

Guest in the Shell  
Project and methodology design for tilde.town's  
research

Author:  
1a3151c3aa421584c9774cb2b3ab321d0bb78ddd6c2318f2d37ed048e39c498e -  
aka: Roan Berger

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### Abstract

This research design proposes an ethnography of *tilde.town* virtual community as a case study for Public Access Unix Systems. In the era of *Surveillance Capitalism*, when telecommunication platforms play a role of social institutions and Social Media are confused with the totality of the Internet, we consider important to pay attention to less common digital practices that still thrive on the margins of the Net. In particular, this research is interested in how *tilde.town* articulates around co-construction of its community and virtual settlement of a shareable Unix-like operating system.

**Key words:** virtual community, Unix, text-based, virtual settlement, command-line interface.

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# 1 Introduction

## 1.1 Socio-technological context

This study proposal is born from genuine astonishment that in the era of ever-more accelerating social media platforms and recent trends of Computer Mediated Communication (CMC) development towards instant photo exchange, rather than written thought exchange, we can still (and anew) find corners of the Internet where those tendencies seem to apply less.

Over recent years increasing popularity of social networks sites and especially of Social Media platforms, such as Facebook, Twitter or Instagram, attracted researchers of multiple humanist fields, like psychology, sociology, economy or philosophy (for example Lovink 2011, Shen et al. 2010, Akoumianakis 2010 or Gehl 2014). Depending on point of focus, some talk about Digital Society, characterised by digital socialisation processes (de Rivera, 2010), Castells (2010) defends Network Society, Krishnan (1999) talks about Internet Society while Mauro-Flude (2007) prefers Information Society term. There seem to be a consensus that our mainstream and technology-centred society tends towards interconnection, networking and relations, much more than about actual content or knowledge.

As Hardt and Negri (2000) point out, nowadays neo-liberal capitalism is characterised by the importance of immaterial services. To guarantee that human creativity can be treated as an exploitable resource, production has shifted from industrial factories to information and communication technologies. If modernity was about industrialisation and thus raw resources, postmodern era it is time of accumulation based on digital capital (Hardt and Negri 2000; Rushkoff 2010).

Terranova (2012) sustains that what is being extracted now is human attention in what she calls “attention capitalism”. Since Foucault (2013) and Deleuze (1992), there is a tendency to think that postmodern society is rather characterised by control mechanism, more than by disciplinary one. Technology gives a perfect setting for what Zuboff (2015) calls “Surveillance Capitalism”.

Meanwhile, de Rivera (2010) criticizes the process in which Internet corporate platforms have become institutions regulating social norms, elucidating the dark side previously noted by van Doorn et al. (2008):

The most recent incitement of this academic interest has been the proliferation of the “Web 2.0,” with its emphasis on user-generated content and social networking. Websites such as MySpace, Facebook, and YouTube (to name the most popular ones) have turned

the sharing of personal narratives and the construction of communities into a multi-billion dollar industry.

Giving us possibility to become creators and express what we most value, those platforms strive to keep us glued to the screens the longest possible in order to get the most information about us possible. As machines are not good at recognising the value behind the things, these are the people that are used to do what machines can't. The famous "like" button is though not only a value/relation counter, but is also an important factor of the "feedback loop" that is argued to create extrinsic reward dependency (Gehl, 2014). Apart from shaping social interactions, as showed recent revelations about Cambridge Analytica, those platforms might have an important influence on national and supra-national politics.

Yet the role of traditional producers (producers-users) or prosumers (producers-consumers) is shifting again. With arrival of such platforms as instagram, pinterest or snapchat text is being replaced with images. So it is not any more of any importance what we post: it can be a photo of a new dress, potatoes or blue sky, this is the social-relational function that seems to take the advance. The task of reflection consists not any more in intellectual activity, but becomes a mirror-like echoing of our milieu.

As there are people aware of and dissatisfied with this tendencies, there is both "alternative" software developed and research effected on those "Alternative Social Media". Worth to be mentioned, Gehl (2015) points out that what is taken for granted by the users within Corporate environments, elements such as infrastructure or source code, for "alternative" mindset become important.

Alternative communities gather around knowledge and practice related to the freedom of software and decentralisation. Technological artefacts that uphold communities, or as Jones (1997) calls them, the "virtual settlements", are political in as much as they define our ways to use them, how we communicate with others and who can determine it. This process of defining technological artefacts remains hidden in the case of corporate platforms. "Alternative" groups want it to be transparent and communitarian. This can be illustrated in the case of defining ActivityPub standard, protocol for distributed, federated social media platforms, that Guy (2017) witnessed from within, described and analysed.

## 1.2 Public Access Unix systems

The term "Public Access Unix Systems" (PAUS) comes from an article provided by sdf.org user, cmccabe (2018). He defines them as "*computers running a Unix*

*(or Unix-like) operating system that provide shell access for free or low cost to members of the general public by remote connection for recreational, educational or other use of Unix”.*

Such systems find some coverage in the media, like in Ford (2014) article about creation of tilde.club or Bookman’s article<sup>1</sup> about advantages of text-based environments. There is an under-discussion Wikipedia article about sdf.org<sup>2</sup>. Even, tilde.town made its way to a recent academic article on interfaces aesthetics (Bollini, 2017). And finally, there are numerous users’ articles, trying to fulfill the gap in the historical and theoretical literature concerning PAUS, such as cmccabe (2018) or Manatee (2016). Those articles, though not academic, are complete and well documented resources, and so I cite them as one of important basis for conceptualising PAUS.

In such systems, users access central computer mainly over ssh protocol from within their terminal or pseudo-terminal that gives user access to a **shell**, that is a command interpreter. For those who are not familiar with what a “terminal” is, the easiest way to grasp it is remembering hacker or science-fiction movies with people typing words into a mysterious computer program that appeared as a black screen with fluorescent green letters. For PAUS, the main users’ activity is held through such “Command-Line Interfaces” (CLI) and not over “Graphical User Interfaces” (GUI).

In this sense, we differentiate “text-based” from “graphical” environments. Until mid-nineties text-based computing was rather a common practice, especially for over-the-network activities, and thus this specification seldom appears. To the contrary, Smith and Kollock (1999) specifies as something unusual “graphical worlds”, while leaving text character of other communities in the cyberspace uncommented. For the need of this article, we will generally use text-based in the sense of CLI-oriented, for the ease of lecture, unless explicitly stated otherwise.

PAUS communities gather around socialisation of setting and maintaining a Unix-like system alive. Participants are not mere “users” but they are co-responsible for the system’s resources (cmccabe, 2018), also, if they want, they may write their own code that further mediates their interactions. This kind of set-up challenges the notion of “prosumers” of Web2.0 and common practices of “attention capitalism”.

The question is not how politically aware those actions are, but rather about

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<sup>1</sup>Todd Bookman, Apr 17, 2012; In Noisy Digital Era, ‘Elegant’ Internet Still Thrives; <https://www.npr.org/2012/04/17/150817325/in-noisy-digital-era-elegant-internet-still-thrives>

<sup>2</sup>[https://en.wikipedia.org/wiki/SDF\\_Public\\_Access\\_Unix\\_System](https://en.wikipedia.org/wiki/SDF_Public_Access_Unix_System)

how and why they persist and what we can learn from them. The existence of user maintained system at the very margins of the noisy and glossy Internet might teach us something very important for privacy and security, knowledge that could find its application for other collectives.

Text-based communities, although not very important in numbers of users, prove their relevance through their persistence in time and keeping non-commercial values. As cmccabe (2018) notes, they maintained quite stable amount of users, and recently they experienced subtle growth. Also, we consider significant their potential for informal education on computer-literacy.

While the general tendency of technological development in our society is often subjugated to corporate and military interests, promoting therefore their culture and values, research on substantially different technological cultures and their artefacts might contribute to first, better understanding current situation and second, propose healthier settings for digital society.

With proposing a research on the subject of CLI-oriented Unix systems we pretend to attract academic attention to non-mainstream social technologies and facilitate further inquiries on Unix-like systems and its public access shells as social dwellings.

### 1.3 Virtual Community and Virtual Settlement

In 1993 Howard Rheingold coined the term “Virtual Community” that soon regained popularity and became an angular stone for numerous virtual ethnographies. As he defines it, “[v]irtual communities are social aggregations that emerge from the Net when enough people carry on [those] public discussions long enough, with sufficient human feeling, to form webs of personal relationships in cyberspace” (Rheingold, 1993).

The main element of a virtual community consists in having a communication medium that allows public debates. Not only particular individuals need to be able to communicate but a common communicative area is necessary. Yet as Bartle (2016) states, having available a discussion channel is not a sufficient condition. For community to emerge, there must be “human feeling” as per Rheingold. This sense of community according to Koh and Kim (2003) is constructed around three dimensions: perception of one’s belonging, ability to influence others and possibility of immersion into the community related activities.

The capacity of affective others, even if remotely, may lead to creation of “personal relations” mentioned above by Rheingold. This author argues that virtual environments allow people to help each other solving problems, learn

from each other and share events and emotions.

The term of “cyberspace” used in the definition, was first introduced in William Gibson’s novel, “Neuromancer” (Gibson, 1984), where it is defined as a “consensual hallucination”. Framed differently, as Reid (1994) points out in her work on textual virtual communities, a virtual reality is not really equal to the set of technologies that holds it, but rather “primarily an imaginative rather than a sensory experience”.

It is very difficult to talk about those imaginary phenomena in a simply descriptive way. We hardly ever would say that we are “going to type on the keyboard for a while”, but rather that we “need to talk with a friend”. Use of metaphors seems almost inevitable.

The image of the Internet as the “ultimate frontier” was almost completely abandoned in favour of “cyber-space”. Although Rheingold (1993) proposes use of biological metaphor of colonies of microorganisms, it is the domain of “spacial imaginary” that gained popularity, supported by a long list of space related *metaphors we live by* Lakoff and Johnson (1980): “going” to the “web-site”, “visit” count, “guest-book”, “entering”, “access” rights and finally “home”.

Without this imaginary we would not think of “virtual community” as something so natural. Until recently, the concept of community was quite strictly related to a shared physical location. Yet the arrival of massive communication tools allows its deterritorialization: human relations can happen on distance and communities of interest become increasingly more common, comparing to others like territory or belief based ones (Akoumianakis (2010)).

### 1.3.1 Virtual Settlement

Since Rheingold (1993) book, Virtual Community concept becomes popular among social researchers. They investigated diverse online groups, putting focal points on subjects like trust, identity, gender, hierarchical relations or governance. Technological aspects of the medium where the communication is held are yet often ignored or taken for granted.

This changes with Jones (1997) conceptualisation of “Virtual Settlements”. This author argues that “a distinction will need to be made between the cyber-place within which a virtual community operates, which will be termed a virtual settlement, and the virtual communities themselves.”

This means that not only communities are different than their places, the latter being a prerequisite for the former, but moreover, as Akoumianakis (2010) points, there might be cross-settlement virtual communities, independent from their technological support.



According to Jones (1997) there is a set of requirements for a CMC medium become a virtual settlement:

“(1) a minimum level of interactivity; (2) a variety of communicators; (3) a minimum level of sustained membership; and (4) a virtual common-public-space where a significant portion of interactive group-CMCs occur.

That is, a specific cyber-place needs to be frequently visited by a sufficient number of persons with a certain constancy and dispose of a common meeting point where group communicative exchange might take place. These basic requirements may allow that a group of users may start sharing the earlier mentioned feeling of belonging.

The differentiation between virtual community and its settlement permits analyzing the relation between the two. For example in case of popular virtual settlements such as facebook, the relation of community to its virtual settlement is that of a user: the settlement is pre-designed and the community members little can say about it, not much more than making facebook groups asking for a needed modifications, such as interface translation or so. Pushing further settlements metaphor, this is like asking your landlord if you can repaint the walls.

As Winner (2001) reminds: “In the complex, large-scale systems that characterize our time, it is seldom the case that any single individual or group has access to a technological process along the whole of its conception, operation, and result.”. Especially in the times of commercial secrets, communities are usually deprived of information on how those systems are constructed. Maybe here more suitable metaphor would be that of a car of which you are not allowed to look under the hood.

## 2 Objectives

This study proposal circulates around the question of: What is so specific for Public Access Unix systems so they retain some users over decades and in the age of Instagram and Snapchat, they paradoxically seem to regain certain popularity among new, young users? Attempt to respond to such a doubt translates into exploring Unix multi-user capacity for social interaction.

As very little has been written on PAUS to give fundamentals to this research, I decide for investigating the case of one, specific server.

The general objective will be then **to understand how tilde.town artic-**

**ulates around co-creation of virtual community and its virtual settlement.**

More specific objectives:

1. elucidating the process in which software is (co-)produced by/for a specific community that one is part of
2. reflect on the relation of knowledge and practice (praxis) that shape such a virtual community
3. illustrate how PAUS is yet another typo of text based virtual community
4. exploring characteristics of text based, CLI-oriented, interactions in nowadays, visual era.

### **3 Methodology**

For the proposed investigation, I opt for ethnographic case study adapted to on-line environment. In particular, I will lead a **netnography**.

In the following section I will review definitions and applications of chosen research methods as well as their more general perspective. I will start from more generic approaches, progressing towards more detailed options, finally pointing at specific steps and tools of my choice.

#### **3.1 Qualitative research**

Drawing on social psychology tradition and in the context of specific goals the proposed research, that is elucidating specific community's cultural articulations and understanding it in a wider context, our choice is to lead a qualitative research. In Saldaña's (2011) words, qualitative research is suitable "for the study of natural life". According to him, researchers may be targeting goals such as "documentation of cultural observations, new insights and understandings about individual and social complexity, evaluation of the effectiveness of programs or policies, artistic renderings of human meanings, and/or the critique of existing social orders and the initiation of social justice".

Those aims are hardly attainable with statistical or experimental methods and thus require another perspective and process. In specific, Saldaña (2011) points that qualitative research is based on following proceedings:

The information or data collected and analysed is primarily (but not exclusively) nonquantitative in character, consisting of textual materials such as interview transcripts, fieldnotes, and documents, and/

or visual materials such as artifacts, photographs, video recordings, and Internet sites, that document human experiences about others and/or one's self in social action and reflexive states.

This data is further analysed and compressed in order to give account in a clear and readable presentation of the findings. Qualitative approach then allows inquiring into meanings, beliefs and knowledges that shape specific practices and relations in turn of specific community and accessing how it relates to its specific artefacts.

## 3.2 Case study

Working on a particular culture one has to delimit its borders of what counts in and what doesn't. If the totality of a given culture doesn't seem apprehensible, researcher may focus on a part of it.

For that purpose, researcher may opt for a case study, that is a kind of inquiry that "concentrates on experiential knowledge of the case and close attention to the influence of its social, political, and other contexts". (Norman K. Denzin, 2005) In such approach the researcher concentrates on a singular case that remains in certain dialectics with wider culture.

We opt for this perspective, as our interest is a singular case, that is `tilde.town`, although we want to, with this example, approach wider context of Public Access Unix systems. Our research motivation is then bidirectional and it moves between an "intrinsic" and "instrumental" case study Norman K. Denzin (2005), though leans rather towards the former one. Intrinsic one concentrates fully on a particular example, as the researcher finds it interesting *per se*, while the *instrumental* one is interested in the case as it illustrates more general issue. Our particular and principal interest lays in in-depth understanding of our case's dynamics. Yet with this work we pretend, as a co-lateral goal, to give illustration for theorising Public Access Unix systems as separate type of text-based virtual communities.

### 3.2.1 The case: `tilde.town`

On the `tilde.town` welcome page we can read:

"`tilde.town` is an intentional digital community for making art, socializing, and learning. Unlike many online spaces, users interact with `tilde.town` through a direct connection instead of a web site. This means using a tool called `ssh` and other text based tools."

Tilde.town grows from a recent wave of new Public Unix systems originated with mentioned previously tilde.club. When this system closes down for new sign-ups, numerous similar entities are created by different system administrators. According to cmccabe (2018) one of those was tilde.town created by vilmibm, “[s]imilar to tilde.club, registration was open to anyone, and users were allowed (encouraged!) to express themselves freely with the utilities a standard Linux box makes available”.

We can access it in 3 main ways:

- normal http web available with Web Browser software,
- gopherspace available with gopher protocol compatible browser, such as lynx (text-based)
- “internal” server space available via ssh connection.

Nowadays habitual communicative digital medium is Web. Yet in case of tilde.town the http-Web space is limited to a wiki - a “user guide” with helpful information and to users’ pages, called “tildes”. On the mail page (<https://tilde.town>) we find links to relevant sections that might help “move around”, for example how to get an account and log into the server.

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| | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | |   we're glad you're here!

Some commands to get you started:
+-----+
| bbj      | post in our local forum
| feels    | start a little command line blog
| chat     | join a chatroom with other users
| nano     | edit a file
| wiki     | edit or view the community wiki
| botany   | plant a little garden
| alpine   | read and send e-mail to other users
| writo    | draw on an infinite plane with others
| graffiti | add to tilde.town/graffiti.html
| aup      | read our code of conduct
+-----+
```

Figure 1: The welcome screen displayed on user’s login via SSH

With those instruction and our account validated we should be able to log into the tilde.server over the ssh protocol. This is usually done form command line interface. From now on, we will deal mostly with the text. The screen that welcomes us after the login points to most important commands that we need

to start getting around. We gain access to commands like “BBJ” which is an Bulletin Board (a kind of a forum) and “chat” that opens IRC - Internet Relay Chat. Another important command is “feels” that is a blogging engine, that can post to your webspaces (tilde), your gopherspace or save entries in the way that they are only accessible from within the server with “feels” command.

Apart of that, a “user” can do a variety of other things, ranging from playing games, creating her/his own Web or gopher page, through using programs installed or written by other users to writing new ones or performing regular system maintenance tasks.

I have chosen Tilde.town, among other PAUS, for three main reasons.

1. it seems technically less challenging than other PAUS, in terms of minimal technical skills necessary for satisfactory “being around”.
2. as for recent wave of new “tilde” servers, tilde.town seems both stable (celebrated 4 years recently) and is quite active in the number of users (amount of logged users appears on the main page and usually points around 50 people)
3. tilde.town’s community, according to available documentation, is gathered around values of sharing, care and empathy, giving it clearly social spin.

I will generally follow Jones (1997)’ distinction between Virtual Community, understanding it as people with their culture, and Virtual Settlements, that are “cyber-places” where the group’s computer mediated communication dwells.

In case of tilde.town, its virtual settlement is not only the web interface, but the totality of the Unix system. With the provided tools, “users” are at the same co-constructors and maintainers and their virtual settlement becomes a kind of “construction site” in constant process of re-building and ameliorating community space. Socialisation is not seldom focused over software writing, programming assignments, planning new tools or system requirements. What remains hidden in most of Social Networks, for tilde.town is one of the keys for community building.

This process of construction of settlement and of community are discursive, textual phenomena, where both natural and programming languages intervene.

### **3.2.2 Data Sources**

In my case, the field is tilde.town server, and data sources might include:

- BBJ (bulletin board)

- IRC (chat)
- IRC logs (archives)
- website (<https://tilde.town>)
- gopherspace
- personal communications within the town (mail)
- participants Feels (kind of blog)
- other communication software available on the server
- software written by participants
- Unix commands (who, last, talk, finger, top, ps etc)

Those items are both data sources and tools of data collecting and recording.

### 3.2.3 Participants

Participants for this research is made of tilde.town active users. A priori, active users will be taken into account, as these are their interactions and contributions that we form tilde.town. In general, participation will be based voluntary, like responding to general forum messages. In special occasions collaboration will be explicitly requested. This will be the case of persons that have contributed software or other important artefacts.

## 3.3 Ethnographic perspective

I will approach tilde.town's case study from ethnographic standpoint.

According to Willig and Stainton Rogers (2008), ethnography is understood as “a form of observation involving qualitative methods of data collection and analysis, and usually a degree of participation by the researcher in the world that they are investigating”.

It consists in **deep immersion** in the field, following the studied community in its everyday actions and places, doing as other participants do, so one can observe the meanings and values that are common place and that give significance to their actions (Gullion, 2016). This meaning-chasing might be based on participant-observation, interviews, artefacts, documents, recordings, autoethnography and so on (Norman K. Denzin, 2005).

**Participant-observation** can be understood as deep immersion in the studied field while participating in people's lives, process that is accompanied

by maintaining “professional distance” (Norman K. Denzin, 2005; Willig and Stainton Rogers, 2008). It consists in going to the studied culture “natural” place, as Malinowski’s **fieldwork** consisted in living among the “natives” for a prolonged period of several years (Leavy, 2014).

While “immersion in the field” seems quite an intuitive process (yet surely not an uncomplicated one), the notion of “professional distance” doesn’t seem that straightforward. As being “distant” creates empirical and ontological difference between the researcher and the culture’s participants, it may lead to creating the “Other” and thus subject-object relation. From my perspective it is not compatible with fully participating in the culture, therefore I will understand “professional distance” rather by a double function that researcher must maintain at the same time. That is, the role of “yet another participant and experiencer”, tending towards horizontal “being-with-others”, shall be conciliated with the role of researcher, which apart of “being there” requires also reflexive and observative way of “being there”.

In ethnographic process, once fieldwork is completed, collected material is transcribed and then rewritten to be interesting for readers. *“Like writers of creative nonfiction, we tell compelling stories with our ethnographic data.”* Gullion (2016) The form of writing is an important aspect for ethnography and is related to set of choices regarding to style, vocabulary and targeted audience.

We shall not forget that words are different kind of data than numbers and statistics, which might be why Willig and Stainton Rogers (2008) complains:

“The recording, interpretation and analysis of ethnographic data are complex processes that are seldom defined with clarity”.

We attribute this problem on the complexity of the ethnographic matter, writing, that is at the same time a way of data recording, interpretation, analysis and presentation.

### 3.3.1 Digital Ethnographies

For Pink et al. (2016), digital ethnography is the one that includes digital realm as an important part of nowadays life. What is proposed is a broad vision that integrates perfectly both online and offline research. Participant observation in a new social reality may be a demanding process with a steep learning curve to gather information about the everyday lives of inhabitants.

Those authors propose different categories that might be studied in relation to digital ethnography: experiences, practices, things, relations, localities, events and social worlds. “Social worlds” is an open-end concept that refers

to interconnected domains of social life, that can inter-play composing diverse layers of realities under ethnographic study.

Digital ethnographers from this school are interested then not only in online activities, but also how they are embedded in off-line lives. Therefore what is proposed is rather embodied perspective that blurs the border between on and off-line.

A more recent yet similar approach can be found in Hine (2015), where the author reflects on challenges of the Internet as an object of ethnographic study, due to its “embedded, embodied and everyday” role in the society. She notes that it shifts form the imaginary of transcendental cyber-space to rather here-and-now direct environment of our lives.

### 3.3.2 Netnography

Netnography might be taken as a kind of Digital Ethnography, that centres on on-line realm and takes its specificities into account, adapting traditional researcher’s tools to this new environment.

As Kozinets (2010) defines it: “**Netnography is participant—observational research based in online fieldwork**”, “a specialized form of ethnography adapted to the unique computer-mediated contingencies of today’s social worlds”. It is born to respond to the need of understanding emerging culture related to new technologies.

This author points that there are many names proliferating around online, virtual, networked or internet ethnographies. For the need of this proposal I will not make difference among them, but for Internet-oriented ethnography I adopt general name of netnography, yet differentiate it from described previously “digital ethnography” of mixed character.

Communities studied by this kind of ethnographies characterise by its particularity of remote interactions that modify traditional ethnological work. Suddenly, *being in the field* may consist of sitting at researcher’s well known home and field observations might get interrupted by researcher’s dog barking or soup over-boiling. Yet the ethnographic work will not give account on that, what the researcher actually hears and smells is of no relevance for the research.

The same happens for the community members. We don’t know how are the rooms where they are, how is the temperature, ceiling colour or if they computer has many stickers glued on. They neither know anything about other’s physical surrounding. In the digital community, the essence of their *being together* is being physically apart.

Hine (2000) proposes that Internet shall not be taken for granted, but rather



investigated and analysed as a product of particular people with their goals and interests, as a social construction. She proposes that it can be understood “as textual twice over: as a discursively performed culture and as a cultural artefact, the technology text. In neither sense are its uses and interpretations determined by the text”. This approach underlines the importance of information technology as social construction that first is created from dialectics of culture and then, as another cultural object it can further transport meanings that can be re-interpreted and re-assigned. Due to interpretative relation to virtual objects of ethnography, she reminds that we cannot pretend to give an “faithful representation of objective realities” and that our accounts are necessarily partial.

Understanding technology as a text brings us to the domain of interface analysis.

Kozinets (2010) points 3 main differences for the netnographic practice. Entrance in the field is different as the “presence” online and offline is different. Data collection and recording is different, as for example there are no transcription downsides, but also contextual information may be missing. Finally, ethical concerns are different than in traditional ethnography.

Hine (2005) introduces another peculiarity, that is the subject of researcher-respondent relation in online setting. She says that “qualitative researchers must become skilled at making and sustaining relationships online”. For some researchers, accustomed to off-line research that may present some extra challenges. She advises that such researchers “need to become adept at creating comfortable spaces for informants and interviewees to share their experiences, and they have to attend to the ethical responsibilities which new forms of research relationship place upon them.” When life stories are “publicly” exposed over the Net, and character of CMC exchanges is often anonymous, the issue of informed consent become tricky. Then, she points at other dangers: how “public” is what is published on newsgroups?

### 3.3.3 Specific tools for data collection

The bases of the data will be gathered in the process of **Participatory Observation**. What will be witnessed will be translated into fieldnotes.

In this context, the researcher is understood as a active part and a contributor to the community, not as a distant and unengaged voyeur. The researcher will seek to **perform actions** typical for being a server’s member and actively interact with other members.

Using means and forms of communication characteristic for this specific settlement is preferred over introducing more “artificial” ones for this setting. For

that reason, researcher will rather replace structured and semistructured interviews with “regular” interactions on BBJ, IRC and via internal mail. Research activity itself will be understood as yet another project that is being realised in the town, with the use of town’s tools.

Textual specificity of the settlement blurs the distinction between the “context” and the “communication” (or any other typically social activity). Both the interactions and the software are constructed in linguistic activity. Coleman (2013) confirms this direction, arguing that “code is speech”. As many social researchers may be more proficient in human communication, we have to envisage the possibility that it is not necessarily the case of all of the participants of tilde.town, that might be at least as proficient in system management and code writing. It seems just to me to treat code as another way of expression and actually as another way of articulating a discourse, as Brock (2018) suggested.

He proposes Critical Technocultural Discourse Analysis that consists in “hermeneutic empirical analysis integrating interface analysis (semiosis of the material and virtual aspects of the artifact) and critical discourse analysis (focusing on representations within and of technology) framed by rhetorics of information technology and critical race theory”.

What is specially relevant for the needs of our research proposal is the **interface analysis**. It consists in analysis seeking to shed light on “the ways [...] interfaces create users through metaphor and practices, and the beliefs expressed by users of those interfaces/ artifacts integrate symbolic, material, and discursive aspects of the ICT under examination”.

For the proposed research, such an analysis will be performed, as interfaces and software used and developed at tilde.town play an important role for understanding the virtual settlement. Chosen programs will be described in detail. For selected programs written by the community, interface analysis will be performed. The researcher will perform in depth exploration of their functionalities as well as will attempt revising the code.

Recording this data will contain **screenshots** and **fieldnotes**.

For understanding community dynamics, interests and processes we will explore (read and document relevant information) available **content**. This concerns especially BBJ, IRC logs, Feels and the Web (see below).

We reckon that to better grasp the specificity of Public Access Unix systems, it is necessary to explore the possibilities of the given shell. Provided **commands** will be explored in **auto-ethnographic** manner.

In this part of data collection we will broaden discursive approach with affective and corporeal perspective. What can be of affects in typing commands

into the terminal? How is it to face text-only interface?

We find answering those questions necessary for constructing a more complete narrative on Unix systems.

### **3.3.4 Contrasting the work**

In order to assure better accountability of the research, findings will be contrasted with a number of actors.

First, we consider important the process of co-production of knowledge with the community itself. It is already taking place, as the concept of “virtual settlements” was proposed by tilde.towns “anonymous” member in a discussion that I proposed on BBJ.

This kind of dialectics will be maintained, using internal communication tools of the town, such as BBJ and IRC. Information sources will be carefully registered and informed consent requested if needed.

Secondly, the process of sense-making for this research will be kept available within the town in the form of Feels (internal blog), where I will give account on my findings, theoretical considerations and other relevant information. Other users will be then able to access this information and discuss it or on public area of BBJ or in private by mail.

And last but not least, the research process will be accompanied with academic mentoring sessions.

### **3.3.5 Saturation**

The proposed research has no generalising pretension. Data collection and participant observation will be led from February till the end of April. If needed, this period might be extended until mid-May. Also, if not enough in depth understanding is generated from informal interactions, more structured interviews might be led.

With the multiple forms of data collection and availability of big amount of archived communication (i.e. BBJ and IRC logs) that can be easily browsed with Unix tools, we consider this sufficient for answering the researches objectives.

## **3.4 Writing as an analytical tool**

Ethnographer’s main analytical tool is writing itself (Richards in Willig and Stainton Rogers 2008), as her/his “central purpose is to describe a social world and its people” (Emerson, 1995).

This analysis consists in re-reading of the text in search of meanings and relations that may contribute to better understanding. As Saldaña (2011) says, “[a]nalysis presents a systematic expansion beyond description” in order to identify particular factors that appear in the data and in elucidating how they are linked. The researcher may look for orientations or tendencies and particular constructions of meanings or relations between different elements, such as feelings, thoughts, artefacts and practices.

Jason and Glenwick (2015) reminds that the process of analysis consists not only in apprehending the apparent, also in searching of those absences that configure given object, text, artefact: “As much as data analysis is about seeking emerging patterns and themes, it is also about locating absences and irregularities.’

The analysis is not a binary process, but it is spread on a continuum. From explicit, conscious and in-depth analysis, it continuous until almost involuntarily categorisations. Not only writing final ethnography or explicitly analytical fieldnotes, but even “descriptive” fieldnotes are impossible without already performing some kind of early analysis, as “writing” means translating our perceptions and thoughts into a textual medium. Words are composed of meanings, with their denotations and connotations they point to symbolic realm that escapes unequivocal automatism. If we look deeper, perception is already an act of interpretation Norman K. Denzin (2005). So if writing a description is perceiving of *what is there* and giving it a specific meaning that will be put in a form of a word, it requires analytical proceedings of selecting, categorising and naming. Because the *signifié* doesn’t automatically engender its *signifiant*, instead of *describing* we prefer to talk about *reading* and *interpretation*.

### 3.5 Reflexivity

With the purpose of guaranteeing scientific rigor, reflexivity and self-criticism are considered to be the basis of qualitative research (De la Cuesta and Otálvaro, 2015).

The positivists’ requirement for successful research was the objectivity. The researcher was supposed to be neutral and leave apart her/his subjectivity. More modern approach recognises this task as impossible: one is always constructed in some way, familiar with certain values and reluctant to others. Van Maanen (2011) points that writing itself may be a dangerous enterprise: “It carries quite serious intellectual and moral responsibilities, for the images of others inscribed in writing are most assuredly not neutral.”

The problem of non-objectivity is not an easy one to be solved, as one cannot

undo neither one's own construction neither the cultural meanings inherent in the language. There are no shortcuts found and what is commonly considered as "best practice" can be expressed in what Willig and Stainton Rogers (2008) proposes;

“[E]thnographers do not set out to deny their impact on the world they are studying, rather their aim is to understand this in a systematic and rigorous way as an inevitable part of the research process”.

Ethnographic writing must be then necessarily a reflexive process to give account on researcher's tendencies, formations and the research process itself. This reflexivity is understood as a not taking for granted concepts that one uses, but understanding them in the social and cultural context. What meanings and power-relations interconnect in a given notion? Who uses it and when? What norms are constructed with this term?

Ethnographer's position determines not only how s/he understands and interprets studied object, but also how s/he acts (Carbó, 2007). It is important to notice that those actions co-construct and modify the world and so the decision process, including particular reasons and motivations, shall be acknowledged and explained.

For the scope of the proposed research, this will be achieved by maintaining reflective field journal, where I will reflect on researching role, institutional position, implications of my participation and any other possible political and ethical aspects. This might also include reflecting on the process of knowledge production process, its outcome and on ontological nature of this knowledge. For a particular analytical tool for dis-segregating experienced situations, I will opt for non-violent communication approach. That is, separating observations from judgements, naming and expliciting related emotions is considered to lead to seeing clearly ones needs and values linked to the particular situation (Rosenberg, 2015). This process is linked to empathy, that is a direct and in-the-body mean of understanding. I need to note, though, that the analytical process of insight into the situations and positions will not be limited to this particular toolkit and if needed, other analytical dynamics will be used.

## **4 Perspectives and considerations**

### **4.1 Discursive, affective and corporeal perspectives**

Dealing with the text via qualitative methodologies in social psychology we are tempted to limit ourselves to discursive perspective. This definitely has

advantages. Such a perspective allows treating investigated phenomena as social constructions made of linguistic matter (Haber, 2016).

Contrary to what positivist standpoint believes, in here language is not understood as a descriptor of the reality but as its constructor. A discourse in this light would also be considered as a social practice.

They are not an independent, neutral entities, but they are strictly linked to what moves the society where they are embedded and they vehicle its values and norms.

While this perspective is valuable and forms one of underlying precepts of the proposed research, we understand that human and social experience cannot be reduced to the linguistic level and thus at least acknowledge the possibility of different perspectives. I will point two of them.

Corporeal turn is to be placed at the end of XX century, while affective one can be dated at the beginning of XXI. They are rather perceived as extending and correcting some gaps left over after the discursive perspective (Sheets-Johnstone, 1992, 2011; Smith, 2011).

They bring back the attention to body and affect as realms that are somewhat independent from the linguistic one and thus cannot be reduced and expressed by it.

Taking body into account in leading a research can be performed from numerous points, yet for the needs of this research, we propose to follow Sheets-Johnstone perspective on corporeal perspective. This is approaching the body from its kinaesthetic, sensing and living aspect, in difference to other visions that could concentrate on body's discursive and cultural construction in meaning.

At the same time, working on affect might be a slightly more complicated affair, as for its non-univocal character of the term.

Affect, in turn, will be understood as the capacity to affect and be affected and it is bound to the possibility of action (Clough, 2008). According to Masumi (1999), it is placed in the *virtuality* of the body, that is in a tiny, imperceptible moment of time that is unconscious for the body and that lays between the reception and reaction.

In the proposed research, those three perspectives will be held together as complementary in the way that they describe different focal points of attention. While I do not pretend to maintain all three perspectives in parallel, I will hold them as underlying precepts, keeping in mind the possibility of shifting realms for grasping fuller image of studied phenomenon, as in example of Pagis (2009).

## 4.2 Understanding

While the main goal of this research is *understanding*, we find it necessary to make clear how this concept will be used.

Following hermeneutics line, we agree that understanding itself is a kind of interpretation (Ricoeur, 1989).

As we sustain that facts don't speak for themselves, the task of researchers is to explain the world in terms of something else, "in relation to". This relation is not obvious or determined.

So understanding is not only repeating textual productions, but also a process of creating a new meaning emerging from the text. Hence, for better translation of the experience to the reader we will use numerous metaphors, yet an extra effort will be put in order not to forget about their non-denotative character, in process similar to builds bridges between reader and the text (Norman K. Denzin, 2005). "Translation is always interpretive, critical, and partial" (Haraway, 1988).

In the case of tilde.town, as we have already pointed, we will treat as a text both human communication and the textual matter of interfaces and programs. While Burnett (2002) applies Ricoeur's hermeneutic approach to virtual communities, we would rather use it as a mode of describing and analysing virtual settlements.

Also, I want to point that the results of my "translation" will be made public and available to be contrasted with other members and users. This is to mitigate the risk that Haraway (1988) remarks: "*The world neither speaks itself nor disappears in favor of a master decoder.*"

## 4.3 Knowledge

Other participants of tilde.town are perceived as knowers. This knowing manifests both in their technology production processes and their ways of relating to others. Each member carries her/his own set of experiences and believes that form the way they perceive and relate to the environment. Putting particular knowledges in common reflects in the community productions, such as common use software, the wiki (Web-site content) or the code of conduct.

For this particular aspect we agree with Haraway (1988)'s position:

We seek those ruled by partial sight and limited voice-not partiality for its own sake but, rather, for the sake of the connections and unexpected openings situated knowledges make possible. Situated knowledges are about communities, not about isolated individuals.

The only way to find a larger vision is to be somewhere in particular (Haraway, 1988).

In this aspect we are interested in the process in which technological and social knowledges are enacted for particular application/action and form a common “praxis” (knowledged enacted in practice).

For what it’s worth, Weber (2006) reminds that:

“In pre-modern societies, technology was understood mostly in the sense of human knowledge, while in modernity, technology’s most important connotation was that of the artefact”. Weber (2006)

#### 4.4 Considerations

- Starting limitation that I need to acknowledge are my linguistic skills: English is not my mother tongue. This has its implications both at the moment of writing, but also, more importantly, it poses clear limits to my capacity of understanding tilde.town’s English-based culture.
- Another initial limitation that will influence the work are my technical skills: although I am GNU/Linux user familiar with the use of CLI, this knowledge is limited. My educational background is that of arts and humanities and so I consider myself not as CLI native speaker, but rather as a *guest in the shell*. My knowledge of programming is basic. It is sufficient for making sense of computer realm, yet it is not full proficiency.
- I have been participating in tilde.town previously to the research. I already have an identity created, from which some interactions were led. This brings an advantage for field entry moment, as I do not feel as a “stranger” to the community and some trust is already established. At the other hand this situation does not permit a more reflected, conscious field entry, neither lets take relevant previous decisions about constructing researcher’s identity.
- Although my previous contribution and participation in tilde.town I would define as sporadic, I feel emotionally attached to the community. From the impressions I have had until now, I often feel reflected in the values proposed by the community. This is advantageous, as I care for the community and thus I may tend to be protective to it and therefore more easily take criticisms or advices. At the other hand, this position may cause more internal resistance to being critical towards aspects that I may consider negative for the community.



- Being humanities adept, socialised for being a female, may be perceived as a disadvantage in the male-technology environment. At the other hand sharing occidental culture, not being racialized or not having other distinctive features that may be negatively received in our culture are clear advantageous positions. I apprehend those factors as moving pieces of the kaleidoscope rather than as a static monument.
- The lecture of the community I may perform is partial and subjective. Even though I might try to negotiate my understanding of the tilde.town with its members and be transparent on particular opinions and their authors and my intention is to write a polyphonic ethnography, giving protagonism to different users, acknowledging and allowing differences, finally, the result is dependant on my socio-historical conditions.
- I find necessary place both the researcher and the community in the context of wider society, given the criteria of privilege. Being a member and user of tilde.town proves certain accumulation of educational, social and digital capital. Necessary skills are not representative for the general society, neither having time and Internet access or having a personal computer. I am aware that many people cannot afford being part of such a community.
- The research I may lead is specific for its particular time and place and cannot represent other such communities neither can be representative for other moments of tilde.town
- As for the coherence, the full process of the research is planned to be led with command line tools and Unix-like software. I am writing this in vim CLI text editor form a GNU/Linux machine. It is relevant, as for I consider that the research process is part of the research subject.
- In the context of online space it is necessary to attach extra attention to respecting others privacy. As the distinction between public and private is less intuitive and actually tilde.town's space is semi-public, it is important to ask for consent and be explicit about goals and motives of researcher's proceedings.
- For guaranteeing the possibility of dialogical participation of tilde.town users in the process of elaboration of this research, I have decided to keep publishing relevant parts of the research process in the town's internal space.

## 5 Planning

As for the preparatory phase, the project design will be fulfilled by mid January 2019.

As I am already a member of tilde.town from about a year, field entry is already done too. When I have mentioned that I wanted to perform a research on tilde.town, responses were positive. The community is already informed then, both via IRC chat and BBJ. Until now I have performed some exploratory activities related to planning this proposal and necessary for choosing a suitable set of methodological tools.

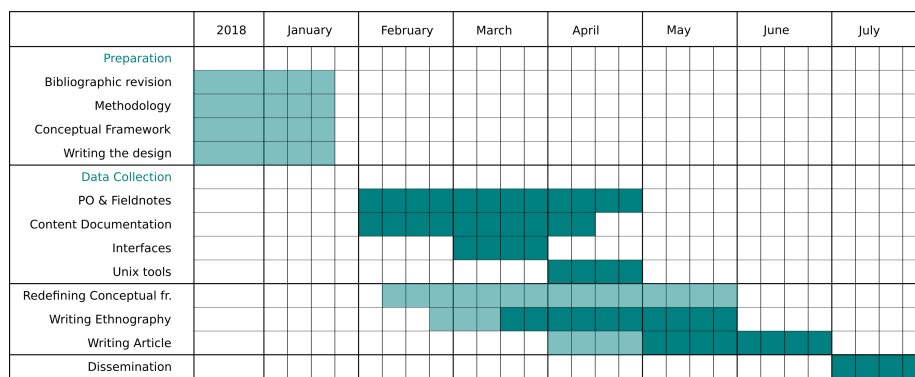


Figure 2: The Gantt chronograph

Data collection period of deep immersion will be performed from February till the end of April. I will start writing ethnography text as soon as possible, marking the deadline at the end of May. Article construction is scheduled for May and June.

During all that period necessary adaptations and corrections of conceptual framework may be performed.

It is an intense, yet feasible planning.

## 6 Expectations

As suggested in the previous section, research on PAUS seeks to contribute to better understanding of our society, process of creating and maintaining its technologies and also might offer some lessons for healthier relation between those two.

We expect to contribute to better understanding of what brings people to Public Access Unix Systems, its specificity as a type of Virtual Communities.

Also we expect to understand how those communities are inscribed in wider socio-technological contemporary culture. While subverting the notions like “prosumers” and giving back to the Web (literally), *tilde.town* might give an example to follow. While the general tendency of technological development in our society is often subjugated to corporate and military interests, imposing their culture and finally trying to model the society in order to, as Maxigas (2018) argues, first, maintain social peace and second, keep accumulating capital, examples of substantially different culture with their artefacts might help also to find more pro-social and responsible technological praxis.

How such virtual communities relate to their virtual settlements can suggest techno-social proposals that might be applied for further theorisation, activism.

This is not only important on theoretical level, but also we might extract suggestions applicable for designing technological systems.

We feel that nowadays panorama of ICT research is incomplete focusing mostly on mainstream, corporate platforms and thus lose some important practices. Important not that much in number but in terms of its potentiality.

Since the very beginning, CMC tools were used for education and empowerment, as shows the history of BBSes, MUDS and IRC. We are sure that Public Access Unix Systems are no different. We hope that they are applied for activist research working on technological emancipation of non-privileged groups that had reduced access to technological design and system management, especially in such a caring, empathic setting as *tilde.town* proposes.

Finally, this research might contribute to find new criteria for the very necessary ethical evaluation of our technological proceedings as society.

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