

Part II
Algorithms, Social Media, and Online
Footprints

Chapter 7

Investigating Exhaust Data in Virtual Communities



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Introduction

In this chapter, we focus on how virtual communities (VCs) leave “traces” or “unintentional information” and study how they can affect VCs and their features. In doing so, we use qualitative data from a doctoral research project developed between Italy and Belgium. Firstly, in this introduction, we briefly describe how “traces” are considered. Secondly, we unpack the concepts “VC” and “sense of community.” Thirdly, we explore the context in which VCs take place theoretically. Fourthly, we explain the methodology used and the case selection procedure. Then, we describe our results, and finally, the chapter ends with a discussion and a conclusion.

We consider the notion “traces” in Bloch’s terms (1992: 51) and use the interpretation given by Ricoeur; traces are “documents in archives (which) for the most part come from witnesses in spite of themselves” (2009: 171); “The trace is thus the higher concept under whose aegis Bloch places testimony. It constitutes the operator par excellence of ‘indirect’ knowledge” (170). Information disseminated by social media users, considered as unconscious “tracks,” can be used by others in different ways than the original intent, thus acquiring a different meaning.

In this chapter, our first research question polls for the features of information that are left unintentionally by the users of virtual communities (RQ1). Our second research question focuses on the role that such unintentional information has in

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virtual communities (RQ2) or, in other words, on how users of VCs appropriate and apply these traces in different ways than originally intended.

Literature Review

Castells describes contemporary society as a social and economic network structure. Being the first one using networks as the basic category of the capitalist system analysis (Anttiroiko, 2015: 16), the contribution of Castells to social theory is undoubtedly important. Nevertheless, his concept of network could be criticized as it works on a high level of abstraction (Anttiroiko, 2015: 9) to a point that it could be considered as a metaphor rather than an analytical concept (15). On the other hand, Castells' view on society, based mainly on post-Marxism and in small part on Marxism, is very wide and comprehensive (Webster, 2006: 107–108). In addition, working on the macro level allows him to describe every tendency of the informational society in late modernity into a whole theory of contemporary society (Anttiroiko, 2015b: 9). Diving more into his theorization, according to Castells, this entire network structure is connected by ICT and shaped by *pervasiveness* (of effects of new technologies), *networking logic* (which is in any system or set of relationships using the ICT), *flexibility* (of processes, organizations, and institutions), *convergence* (of technologies into a highly integrated system), and the *information* as its raw material (2010: 69–71). He defines network as a set of interconnected points at which a curve intersects itself (501) and in its theorization a new social morphology takes place, affecting operation and outcomes basically concerning everything (processes of production, experience, power, and culture) (500). Networks, of course, also existed in past societies (Castells, 2010: 500), “but recent technological developments in communication have afforded their emergence as a dominant form of social organization” (Wellman, 2001b: 228). The terms information society and knowledge society, according to Castells, are poorly chosen because all societies in history have been about information and knowledge (2010: 21). “To be sure, knowledge and information are critical elements in all modes of development (...). However, what is specific to the informational mode of development is the action of knowledge upon knowledge itself as the main source of productivity” (2010: 17).

For this reason, Castell uses the concept “informational society,” in which *quantity* (the volume, the size, and the speed) and *quality* of the transactions performed are different because the economy itself changed into “informational.” Thus, information is merged with the material support of the product (Castells, 2010: 221), and companies become “network enterprises” (176–178); even states become “network states” (Carnoy & Castells, 2001). In order to support this global network system, and especially this new form of capitalism, time and space “have” to be fragmented and compressed; more specifically, time becomes “timeless” and space just “flows.” Physical contiguity is then outdated by flows (of capital, information, and technology), and time is remodeled so that its sequential order can be contorted

Table 7.1 Differences between surveillance and interveillance

	Surveillance	Interveillance
<i>Driving force</i>	Check of users and fields	Identity evolution
<i>Mode of practice</i>	Standardized actions	Daily patterns
<i>Power relation</i>	Hierarchical, official	Multi-level, unofficial
<i>Direction of flows</i>	Essentially one way, vertical	Essentially two way, horizontal

Source: see Jansson (2015: 85)

to the point that linearity can be broken into simultaneity (Van Dijk, 1999: 131) or with random discontinuity in the sequence (Castells, 2010: 494), thus becoming “timeless” (491). Within informational capitalism, some dimensions of human life are connected, while others are excluded (Castells, 2010: xxxix), which is the manifestation of contradictions between space of flows and space of places. From network society (NS), Castells moves on to the mobile network society, which is just its enhancement driven by new wireless communication technologies (Castells et al., 2009: 6). In the NS, communication shifts to a new form named “mass self-communication”: it is self-generated in content, self-directed in emission, and self-selected in reception by many who communicate with many. At the same time, it is mass communication because it reaches a potentially global audience through P2P networks and Internet connections (Castells, 2009: 70). This new platform of communication, now prevalent (Castells, 2012: 248), is mainly based on horizontal networks of communication (Castells, 2007: 239), and around people’s initiatives and interests, it frequently stands on means of interactive communication—nevertheless, it is not only limited to high-end technology (Castells, 2009: 69–70). By these new means of communication, forms of surveillance (vertical and horizontal) can take place and among users can be defined as an interpersonal process which seems to them the normalization of surveillance, consequently, part of the social media communication process (Vittadini, 2018: 91), which can be named “interveillance.”

Thus, interveillance can be referred to the social processes related to mediated monitoring and control, including everyday check-ups and “(…) peer-to-peer monitoring, understood as the use of surveillance tools by individuals (…) to keep track of one another (…)” (Andrejevic, 2004: 488); hence, “(…) they are not systematic and hierarchical per se. Rather, they are driven by the fundamental social needs through which identities are (re) created and manifested and thus take on a relatively non-reflexive and volatile character” (Jansson, 2015: 85) (see Table 7.1).

The concept “networked individualism” developed by Barry Wellman is deeply connected with Castells’ theorization and can be resumed as an “individualized relationship to society” (Castells, 2002: 128) of “sparsely-knit, linking individuals with little regard to space” (Wellman, 2001a: 10). In the first part of his career, Wellman described the transition “from group to glocalized relationships” (13), as from “little boxes” to “glocalized networks” and then to “networked individualism.” Even the kind of ties evolved: from place-to-place to individualized person-to-person interactions (2001b: 238) and also to specialized role-to-role (244). Three

revolutions took place, which Wellman named, respectively, the development of social networks, the rise of the Internet, and the mobile connectivity. These led the world to this “new social operating system” (Rainie & Wellman, 2012: 11–12) which today is the dominant form of sociability (Castells, 2002: 132).

Virtual Community

Virtual communities have existed since the 1980s (Fuchs, 2014: 5) and are thus no new object of study in sociology or communication sciences. Wellman (2004) discerns different phases in research on virtual communities: a first enthusiastic phase, a second phase with systematic documentation of users and uses, and a third phase in which there is a shift from documentation to analysis. The concepts “community” and “virtual” are the basic elements of the concept “VC.” There is a lack of consensus regarding this concept. Contemporary sociologists represent it in different ways: as an *imagined community* (Anderson, 1983), a *pseudo-community* (Beniger, 1987), or a *symbolic construction* (Cohen, 1985). The “virtual” is conceptualized as something which exists without being there, therefore, without space-time coordinates (Van Dijk, 1999), as something which is “real” according to Castells (“real virtuality”): “All realities are communicated through symbols. And in human, interactive communication, regardless of the medium, all symbols are somewhat displaced in relation to their assigned semantic meaning. In a sense, all reality is virtually perceived” (Castells, 2010: 404). Many scholars refer to Rheingold’s definition for “virtual community” as a social aggregation that emerges online when enough people carry on public discussions and with sufficient human feeling (2000: xx). In this chapter, we use an empirically grounded definition: a virtual community is an aggregate of individuals and/or business partners that interact on a shared (or complementary) interest realized at least partially in a digital common space and that is supported and/or mediated by the Internet (see Agostini & Mechant, 2019).

VCs are often inscribed into Web 2.0 (Bennato, 2012: 57–60) and social media. The latter can be considered as all media as they are social artifacts and transmit human knowledge, or those media which support the reciprocal process of communication among humans, or those media which support collaboration or cooperative work, or those media which enable people to experience feelings of belonging or friendship by a regular communication process (Fuchs, 2014: 4–6). Regarding the latter, we can refer specifically to the sense of virtual community (Blanchard & Markus, 2002) or, in general, to the sense of community.

Sense of Community

Sense of community (SOC) is defined by McMillan and Chavis as a feeling of belonging that community members have and at the same time as a shared faith to be together (1986: 9). The authors divided the concept in four dimensions: membership, influence, integration and fulfillment of needs, and shared emotional connection (9).

The first dimension, “membership,” presupposes there are *boundaries*, which is to say there are people who belong and people who do not (9); membership is a feeling that relates to the personal investment made by people who want to be part of the group, as well as to a common symbol system (10).

The second dimension, “influence,” is considered as a bidirectional concept (11) and is related to cohesiveness, because “Influence of a member on the community and influence of the community on a member operate concurrently (. . .)” (12).

The third dimension, “integration and fulfillment of needs,” can be interpreted, according to McMillan and Chavis, as reinforcement (12).

The fourth dimension, “shared emotional connection,” is based on shared history and relates to identification with other members. Also, the quality of the interaction in shared events and the investment of each member is key in this context (13).

Case Selection

Porter’s typology was used for the case selection of virtual communities studied in this chapter. Porter’s categorization is exhaustive and applicable on an empirical level, although some adjustments are needed (see Agostini & Mechant, 2019). On a theoretical level, our focus was aimed at a “social,” a “professional,” a “non-profit,” and a “commercial” VC (the “government” VC was not chosen because they were not widespread at that time). On an empirical level, we used specific selection criteria: VCs were mainly selected from VCs with members located in Rome and from VCs with a minimum level of significant interactions present (in terms of frequency and consistency) and a lifetime of at least 2 years.

Based on Patton’s distinction on the role of the researcher (between complete immersion in the setting as a full participant and complete separation from the setting as a spectator) (Patton, 2002: 265), we chose the latter. For the “non-profit” and “commercial” VCs, online and offline observations were conducted. Due to the closed, non-accessible online environment for the “professional” and “social” VCs, only offline observations were made for these cases.

The first-level categorization element of Porter’s typology (member-initiated or organization-sponsored VC) was hard to apply “in the field.” More specifically, “member-initiated” or “organization-sponsored” VCs often did not match with the second-level categorization. Consequently, we chose the latter to drive the case selection. This second-level categorization element, relationship orientation, describes the type of relationship fostered among members of a VC. Thus, the

selected cases were “GSCAI” as “social” (members have a hobby in common), “Diarioclown” as “professional” (members work together), “AZALEA” as “non-profit” (members support a non-profit organization), and “F & G” as “commercial” (members are students of a dancing school).

Methodology

Using offline ethnography, we collected qualitative face-to-face interviews with members of the four selected VCs in order to understand users’ meanings and scopes (Caliandro, 2018: 5). Also, netnography was used (when possible) mainly for background research.

We selected four case studies from two different online platforms. On “Yahoo! Groups,” we studied a “social” and “professional” VC, while on “Facebook,” we studied a “non-profit” and “commercial” VC. Using a cross-sectional analysis, we explore and describe the role of unintentional information in VCs, especially regarding the SOC.

The main features of the four VCs that were studied are summarized in Table 7.2.

The VC “GSCAI” comprises a speleological group located in Rome. This VC was selected as the case study for a social VC because the relationship fostered among the members is based on a hobby. The group undertakes activities (explorations, visits) that require planning (equipment, travel, etc.). To manage such activities, they have set up an online group called “GSCAI” on “Yahoo! Groups.” Expert members who are “retired” from group activities keep in touch exclusively with other members via the VC, read the online messages, and sometimes give suggestions (so-called sleepers). In January 2012, the group split due to a rotation in the management team, which led to an online and then an offline confrontation.

“Diarioclown” (professional VC) is a group created by therapists located in Rome working as “clown therapists.” In their online group, “Diarioclown,” they

Table 7.2 Virtual communities investigated

	GSCAI social (A)	Diarioclown professional (B)	AZALEA non-profit (C)	F & G commercial (D)
Established	Over 4 years	Over 4 years	4 years	Over 4 years
Platform	Yahoo! Groups	Yahoo! Groups	Facebook	Facebook
Open/closed	Closed	Closed	Open	Open
Members	49	11	>2000	>600
Respondents	10	10	12	12
Male	8	6	0	7
Female	2	4	12	5
Average age (y.o.)	37,6	35,7	37,1	41,9

Source: see Agostini and Mechant (2019)

communicate only “professional” messages such as the weekly shifts division and daily reports (which is an important element in order to keep the team job running properly). In January 2012, this group was also separated, and subsequently, four members decided to move to another workplace. Discontent was manifested online by not writing reports.

The VC “AZALEA” is a non-profit association located in Rome that supports a cat center where abandoned cats are hosted, fed, and cured. They use various social network sites (SNSs), but most of their activity is targeted at their Facebook fan page. This is mainly used in order to find adopters—for their abandoned cats—and to make follow-up checks on the “adoptions” already made, periodically asking adopters to share pictures of the adopted cat and replying to their questions in case of need.

The VC “F & G” is formed around a Latin American dance school in Rome. “F & G” also organizes events—not always related to dancing and music. “F & G” has a Facebook fan page in order to communicate information about its activities (e.g., changes in lesson schedules, special events, etc.).

Porter’s typology (Porter, 2004) used for the case selection takes into account five attributes of virtual communities: *purpose* (content of interaction), *place* (extent of technology mediation of interaction), *platform* (design of interaction, synchronous, asynchronous communication, or both), *population* (pattern of interaction), and *profit model* (return on interaction). The cases selected incorporate the four attributes described as well as the minimum set of conditions required to label a cyber-place as a virtual settlement (Jones, 1997), so they can be considered VCs.

We collected 49 in-depth semi-structured qualitative interviews with an average length of 90 min. We conducted interviews until data “saturation” was reached. Respondents were divided in three subgroups: beginner users, less than 1 year of membership; average users, from 1 to 2 years of membership; and expert users, from 2 to 4 years of membership (see Agostini & Mechant 2015). We applied a deductive coding methodology on the transcripts of the interviews. Deductive coding encompasses three coding phases (Miles & Huberman, 1994). In the first phase, descriptive codes are assigned to text snippets based on predefined areas of interest, whether factual, thematic, or theoretical in nature (Lewins & Silver, 2007: 86). Focusing on the four dimensions of SOC, codes were assigned when VC’s members described how they used the VC or how they experienced feelings of influence. Next, interpretative coding was done, digging deeper into the meaning of the descriptive codes. By using an exploratory-descriptive logic moving toward analytical generalization (Yin, 2003: 37), parallels, differences, and oppositions between the descriptive and interpretative codes were then examined, and pattern codes were assigned. Finally, thematic analysis was done.

Research has shown that elements of SOC can be found in specific VCs, such as feelings of membership (Nonnecke et al., 2004: 6), emotional contagion (Barsade, 2002) and the impact offline activities have on the influence over the members (Koh & Kim, 2001: 3), integration of members (Casaló et al., 2013), and emotional connection (Brook & Oliver, 2002).

Results

Dimensions of SOC in the Cases Selected

Each VC was created to support a specific topic or domain: a business (“commercial”), a cat center (“non-profit”), a speleological group (“social”), and a team of therapists (“professional”). We noted that traces left behind by users within the common shared space had a positive impact on the SOC of the groups investigated. In one case only, namely, “F & G commercial,” there was a rather weak link with “emotional connection” because the platform structure and the communication flow within this VC seemed to give members an emotional connection which was not so deep (see Table 7.3). Results show that exhaust data within VCs can increase the manifestation of discontent (“social” and “professional” VCs) as well as increase quarrels because of the reduced non-verbal cues in CMC (“social” VC). These “side effects” were experienced as less important than positive ones on SOC: without the presence of a virtual space, the majority of the users would be lost within the “social” VC (only few join the offline activities from time to time), and the “professional” VC would be very hard to coordinate.

Subdimensions of SOC

Table 7.4 summarizes an evaluation of the subdimensions by the members of the selected cases. In a “professional” VC, feelings of influence are mostly expressed as a form of support and lesser forms of discontent, while in a “social” one, feelings of influence take the form of wellbeing and real quarrels. With regard to the integration and fulfillment of needs, we noticed that, while in the non-profit there is emotional support, this is manifested in the commercial VC through reinforcement. With reference to the single VCs, examining them *vertically* allows one to better understand how SOC is developed by exhaust data.

Table 7.3 Exhaust data and SOC

	GSCAI social	Diarioclown professional	AZALEA non-profit	F & G commercial
Feelings of membership	+	+	+	+
Feelings of influence	+	+	+	+
Integration and fulfillment of needs	+	+	+	+
Shared emotional connection	+	+	+	±

Table 7.4 Exhaust data and SOC—subdimensions

	GSCAI social (A)	Diarioclown professional (B)	AZALEA non-profit (C)	F & G commercial (D)
Feelings of membership				
Joining the group more easily	+	+	+	+
Feelings of influence				
Quarrels	+	±		
Wellbeing	+		+	+
Support		+		
Integration and fulfillment of needs				
Inspiring to participate in the activities	+			
Emotional support			+	
Reinforce		+		+
Shared emotional connection				
Emotional connection		±	+	
Shared history	+	+		±

Social VC (A)

In the “social” VC, beginners were able to get to know the social network of the group (sociogram) by reading the archived content shared within the VC (who is friend of whom, parties, subgroups, etc.) making conversations easier because the dialogues could be adjusted to the speaker (membership):

I take the information (by the VC) about the group, history, bonds that were there before me, also because I can figure it out there (within the VC) then in case I ask for someone (laughs). Otherwise the group would be those 15 people I meet at the explorations (. . .). (A2F)

In GSCAI, a “simple” account cancellation, due to the change of the management team, erased the “supposed” non-active users from the mailing list. This caused harsh criticism and offline action by these so-called sleepers (influence). Those ex-members, who were very experienced, did not pay the annual fee and did not take part in the offline activities for a long time. They were supposed to be mostly inactive. However, while more active members were writing about their explorations leaving “traces behind,” these sleepers were reading all of these updates and felt like part of the group, sometimes even replying and giving suggestions on how to proceed with certain explorations. Although their time with the group “passed by,” they continued to perceive themselves as part of the group, thanks to the VC, similar to members who couldn’t take part in the activities every time:

Some people felt kicked out just because they weren’t on the list. (. . .) They said it on the day of the assembly (. . .) they got angry about it (laughs) “I was there because I liked to read, even the squabbles” (. . .) “it’s normal, but I liked being there” (. . .) none of the old people had told us . . . (. . .) we thought that it was now a dead email, it was there, they didn’t write (. . .). But some actually read (laughs). (A4M)

Reading about the goals achieved by the group shared within the VC gives “sleepers” and the other members a sense of wellbeing (influence):

(...) there are people online who make a weekly reporting of ... what happened on Thursday night or Sunday, or the exploration report, so the whole group is always made aware (...) it is beautiful (...) being a group activity it is nice to know what the group does (...) I was happy that they managed to open it (the well), I can't wait to go and see what's down there (laughs). (A2F)

The online platform supporting the VC enables members to keep track of their (speleology) activities and, therefore, of the history of the group (emotional connection). Before it was done in a book but now it is done online. Reading the coordination messages inspires users to join the explorations (integration): “(...) Just, someone replies (within the VC) and says: ‘Well done, great job’, or says ‘Ah, interesting, next time keep me in mind for these activities, I want to participate too’” (A1M).

This is ... another benefit of the mailing list. Because it allows those who, for work or family reasons, cannot join, still allow them to be satellite to this (...) and not to stray too far because otherwise their ties are broken. Instead, in this way the activity is alive. (...) a maintenance of ties. Because it is strengthened, those who have not come for 20 years say: “Hey! I want to come back.” (A8M)

Despite the physical distance, a member who moved away from the city kept in contact with the group and its activities using the VC: “It was a way to continue seeing and hearing what those in the group were doing (...)” (A3M).

Professional VC (B)

Similar to the “social” VC are the “traces left behind” in the “professional” VC useful for beginners in order to join the group more easily (membership):

That is, just to join the group, because (...) in my opinion, there is not yet such a consolidated group (...) because after a month, two months (...) in my opinion it is almost impossible (...) ... and therefore (the VC is) also to, to share, therefore to get to know and to let others get to know me. (...) to join the group (...). (B5F)

Even experts find useful information about their co-workers, thanks to the written reports, making things easier when they join the group (membership): “(...) maybe the clown therapists who are a little more shy (...) however, from the emotional point of view they write a lot, so ... (...) you get an idea about, about the clown therapist in front of you, about your companions (...)” (B6M).

Reports also provide information that helps to better understand group dynamics (membership):

Well ... now ... you know, you can see that there's something wrong and that doesn't work. And yes, yes ... (...) from reports (...) between the lines I can also understand other things (...) and I say to myself: “Ah! Look at him who is ruffling that one because it is convenient to take him to his side”. You know what I'm saying? (B9M)

These reports heavily influence the working life of the team members because the shifts are detailed online (coordination) and above all they inform their colleagues about what has happened with specific patients, so that the other therapists—who alternate—are able to continue from where the previous pair left off. “In short, information is fundamental for us” (B8F).

Reports can make the group stronger (integration):

(...) in the case of a child who has passed away, in short, there is a bit of a consolation, as we say, from the others. And to think that you are not alone in short, because it is as if it were a weight that you carry on your shoulders and is shared with everyone. (B3M)

This is confirmed by an expert, because, when reports are missing as a sign of discontent, or are done in a hurry without attention to details, the group cohesion is damaged, as it is hard for them to cooperate without reports: “Later I saw that the clown diary practically no longer existed. There were no longer reports, no one wrote the report anymore (...) So ... it was just the ... just like the desert at that time (smiles)” (B10F).

Reports also keep track of the history of the group, which has emotional elements due to the nature of the job (emotional connection):

So every clown therapist in the end, we say, about the performance in the hospital should be, a daily (smiles) update for the other clown therapists, but also to elaborate what he experienced during the day (...) to elaborate them personally, because in any case it is important not to keep them inside, right? (...) Because (...) sooner or later you burst. And so this is important (...) to share them with the group (...) because perhaps reading what the other has experienced, you ... relive it (...). We work on emotions so it is important that we also work on our emotions. (B5F)

Non-profit VC (C)

The “non-profit” VC was set up in order to check the cats’ entrusted conditions and help cat custodians in case they need information. Sharing messages gives wellbeing to many users (influence), as the majority are not custodians but just supporters of the association and this happens especially for beginners. The messages shared in the VC involve also non-recipients, so when a user is helped by the association’s members or by a supporter, other users also receive help (influence) indirectly:

(...) reading this news, these tips also affect my behavior with my cat. I say to myself “Aaah see? They say that this brand of crunchies might not be good then, let’s see if there’s another one”, I mean (...) I trust the group so if there is any advice maybe I try to follow it. (C8F)

Generally, through the exchange of “service messages” to the association or to a specific user, a sort of relationship is created, although it could not be defined as a real friendship. This process takes place explicitly when, during the offline events of the organization, they address each other by their Facebook nickname and not by their real name (membership):

(...) you already have a bond with those people due to the fact that you have a cat. (...) It is a bond that is (...) I do not know how to explain, it is like if they were non-elective affinities but almost. (C1F)

Providing news about their cat by using a “service message,” for instance, updating the health situation of their pet, results in many users asking for updates in the following days. The Facebook page of this VC collects the history of fostered cats and the users involved (emotional connection). Furthermore, this includes reactions from other readers, which are expressed in solidarity actions or comforting messages as emotional support (integration):

(...) when there was (...) that lady’s cat who was dying, there must have been like a hundred comments, a lot, because then they asked how she was, all the updates ... (...). You don’t feel alone, you know there are people like you. (C5F)

Commercial VC (D)

The “commercial” VC uses the Internet in order to manage its activities. Messages shared within the web space of the group mean for some “being active” on Facebook. For others, these messages symbolize being part of a community (membership) even when they are not able to take part in the real-life activities. Messages provide opportunities to know if there are new people involved in the group and to get to know them (online or offline). This is particularly true for beginners. They can deepen their knowledge in a “discreet” and comfortable manner, especially the more timid new members, and increase their involvement and participation in the activities:

In short, it is also a way to socialize a little more (...) there are also other people you don’t know that maybe if you write, I don’t know ... a comment, something, maybe they’ll answer as well (...) (smiling) it’s also a way, you know (...) to socialize, to get to know (...). (D4F)

The page on Facebook is thus not only the page itself; it has a deeper meaning for the users because it connects all of them (membership) and reinforces the group (integration):

For me, being part of this online group means being part of a group of people who have an interest in salsa (...) I believe that most of the people who are interested in that page and write on that page have my same interest, in the sense of the interest of talking each other, being in contact with a group of people that you feel good with and with whom, beyond the dancing through this page, let’s say, stay in touch. (D12M)

Reading the messages shared within the VC gives a sense of wellbeing to the users (influence): “(...) let’s say when you see the photos, posts etc. ... there is a moment of, a moment of leisure ... a moment of relaxation, so to speak (...)” (D1M). The VC represents a sort of history of the group (emotional connection): “(...) maybe there are, often they are all comments like this, playful ... laughing, joking, right? (...) I see that maybe in the photos that are shared, which are many, the parties rather than etc. ...” (D1M).

Within the membership and integration dimensions of SOC, we found interveillance among the members, who looked each other over to better introduce themselves or see what is going on in the group: “(…) as I told you I read them and I can only see what is missing, that is, I notice how the group is not working well (…)” (B9M); “(…) surely through Facebook you have the possibility to know a little bit about people’s lives and therefore maybe it happens that you go and see some photos (…)” (D3F).

Discussion and Conclusion

In this chapter, we showed how exhaust data can manifest itself in VCs and what effect it can have on users of VCs. More specifically, unintentional information left by users of VCs (RQ1) can be described as routine messages related to group coordination and management. Moreover, such unintentional information can play different roles in VCs (RQ2): exhaust data can definitely increment community building for professionals (see also Figenschou & Fredheim, 2020), non-profit (see Gruss et al., 2019; Sun & Asencio, 2019), commercial (see also Al-Kandari et al., 2019; Gruss et al., 2020), and social (see also Gnach, 2017; Allen et al., 2016) also by letting beginners join the group more easily by adjusting their communication (see Papacharissi, 2010) or by increasing sense of belonging as well as strengthening the group (Bock et al., 2015); they can also give wellbeing to users. Nevertheless, they can increase quarrels and increment the manifestation of discontent. Our results also demonstrate the usefulness of a qualitative approach in studying exhaust data: using software to extract and process (meta) data from VCs would, for example, not have identified so-called sleepers in the VCs.

Furthermore, we found a specific kind of surveillance based on the “digital footprints” users leave behind and which can be observed within the VCs selected (Vittadini, 2018: 91). According to Trottier, there is evidence of interpersonal surveillance on Facebook in two directions; Facebook users are the subject and the agent of surveillance (2012: 320) and it “(…) is framed not so much as a violation than a condition that users need to manage” (330).

Of course, this research is not exhaustive, and further study could have been made on different topics like domestication of technology, social capital, or identity. However, in order to improve the scope of this investigation, this could be done in the future.

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