano 1979). Over the years, this term has been used to

point to the key informants' own understanding of their world: as in the Dani people autoethnography, where 50 Dani children gave responses to the question "what do people do?" (Heider, 1975). It has also been referred to the process of studying a fieldworker's own people, where an indigenous insider collects and analyzes the data concerning a particular group (Hayano 1979). This position ascribes autoethnography to marginalized subjects (Sundén 2012), as a response to the "dominant" European tradition, where ethnographic works represent to researchers their (usually subjugated) others, whereas autoethnographic works are those the others construct in response to or in dialogue with those representations (Pratt 1986).

Ellis, Adams and Bochner, in turn, prefer to define autoethnography as "an approach to research and writing that seeks to describe and systematically analyze (graphy) personal experience (auto) in order to understand cultural experience (ethno)" (2011: 273). This emphasis on "personal experience" and "writing" reflects the important transformations that ethnography has seen in its theoretical accounts during the 1980s. The postmodernist position in anthropology, which can be rooted in the Clifford's and Marcus' book Writing Culture (1986), highlights "the constructed, artificial nature of cultural accounts" (p. 2), provoking a "crisis" in the confidence on the fieldworker's objectivity. Such accounts claim that ethnographies are no more than fictional texts which should be judged only in terms of honesty and aesthetics as per literary practice. This somewhat extreme position reflects a deep transformation in the epistemology of science at that moment: in those years scholars begun to question the objective ontology of science, showing how facts and truths are conditioned by the overarching paradigms in which they are discovered (Kuhn 1962), and are inevitably tied to the words used to represent them (Rorty 1982).

On the one hand, this epistemological shift provoked a realist reaction in anthropology, with the Evidence Based research movement (Goldthorpe 2000; Runciman 1983) claiming that ethnographies should be assessed by using the same criteria adopted by the hard sciences. On the other hand it opened the way for methods that value the ethnographer's subjective position. Researchers started considering what social sciences would be if they were closer to literature than to quantitative sciences, and if they were self-aware of the values and beliefs affecting their research, rather than pretending to be free of any conditioning (Ellis et al. 2011; Bochner 1994). Many fieldworkers turned to autoethnography because they "wanted to concentrate on ways of producing meaningful, accessible, and evocative research grounded in personal experience, research that would sensitize readers to issues of identity politics, to experiences shrouded in silence, and to forms of representation that deepen our capacity to empathize with people who are different from us" (Ellis et al. 2011: 2).

Autoethnographers value personal experiences, recognizing that every attempt to describe the world is framed in the subjectivity of the observer. When this is not accounted for, ethnography will commonly encompass a series of assumptions about the identity of the ethnographer, taking them for granted:

> For the most part, those who advocate and insist on canonical forms of doing and writing research are advocating a White, masculine, heterosexual, middle/upper-classed, Christian, able-bodied perspective. Following these conventions, a researcher not only disregards other ways of knowing but also implies that other ways necessarily are unsatisfactory and invalid (Ellis et al. 2011: 3).

Race (Boylorn 2006), gender (Keller 1995), age (Paulson and Willig 2008), education (Delpit 1996), or religion (Droogsma 2007) entail different assumptions about the world (Ellis et al. 2011). Similarly, writing styles are by no means neutral. The way ethnographies are recounted inevitably implies a stance on the world that has been observed. This textwork involves "choices, innumerable ones concerned with such things as voice, authorial presence (or absence), analogies and metaphors, allusions, professional dialect and jargon, imagery, interpretative moves, tone, empirical or theoretical emphasis, truth claims (or lack thereof), figures of speech, and so on" (Van Maanen 2011: 159). Van Maanen identifies three main styles of writing ethnography in anthropology: (1) realistic, (2) impressionistic, and (3) confessional. Whereas the first one actually encompasses a positivist position that contrasts with the autoethnographic account, the others get close to the autoethnographer's aim of revealing the individuality lying behind the fieldwork, emphasizing the personal experiences of the "I".

3.2.1 The Realistic Style

The realistic teller commonly removes any subjective cues from the text in order to give to the ethnographic recounting the appearance of an objective narration of the world, completely transparent and exempt from biases emerging from the author of the writing: "the most striking characteristic of ethnographic realism is the almost complete absence of the author from most segments of finished text" (Van Maanen 2011: 46). The vanishing of the "I" is usually paired with a documentary style focused on minute details about the daily life of the investigated people, and a univocal interpretation of the collected data, offering one reading and culling its facts to support that reading. This

> …permits readers to hold the attitude that whatever the fieldworker saw and heard during a stay in the studied culture is more-or-less what any similarly well-placed and well-trained participant-observer would see and hear. Ironically, by taking the "I" (the observer) out of the ethnographic report, the narrator's authority is apparently enhanced and audience worries of personal subjectivity becomes moot. (Van Maanen 2011: 46)

For Van Maanen these rhetorical devices not only hide the ways in which the research and the text have been constructed, but also leave out any event that may disconfirm "the" provided interpretation, without allowing alternative perspectives to creep into view.

3.2.2 The Impressionistic Style

Impressionistic accounts, in contrast, show different features:

The form of an impressionist tale is dramatic recall. Events are recounted roughly in the order in which they are said to have occurred and carry with them all the odds

and ends that are associated with the remembered events. The idea is to draw an audience into an unfamiliar story world and allow it, as far as possible, to see, hear, and feel, as the fieldworker saw, heard, and felt. Such tales seek to imaginatively place the audience in the fieldwork situation. (Van Maanen 2011: 103).

This kind of recount seeks "transparency", using evocative language that tries to project the reader into the fieldwork, making her "relive" it. More than disciplinary, in impressionistic tales the standards are literary, and the impressionist tellers aim at engaging their audience, keeping it alert and interested. Unlike the realist tales, the ethnographer's subjective point of view is important, since, as with impressionist paintings, reality is captured from a unique and individual perspective.

3.2.3 The Confessional Style

Finally, confessional tales "attempt to explicitly demystify fieldwork of participant-observation by showing how the technique is practiced in the field. Stories of infiltration, fables of fieldwork rapport, mini-melodramas of hardships endured (and overcome), and accounts of what fieldwork did to the fieldworker are prominent features of confessions" (Van Maanen 2011: 73). The author is close at hand, since her writing is intended to show how the fieldwork came into being. Typically, the evolution of a confessional tale starts from the way in the fieldworker sees the observed reality, to end with the ethnographer seeing the world in an entirely different manner: this sort of new perception is normally claimed to be close to the native's point of view. Narration is then enriched with the fieldworker's autobiographical details, as well as those that constitute the field experience of the author.

3.2.4 The Autoethnographic Style

Confessional style closely resembles autoethnographies. However, autoethnography goes beyond such "confessions" since it puts the ethnographer's subjective experience and self-observation at the center of the fieldwork. What is interesting here, nonetheless, is that the methodological observations made by Van Maanen with reference to confessional tales are even more valid when looking at the autoethnographic method. Van Maanen notes that the major difficulty in confessional recounts is to convince the audience that the work is authentic and reliable, despite the touch of the fieldworker.

Autoethnography has been criticized for its autobiographical component as well, which risks to transform scientific work into "art" (Ellis et al. 2011). For example, it has been claimed that autoethnography is too aesthetic and emotional (Hooks 1994; Ellis 2009), or that it does not spend a sufficient amount of time with "others" (Delamont 2009; Fine 2003). Delamont (2009) summarizes the main concerns that researchers have in recognizing autoethnography, arguing that research is supposed

to be analytic and not merely experiential, and introspection is not a sufficient substitute for data collection.

Critiques of autoethnographic writing 'of being too literary' without respecting the 'canon' of social science research points to the debate between postmodernism and positivism we highlighted at the beginning of this Section. Autoethnography needs a theoretical and methodological background capable of accounting for its results and responding to the critics discussed above. The notion of "reflexivity", which has been extensively discussed in social sciences and recently introduced to HCI, can provide solid grounding of the autoethnographic genre. When autoethnography becomes reflexive – not only in the sense of a gaze that looks back to the observer, but also with reference to a procedural strategy aimed at exposing all the methodological and theoretical tools used in the fieldwork – it can recover that "objectivity" traditional ethnographies pursue in different ways.

3.3 Autoethnography and Reflexivity

The awareness of considering the ethnographer's "gaze" crucial in ethnographic research has been spreading for a long time in anthropology, whereas it has been adapted only recently within the HCI community (Johnson et al. 2012; Rode 2011). HCI practitioners and researchers framed ethnographers mainly as "realist tellers" whose subjectivity is completely hidden in the text, "preventing discussion of how the researcher's presence in the field, their interactions with participants and their own background and experiences, have shaped the ethnography" (Johnson et al. 2012: 1136). As a consequence, confessional or impressionistic styles of writing revealing the subjective stance of the ethnography have been rarely used in HCI research (Rode 2011). From this perspective, autoethnography could hardly find a place in HCI, because one of its main characteristics is to make the "author" of the ethnographic work visible, consequently revealing that the "realist teller" is only one way to recount the fieldwork.

In recent years, however, HCI researchers have started rethinking most of their methodological tools. This methodological and theoretical shift – marked as the "third wave" in HCI – has also led to questioning the assumptions behind the HCI ethnographic work. Rode (2011) introduced the term "reflexivity" to the HCI ethnography debate. She emphasized that hiding the ethnographic voice under a cover of objectivity narrows our perspective on the data and our possibility to use it for design purposes. Following Burawoy (1998), she defines reflexivity resting on four criteria: (i) reflexivity, unlike positivism, embraces intervention as a data gathering opportunity; (ii) reflective texts aim to understand how data gathering impacts the quality of the data itself, commanding "the observer to unpack those situational experiences by moving with the participants through their time and space" (Burawoy 1998: 14); (iii) reflexive practitioners attempt to find structural patterns in what they observed; (iv) in doing so they extend theory (Rode 2011). Rode, therefore, emphasizes the experiential nature of ethnography, noting how the relationship with

informants is always two-way, where fieldwork is inherently subjective, contextual, and incomplete.

If Rode opens the way to using impressionistic and confessional ethnographic styles in HCI, de facto legitimizing the use of autoethnography, the notion of reflexivity she introduces entails further theoretical considerations that might better ground the autoethnographic method. Cardano (2009) emphasizes that reflexivity – distancing both from the constructivism of the postmodernist position and the positivism of the natural sciences – may represent a third way to found the ethnographic approach. Cardano stresses that the content of ethnography is both theory-laden and procedure-laden. On the one hand, it is shaped by the theories that guide the observation, as it is not possible to describe the world from a "God's eye view" (Putnam 1981). Such theories are both scientific theories which may help the ethnographer explain the observed phenomena, and more widely–shared common sense theory, namely "notions which are established, with images of the world which the totality of rational individuals adheres to" (Cardano 2009: 9). On the other hand, ethnographic research is procedure-laden, which means that "the observational role taken up, the research techniques used, the implicit or explicit forms of sampling adopted, and more in general the line taken up during ethnography – all these, as well as theoretical preconceptions, go towards determining the representation of the culture being studied" (Cardano 2009: 8).

If ethnography is not neutral in representing the world, then the realistic recount can no longer represent a valid way to found the ethnographic narration: the epistemic authority of the "realist teller" reveals itself as a fiction, a rhetoric procedure that misleads about how the fieldwork has been conducted. From this perspective, reflexivity becomes a means to make the ethnographic work accountable: "Reflexive accounts enable readers to assess the plausibility of each statement (or at least of the most salient one) by scrutinizing the empirical condition which led to their formulation" (Cardano 1999: 11). Altheide and Johnson (1994) claim that the ethnographic ethic imposes on ethnographers the responsibility to evidence the foundations of their interpretations and results, by using an accurate reflexive narration:

While no one is suggesting a "literal" accounting, our work and that of many others suggests that the more a reader (audience member) can engage in a symbolic dialogue with the author about a host of routinely encountered problems that compromise ethnographic work, the more our confidence increases. Good ethnographies increase our confidence in the findings, interpretations, and accounts offered. (p. 591).

Reflexivity, by describing the rapport between the observer and what is observed, provides the reader with the tools for understanding how the fieldwork has been conducted and how the data have been collected, analyzed and interpreted.

Satisfying such criteria "enables the ethnographic reader to approach the ethnography interactively and critically, and to ask what was done, and how it was done, and what are the likely and foreseen consequences of the particular research issue, and how was it handled by the researcher" (Altheide and Johnson 1994: 591–592). Reflexivity imposes to accurately account for the theories used to explain the observed reality, the procedures employed to sample the data, and the interpretative strategies used to "make sense" of the observation. In this way, the ethnographer

grounds the ethnographic description, assuring more validity, reliability and credibility, not by withdrawing subjectivity, but actually highlighting it.

Within the reflexive perspective, autoethnography becomes a paradigmatic technique to account for the ethnographic work: the fieldworker not only explains her methodological and theoretical choices, but exposes herself in her interpretative doubts, in her failed attempts, in her temporary hypotheses and precarious experiences to describe how the observed reality has been constructed. In other words, autoethnography becomes a means to completely enact the reflexive recount.

3.4 Autoethnography in Human-Computer Interaction

Within HCI, autoethnography has been gaining an increasing popularity in recent years, where it has been employed to understand the impact of location-based services on a bus drivers' work conditions (Pritcherd et al. 2014), to explore how individuals learn music through listening, embodied understanding, and creative imagination (Xiao and Ishii 2016), to examine the practices of people that do not use smartphones and social media to interact with others (Diaz et al. 2017), and to investigate how prototype wearable devices aimed at increasing the awareness of time might be integrated in daily living (Harrison and Cecchinato 2015). Under the name of autobiographical design, it has been employed as a form of design research that draws on extensive use of a system by its own creators (Neustaedter and Sengers 2012). Boehner et al. (2008), for example, designed a system for reflection and awareness of emotional presence, claiming that their objective was to "critically reflect on our experiences with the system, to plumb their nature and how they relate to design choices, and use them to continually push the system design in new, perhaps unexpected directions" (Boehner et al. 2008: 6–7).

3.4.1 Autoethnography as a "Quick" Method

A reason for moving to the autoethnographic method can be retraced in the need of finding less-demanding techniques than those employed in traditional ethnographies for studying technology in real contexts of use. Ethnographies typically require a period of several months of observation and analysis (Bentley et al. 1992), face barriers in gaining access to the field, and spend excessive periods of time finding, observing and interviewing key informants, as well as acquiring a deep knowledge of the field. While HCI research has always attempted to "understand" the user, namely to empathize with her (Segal and Suri 1997) and obtain knowledge about what she feels, thinks and perceives when using technology: "spending 24 h over several weeks with the participants is just not feasible" (Cunningham and Jones 2005: 2), or better, is very hard to achieve with the often limited resources available to HCI researchers.

Wright and McCarthy (2008) proposed to fill the gap between the researcher's understanding and the users' knowledge through the "imagined other", personally involving researchers in the use of technology through a variety of self-studies (O'Kane et al. 2014). If such self-studies in HCI can be brought back to Hawkin's auto-observation,[1] autoethnography seems to precisely satisfy the need of gaining empathy with the user without engaging in ethnography-heavy techniques. Ljungblad (2009) stressed that autoethnography-like techniques may lead to a deeper empathic understanding of the participants' experiences. Ljungblad required people to use the passive camera device SenseCam for a week, in order to explore how it might involve a different type of photographic experience. In doing so, she personally used the camera for 1 month (before and after the study), where the experiences of using the camera were reflected upon and written down as a diary, mainly focusing on the questions raised by the participants.

Autoethnography appears to promise a quicker access to the "ethnographic data" as the main "object" of research becomes the ethnographer herself who may already know the "field" of study due to past experiences and expertise. From this perspective, autoethnography can be inscribed in those approaches that refer to the umbrella-term "rapid ethnography", aimed at understanding users and their environments in a shortened timeframe and particularly valued in industry contexts due to the evident savings of time and resources (Millen 2000).

Marcengo et al. (2016), for example, accounted precisely for the use of autoethnography in exploring the reliability of self-tracking devices by claiming that self-observation may provide "easier" access to data impossible to collect otherwise, overcoming the difficulties of observing users in private settings, such as during sleep. Similarly, O'Kane et al. (2014) used autoethnography for evaluating a wrist blood pressure monitor used by individuals with hypertension, claiming that this method enables researchers "to understand and empathize with the experiences mobile device users can face in difficult to access contexts", allowing them "to better understand user experiences with mobile devices, including mobile medical technology, especially during non-routine times that can be difficult to study in-situ with traditional user studies" (O'Kane et al. 2014: 990). Cecchinato et al. (2017) combined autoethnography and semi-structured interviews with early adopters to uncover perceived benefits, issues and unmet needs when using a smartwatch. Here, autoethnography allowed researchers to gain first-hand situated user experience of a device not yet widespread, relieving them from the task of conducting long sessions of observation of users in private settings: autoethnographic data were also used to inform the questions for the interviews, a role that in traditional ethnography is usually covered by participant observation in the field.

[1] Hawkin carried a block of wood within his pocket simulating how would fill like to carry a Palm Pilot always with oneself (Bergman and Haitani, 2000),

3.4.2 Autoethnography as a "Reflexive" Method

Grounding the autoethnographic method in practical convenience and cost saving leaves autoethnography open to a variety of critiques: for example, that the autoethnographer does not spend a sufficient amount of time with "others", and that her take on reality is too subjective and unreliable. Saving resources, in fact, cannot be a sufficient motivation to account for an inspection technique that can be blamed for not complying with the standards of social science research. Situating autoethnography in the reflexive frame, instead, can give support to the subjective position of the ethnographer, emphasizing the importance of her own experience in the fieldwork's recounting.

Williams (2015), for example, conducted a multi-year autoethnography on the use of self-tracking technologies for weight-loss in order to explicitly counter the realistic position of traditional ethnography largely predominant in situated studies of human-technology interaction. She emphasized that designing technologies entailed personal interests and experiences that should be embraced rather than put aside: bringing her approach back to postmodern ethnography and autobiography, she called into question the objective observer position and the conventions of the realist teller, with the explicit aim to disturb the concept of the coherent and individual self as well as the classical opposition between self and society, subjective and objective (Reed-Danahay 1997). Using weight trackers generated from a personal interest, being not initially intended as research, but as part of an effort to address a personal need. However, it turned into an opportunity to develop an experiential understanding and a professional account of fitness self-tracking devices. What she explicitly stressed in her work was the highly idiosyncratic nature of her research as a point of strength rather than of weakness: exposing personal experiences has the potential to generate a connection with what can be the life paths of other individuals in similar situations, producing "a rich understanding of the role of personal devices in our lives" (Williams 2015: 122). Such a perspective, therefore, emphasizes the vulnerability, motivations, personality traits, and contradictions of the ethnographer as a source of value. Williams claims for the subjectivity of ethnographic research, and in doing so, exposes the methodological and theoretical foundations that underpin the position: this reflexive recount allows the reader to fully account for the fieldworker's choice, making her work transparent.

Sundén (2012) further deepened the methodological reasons for using autoethnography in design by explicitly arguing for its peculiar ways of producing knowledge, different from the objectivism of traditional ethnographies, but nonetheless equally valuable. She made use of personal experiences and emotions, by recounting an in-game as well as out-of-the-game love affair, emphasizing the importance of a fairly intimate disclosure of the researching "I" to investigate queer potentials in mainstream World of Warcraft cultures. Instead of the "self-confidence" of the realist ethnographer she made visible the "epistemological uncertainty" of the autoethnographer, strictly tying the autoethnographic experience to the reflexive narration:

> Uncertainty, here, is meant to evoke a manner of not being sure of whether one's methodological strategies will work productively in an academic setting. Uncertainty points at how

> ways of knowing are shaky, partial, and always in the process of being proved otherwise. Uncertainty may also work as a theoretical code word in new media ethnographies in relation to which the limits, of this body and that, and of the field itself, are everything but clear (Sundén 2012: 173).

Rather than hiding the doubts and the risks of the fieldwork, Sundén emphasized them as a means to expose how the research took form, its dynamics and assumptions.

The Participatory Design researchers Malinverni and Pares (2017) stress that self-investigating their role and subjective experience does not only allow them to empathize with users but can also guide ethical practice, helping designers become more aware of their unconscious values and assumptions. The use of the autoethnographic method, then, becomes a means to guide ethnographer's "reflection on her standpoint in PD, the way in which she conceptualizes participants, and the way in which she perceives her authorship in the design process" (Malinverni and Pares 2017: 411). Moreover, it allows for the revealing of assumptions and values that surround PD practice, unveiling "how even simple decisions and behaviors have specific meanings that are grounded on a vast array of antecedents, which may lead to different kinds of consequences" (Malinverni and Pares 2017: 411). Here again, the use of autoethnography is motivated by the unique perspective on reality that it introduces, as well as the reflexive recount that it produces, providing a de facto theoretical and methodological legitimacy rather than a practical one.

3.5 Autoethnography and Design in Practice

Over the last 4 years, I conducted a multi-phase ethnography in World of Warcraft, trying to dig into the methodological consequences of the autoethnographic stance when paired with the reflexive recounting. I looked at autoethnography as a means for "phenomenologically" experiencing the reality as it is seen through eyes of the others, attempting to understand how "natives" live their world. Massively Multi Player Online Role-Playing Games (MMORPGs) are a game genre that involves millions of players around the world. These games project individuals in a fantasy world where social relations are developed and different identities are explored. MMORPGs are an interesting phenomenon for design practices: they intensely involve their players, being played for longer periods of time than other videogames (Ng and Wiemer-Hastings 2005); their players carry out a variety of burdensome activities – such as farming and managing resources – transcending the common concept of play (Calleja 2007); finally, MMORPGs support the creation of a large variety of social relationships (Drennan 2007).

All these characteristics suggest that MMORPGs embed design features highly capable of engaging and gluing players to the screen, making them an ideal object of study for searching design patterns that can be utilized outside the game domain. The use of game elements in non-game contexts has been called gamification: gamification techniques have been used, for instance, to promote healthy food habits (Orji et al. 2013) and lifestyles (Thompson et al. 2010), support physical activity

(Macvean and Robertson 2013), increase control on patients' diseases (Bassilious et al. 2012), raise awareness about sustainability (Antle et al. 2011) energy consumptions (Bang et al. 2007), and evaluations of prototype applications (Rapp et al. 2016a). However, the design elements used by gamification designers are still scarce: points, badges, and leaderboards are the most commonly employed game elements (Rapp 2014b), where designers rarely look at the world of games to find new insights (Rapp et al. 2016b; Meder et al. 2017).

3.5.1 Setting

My research aims to draw inspiration from MMORPGs to discover new design elements to be employed for gamification purposes (Rapp 2013, 2014b, 2017a, 2017b, 2017c). Among MMORPGs, World of Warcraft (WoW), is still the most popular MMORPG available on the market. Players proceed through 110 levels of play, exploring the world of Azeroth, killing creatures, acquiring new powers and learning new professions. Game activities are designed in the form of quests, i.e. missions that should be faced to gain experience points and gear. Players create characters choosing their "race" (e.g. Human, Night Elf) and class (e.g. Death Knight, Warrior) – choices which impact play styles. Players also collaborate to accomplish the hardest missions of the game, i.e. the raids. Raids are ten-to-thirty players dungeons that can be faced by being part of a guild (i.e. a permanent structured group of players). Over the years, WoW has entered "the offline culture's everyday speech to a greater extent than have most other computer games" (Corneliussen and Rettberg 2011: 5) attracting players also outside the strict circle of hardcore gamers. For designers, it set the MMORPGs' "genre standards" (Debeauvais et al. 2011: 181), while researchers found in WoW the "typical" game able to deeply engage its players, hitting "on all cylinders motivationally" (Rigby and Ryan 2011). All these elements make WoW an "ideal type" (Weber 1949) of a MMORPG.

Given these characteristics, I decided to do an ethnography in WoW, which lasted more than 4 years. The autoethnographic stance gave me the opportunity to answer my research questions. I was seeking design elements able to highly engage players that can be utilized as building blocks for gamification design in other, non-ludic, contexts. This goal required a deep personal involvement in the game, in order to experiment the game mechanics' effects personally. As a matter of fact, only the ethnographer's lived experience can really explain why and how a certain game element works and its consequences on the players' behavior.

3.5.2 Notes from the Field

Autoethnography, then, represents an ideal tool to gain knowledge about specific designs. By analyzing my reactions, and how certain game design elements impacted my game experience, I was able to formulate more precise research questions to be

explored in the field. Conversely, data collected during the fieldwork was constantly compared with my personal histories.

This passage presents my notes dated January 6th, 2014:

> It was Monday when I became officer of The Emperors. That day I found myself wondering about my whole social experience in WoW up to that moment. My first attempts at socializing, as I was recalling them, were meant to fail. I was not used to online gaming and it sounded strange to me to request help from others in accomplishing in-game missions. So, until I reached the level cap, I played almost alone. [...] Suddenly, by chance, when I was with a casual group in the Vale of the Eternal Sorrow, I met Derkes and Axial. After chatting for a while they invited me to join their guild. I left my previous guild with no regrets, it had no meaning for me. I was lucky enough to discover a new world, in the subsequent months. While Derkes and Axial helped me optimizing my character suggesting me which skills to develop, I started chatting with three other members of the group, Kairos, Neon and Elin. I felt free to talk with them even of my private life, and progressively so, I began to think those could be friendships beyond the game world. Slowly, I began to "feel" the values and the goals of the guild as mine, thinking that I would never have left it. In the meanwhile, hours of play accumulated also because I wanted to meet my friends in there, sharing with them the efforts and the responsibilities of guild activities, but also the experiences that was happening in our 'real lives (Rapp 2017a: 460).

The episode emphasizes that one of the essential elements that sticks players to the game is the "social environment" that they encounter while playing. The autoethnographic work allowed me to understand how WoW favors, through its designs, the creation of specific kinds of relations, and how such relations have a variety of effects. In other words, experiencing friendship, camaraderie, casual encounters, and short-term collaborations in first person gave me the opportunity of obtaining fine-grained information about the impacts of specific design elements, such private chats and raids. From this perspective, autoethnography is not a cost-saving method, but the unique technique that has the potential to reveal how designs are turned into meanings by players.

It happened, more or less, when I began to raise my character's level and to collect more powerful items. Each piece of gear, each new experience level, and each new unlocked dungeon opened new possibilities for action. This progression was somehow exponential. The more I advanced in the game, the more I felt free of choosing my own direction. The interesting thing was that I was connecting all those rewards with my character's abilities, and through them with my sense of agency in the game. For me, gaining a new weapon meant to become more powerful; acquiring a new spell meant to become more skillful. The game somehow drove me along a path where each reward was only the nth trigger for pursuing the next one. I clearly remember when I finally conquered the "Unerring Vision of Lei Shen", which considerably raised the item level of my mage. I was so happy not for the object per se, but because, with that trinket, I could face more difficult challenges. Now, things are subtly changed. Having outstanding gear is still crucial for facing the most difficult raids, but such items have also other meanings for me. (Rapp 2017c: 389).

As this episode shows, autoethnography also offers a recount of how the research has been conducted, exposing the initial hypotheses, the interpretative doubts, and the theoretical choices that the (auto)ethnographer has made during the fieldwork, and how all these evolved over time.

3.6 Conclusion

In this chapter I have outlined how the autoethnographic method may be employed in Human-Computer Interaction. Starting from reflections in anthropology, I described how the autoethnographer can argue for her subjective position by relying on a reflexive approach. In doing so, I suggested that HCI ethnography might leverage the autoethnographic method, not only for saving costs and resources of the fieldwork, but also, and more importantly, to offer an alternative perspective on the observed reality, going beyond the presumed objectivity of the realist teller.

I personally conducted an autoethnography in WoW to take away ideas from a game world and porting these into non ludic environments. During the 4 years of fieldwork, I identified a variety of game elements to be employed in the design of online communities, behavior change technologies and personal informatics systems. For example, I found that WoW gives life to a plethora of different stories in which players can project themselves, becoming the protagonists of the deeds told in the game. WoW employs "quests" to frame activities and goals, inserting game missions in narratives, usually told by Non-Player Characters. Through such stories players are pushed to perform laborious and repetitive tasks, such as collecting items and slaying monsters, since the burden of their accomplishment is lightened by the narrative frame in which they are inserted: I personally experimented the "power" of WoW's stories in affecting behavior and habits, as well as committing to game assignments. The variety of the provided narratives, nonetheless, allows players to choose the tales that are closer to their desires, leading to experiencing a sense of freedom (Rapp 2017b).

Building on these findings, I identified ways to exploit a narrative framework to present objectives and tasks, encouraging the user's projection into a different universe of meanings, which could lighten the activities to be carried out during behavior change interventions (Rapp 2017b). Moreover, by providing diverse and overabundant stories, which can differently dress the same type of assignments, behavior change systems would make users feel free of determining their own experience of change (Rapp 2017b). Similar techniques based on narrative elements could be employed to make sense of personal data, for example in fitness applications (Rapp 2014a). Narration, in fact, has been highlighted as an important component of data visualizations aimed at providing self-awareness (Rapp and Cena 2016; Rapp and Tirassa 2017; Hilviu and Rapp 2015).

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