Enriching ethnography in marginalized communities with Surrealist techniques

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1. Introduction

This paper describes two projects, *Vila Rosario* and *Vila Mimosa*, two pieces of ethnographic research done when the authors were working with pro bono organizations aiming at improving public health in poor corners of Rio de Janeiro, Brazil. The main objective of the paper is to explain how surrealist techniques could be applied to enrich ethnographic fieldwork. The research sought to improve public health in these two marginalized communities in Rio de Janeiro.

The authors studied Vila Rosário and Vila Mimosa in depth to learn how people in these communities understand diseases like tuberculosis and their contagion mechanisms. This knowledge, it was assumed, would help people to protect themselves from these diseases. The original aim of the study was to develop information systems to improve public health in the impoverished areas of Rio, but as the research went along, the design work was refocused to low-tech designs such as posters, educational booklets, and games that could be used in the community to teach these issues to children and young mothers. As the community had had little exposure to digital technologies, and even less previous exposure to design, we had to find ways to enrich fieldwork with techniques that would unleash technological imagination in the community while giving them few cues about what we were after. We found some of those methods from techniques that have originally been inspired by Surrealism and its idiosyncratic interpretation of psychoanalysis.
We had precedents in ethnography, which has had connections with Surrealism especially in France since Mauss and his followers Metraux and Bataille, as Marcus has noted (Clifford 1981). Ethnographers have of course used many types of elicitation visual techniques over the years. Yet, a gap between Surrealism and ethnography has been pronounced, and discussion about it has largely been removed from ethnographic literature, at least in sociology, the academic background of one of the writers. With few notable exceptions (see the survey of Wood 2007), this has been the case in design as well: its ideology has leaned towards science rather than art after functionalism, semiotics, and user-centered design (see Mecacci 2012). Yet, artistic techniques have been doing a comeback in design for reasons at the very heart of design as a discipline which finds its justification from imagining realities that could be rather than capturing realities that exists. We can only speculate about the reasons for why artistic techniques are coming back to design, but our guess is that they liberate designers from the strictures of the science, engineering and business by suggesting that even things like gravity can be thought of as social constructions that have an exact meaning in some discourses only, but can be treated as metaphors outside that discourse. Surrealism may be particularly liberating in this regard.

2. The tension between what exists and what could be

Ethnographic methods have proved their value in design several times over the last 20 years (cf. Salvador and Anderson 1999; Squires 2002; Cefkin 2010). From these initial beginnings has grown a well-established practice. The uptake has been especially robust in IT and ICT industries, but consumer industries are increasingly joining the ranks of companies who hire ethnographers. Unlike traditional quantitative marketing research, ethnography provides vivid and evocative stories that can be used to guide product development and – in rare cases – strategic decisions in companies.

If done in a the same manner as in the mother disciplines of anthropology and sociology, ethnographers build design insights on usually careful (or thick) descriptions of existing social and material practices and mentalities without affecting them. In their training, they learn to be wary of things like the ethnographer's blues,
and about the ways in which people react to the their presence and activities (Baranauskas 1999; Becker 1970). The interests of designers, however, are usually in possible worlds rather than in the existing reality. This creates a problem for design researchers who build their research craft on ethnography, which has an in-built tendency to focus on what exist at the expense of what could be.

In design literature, there are several ways to solve this problem of imagination. The first two techniques are well-known in design literature. Researchers may first treat a place as a natural laboratory where the future exists before it becomes a reality elsewhere. Well-known examples from design literature include Scandinavia and Japan in mobile technologies around 1996-2002 and Seoul a few years after (see Koskinen et al. 2002; Kurvinen et al. 2008), Hong Kong as a laboratory of high-density living (Manzini 2003), street ethnography and cool hunt in fashion (Polhemus, 1994; Gladwell 1997), the location of car design studios in Los Angeles (Molotch 1996: 257–258), and studying copy machine repair technicians in the advanced market of Chicago rather than elsewhere (Orr 1996). They may, second, create a version of the future with prototypes. Technically, these vary from fairly straightforward field tests to studies using artistic techniques (Dunne and Raby 2001), and from studies with imaginative prototypes (Gaver 2015) to studies with ready-mades, assemblages and appropriations (Koskinen 2013). The most elaborate arguments suggest building technologically supported practices that are open in their design, and following what happens with these practices through theoretically informed frameworks (see Kurvinen et al. 2008).

A different technique is what we shall call Surrealist fieldwork in want of a better term. Here, the idea is to unleash imagination from everyday habits by building research on props and protocols that provoke strange and dream-like associations among users. Designer researchers use many types of techniques borrowed from

1 As Michael Powell noted to us, so much of this literature referenced and surrealism is founded on or closely tied to Freud’s work on the individual mind. Imagination can, of course, also be seen in social, collective and cultural terms, maybe following the Lacanian versions of psychoanalysis in which unconsciousness is structured like language, Jungian psychology in which imagination becomes archetypes, or even Winnicott’s transitional objects that after all are objects and a part of the intersubjective realm. In design, the problem is usually designers’ imagination which tends to go after iconic designs through design techniques like moodboards, sketches and CAD programs.
projective psychology, Surrealism (and Dada) world that use existing spaces and objects as props for something else, but that help people to detach themselves from existing realities (Presence Project 2001). Researchers target these imaginations rather than the props as such; they are but a canvas that sets Freudian primary processes at motion. The best-known examples are Liz Sanders’ Make Tools that tell us to focus on dreams, Tony Salvador’s props and Iacucci’s Magic Things that are reinterpretation of Salvador (Sanders 2000: Salvador and Howells 1998: Iacucci et al. 2000). The difference to the first two techniques is pronounced. Here, the imaginations are laid over social reality, and designers need not to build a prototype to study dream-like imaginaries; their job is to set primary processes going and follow them.²

The heart of the Surrealist approach, as we saw it in our work, is putting something sketchy in the world to see what happens, and capture this what. Through techniques like these, the designer-fieldworkers can manage to see the world in terms of imaginary constructs that animate people. These insights from interaction with these imaginary constructs are there waiting to be captured by researchers, and their work flow turns these insights into product ideas after a more or less careful analysis that usually builds on analytic induction.³

Most research of this sort, however, has been done in relatively privileged settings with populations that tend to be educated well enough to understand the imaginary format imposed on them. In contrast, this paper adds to that literature by describing Surrealist techniques in communities at the margin of the society where people steal electricity, illiteracy is common, diseases like tuberculosis and yellow fever are real threats, and where university degrees are rare.

² Surrealism, of course, presents a highly sublimed version of Freud’s theories of the unconscious.
³ This is a dense sentence. Artists are usually happy to capture the world and communicate their interpretation through singular art works. While there is a market for sketches, models, and prototypes, and galleries sell limited editions and unique, signed design pieces too, design usually ends up in the mass market. The main worry for designers is the group and collective level of society, while artists have the luxury of exploring individual subjectivities for in-group discussions.
3. The sites and the partners

The studies we describe in this paper were done in two communities characterized by extreme poverty and its implications, but having a different set of problems. Both sites are in the State of Rio de Janeiro. The fieldwork was done in three batches between 2006 and 2010 and resulted in two PhD theses (Judice, A. 2014; Judice, M. 2014).

The first study was conducted in Vila Rosário, which is a community of 60,000 inhabitants in the municipality of Duque de Caxias, on Rio de Janeiro State. The study was conducted with the support of “Instituto Vila Rosário” (IVR), an organization that make a long-term health work in the community of “Vila Rosário”, where the researchers rely on empowering a group of health agents working for IVR to reduce levels of Tropical Diseases. Health Agents were a group of local women the Institute had hired and trained to conduct home visits in Vila Rosario. They shared information about contagious diseases, did preliminary diagnosis for doctors, supervised treatments, and also recruited people for the Institute's activities. When we were doing our study, there were 11 health agents. We worked with six of the more experienced health agents, Marlúce, Clara, Dulcinéa, Custódia, Maria, Leila and Deolinda. Their average age in 2006 was 52. The population in Vila Rosario had a very low socio-economics status, a high level of tuberculosis, inadequate housing, and other problems as addiction to alcohol and drugs (cf. Costa Neto 2004).

Figure 1. Vila Rosario: streetscape, local housing next to an open sewer, A. Judice with health agents fitting the uniform designed for them

The second study was conducted in the vicinity of downtown Rio de Janeiro, but worlds away from its business elites. The study was supported by a pro bono
organization working at “Ambulatório da Providência”, a clinic aiming to reduce levels of HIV/AIDS, other Sexual Transmitted Diseases and tuberculosis at a cheap prostitution district well known as “Vila Mimosa.” Vila Mimosa is located in the vicinity of downtown Rio in the shadow of a major railway station and the Maracana stadium, and it is one of the main hubs of transmission of HIV/AIDS in the metropolitan area.

Figure 2. Vila Mimosa: the interior of a brothel, a textiles working space for the prostitutes, and an outpatient clinic where doctors met prostitutes

The study proceeded in four phases involving contact with people, the three first of which took place in Vila Rosario, and the last in Vila Mimosa: (1) probing; (2) ethnographic fieldwork; (3) fieldwork with designs; (4) transferring the research process into Vila Mimosa. Given the status of Vila Mimosa as a way of streamlining our method, we mainly focus on Vila Rosario in this paper.

These studies have been described elsewhere in detail (Judice, A. 2014; Judice, M. 2014). This paper describes two techniques used in ethnographic fieldwork, Magic Things and Good Fairies. These techniques had basis in Surrealism and projective psychology, both in debt to psychoanalysis, and were inspired by Cultural Probes, which share these similar roots.

4. Magic Things and ICT in Vila Rosario

The first phase of the study was conducted in Vila Rosario in 2005 when the authors were working in Helsinki, Finland. Although both main authors were from Brazil, and
one of them was carioca, the research team knew it did not know enough about Vila Rosario. It was only 20 miles away from their previous home, but social worlds apart from places like Barra de Tijuca and Botafogo. The first contacts with Vila Rosario were done with cultural probes, the brainchild of Bill Gaver, Anthony Dunne and Elena Pacenti (1999), and although the study in Vila Rosario was inspired primarily by Mattelmaki’s (2006) empathic understanding of the probes, the projective roots of the methods were observed carefully.

From Mattelmaki, the study picked up the habit of validating the interpretations made of the probe returns, which took place in two phases. While still in Helsinki, the researchers did Skype interviews with research assistants in Rio de Janeiro. Later, the researchers flew to Rio for fieldwork, the theory being that it is impossible to know Vila Rosario just through words. Ethnography focused on understanding the population of Vila Rosario, its etiological geography, the work of the clinic and its relationship to the community, as well as the uses of information technologies.

Although this ethnography was seen mainly as a way to validate the interpretations done with probes, and the main focus was understanding the clinic in context, the fieldwork also went beyond thick description in its understanding of ICTs, which were the early focus of the study. The problem was that few health agents had experience with the Web, not to mention mobile phones. The existing uses were elementary, and as the health agents had no experience in working with designers, they could not put into words their technological and design wishes. They knew how to do their work, but they could not imagine how communication technology could help them.4

Here, projective techniques came to help. The key tool for eliciting these wishes became Magic Things by Iacucci et al. (2001). Magic Things are blocks of foam or wood that have no functionality, but serve as props that people carry with them for some time. People carrying them are asked to stop in situations in which they are

4 It is good to keep in mind that this was the situation before the current generation of smart phones. By 2015, health agents in Vila Rosario are much more adept at using smart phones. Around 2006, only one or two of them had had a mobile phone, and none had an Internet connection at home.
facing problems and to think what kind of assistance they would like to get with [from?] the thing. The method is used to collect dream-like ideas from fieldwork, and situate these ideas in the lived reality of the people without researchers controlling the situation.

To apply Magic Things, we were monitoring the activities of community Health Agents during one working day. The activities were recorded in a diary and on maps to understand their mobility. Also, we took photographs, recorded video, and conducted semi-structured interviews in combination with the Magic Thing. The aim was to register all kinds of facts and to observe what happened when Health Agents were doing their work. The method highlighted many interesting aspects of the situation. As designers we had a well-structured idea of which factors are contributing to the problems facing by the community, but we did not understand in detail how Health Agents encounter things like inadequate sanitation and poor nutrition. At this point of the study, the main question was: what types of products and services would meet the needs of this community?

The following example is from an interview transcript with Custodia, one of the health agents. It was done after she had been having a Magic Thing for a week:

1. Another day one lady came to complain with me: “my
2. ‘daughter’, this is the ‘septic-tank’ (fossa) of my
3. neighbor, when she flushes the toilet it full my yard with
4. dirt water (wastewater). I am getting crazy with this
5. situation. I do not know what to do anymore! I am afraid of
6. getting hepatitis; I have my children and have that to be
7. careful. My ‘daughter’, says to me what can I do to prevent
8. illnesses in a situation like that?”
9. In that moment I had no answered to that woman, I felt
10. myself depressed!
11. I told her: “Madam, Did you already ask orientation about it
12. in the city hall?” and she answered to me: “yes, I did. But
13. they said that from now they can make nothing to help me!”
14. The street where she lives is half asphalted. It is
15. asphalted in the beginning and in the end, but not in the
16. middle of the street. For me, that land was a swamp and
17. they just added sand on it and started to build their houses
18. over it. This woman has a baby of 2 months, a little girl of
19. 4 years, a boy of 6 years and a little boy of one year and
20. ten months. In this day her kids and some friends, around
21. five kids, were playing in her yard.
22. Because of this lack of basic sanitation, this street has
Applying The Magic Thing elicited several insights about the situation of the community. Understanding the mobility of agents was not restricted to geography/physical mobility and navigation, or to the way agents accessed and transmitted information. The Magic Thing also gave us access to how the agents would have wanted to use technology, and what capabilities they would like to have on a mobile device. It also gave us access to different types of community in Vila Rosario, and how these communications were organized and how they occurred in social activities of the village. The Magic Thing reinforcing some of our observations, but it also brought about new insights into the habits of that social group, its local culture, its behaviors, its beliefs, and their interconnections.

The Magic Thing worked well for us because it is a tool applied without specific focus. The user can feel comfortable in context as she is in control, and the context is familiar to her from her own life. She allows herself to dream and to show to researchers what the community needs. She also lets them to take part in her own world. Two other interesting points to be highlighted are: the low cost for developing the Magic Thing, and, as it has no predefined functions and shapes, it helps users to deal with it and allow users to point concepts and functions of products based on their own experience. Therefore, it fills the gaps between current experience and future use (cf. Iacucci et al. 2000). Magic Things were applied as yet another step in deepening our understanding of Villa Rosario, its local culture and its daily life.

Magic Things have some obvious limits. The main problem as we see it is that they assume that people can imagine an inner life to an inanimate block of wood, and can think how it would function in situations they encounter in their daily routines. When Iacucci and his colleagues were doing their study, their subjects were information technology students in Helsinki, which was one of the leading centers of mobile telephony. A student like “Sergey,” whom Iacucci followed, had no difficulties in seeing the life through a Magic Thing; his mind most likely saw these opportunities anyway. This was a luxury not available to us in Vila Rosario. Whatever health agents
did with their Magic Things were constrained by how they encountered people, situations, and things in Vila Rosario. Where Sergey saw sensors, interfaces and actuators, health agents like Custodia saw people and characters from telenovelas. To appreciate their concerns better, we developed another Surrealistic device, which did not constrain health agents’ imagination through a prism of a handheld device.

5. How a Good Fairy led us to reframing media as a design resource

As effective as Magic Things were in eliciting views about mobile technologies, they were restricted by their appearance. As open-format as they are, they remain handheld devices, which gives several hints about their potentials and limits. To create a still more free form, we developed another Surreal device, the Good Fairy. The Fairy was our own creation.

During fieldwork, people described many types of problems they face in their daily life. We asked them to imagine a Good Fairy who would come to rescue them – or people with diseases. This technique gave us a cue that came to be fundamental in our design work, which was the importance of media appropriations in helping people to manage their diseases.

After many workshops, inquiries, observations, and other contacts, health agents started to get used to our presence. As they were comfortable enough with us, we decided to ask them to try a new experience. We asked them to imagine a Good Fairy, and asked them how the Fairy could help them in their work. When they were telling what they would wish from the Fairy, we also asked them to explain how they think the Fairy could help. Once more, we can borrow a story told to us by Custódia as an example of an insight into what kinds of themes figured in the imagination in Vila Rosario:

1. You know, when I was in Maria’s house, the same family that
2. I told you the story, I would like to have with me
3. a cleanliness kit, to teach her how to clean her house. I also
4. wanted to have a photo album so, I could show for her that
5. these photos are showing the reality of her house, the house
6. she lives with her family, and if she does not help me to
7. clean it and keep it clean the situation is going to be
8. worst!
9. In this album, I want to have photos from her house and
10. photos from another family, like Maria’s family and a house
11. like her house too, but the family living in a clean house,
12. all of them healthy and happy. Maybe, with this album I can
13. find a motivation for her to clean her house and keep it
14. clean!!
15. In her house, there are many illnesses: Leptospirosis,
16. cholera, most of the time the kids are vomiting and with
17. diarrhea.

As we see, Custódia felt herself very confident in telling us the story, and gave us many tips that helped us to develop suitable products for situations she were describing. She chose to tell us the Maria story again. Based on her choice, we could see that despite the Vila Rosarios Institute program has its focus on tuberculosis, we had to reach out attempts beyond this disease. In Maria’s case, nobody is ill with tuberculosis, but there are other issues as poor hygiene and the lack of information about a health, and so forth, that are of equal importance to tuberculosis, and complex enough to warrant attention on their own.

Earlier, Custódia had spoken about the necessity to compare a bad scenario with a good scenario. At the end of her Good Fairy Story, she shows to the person how the Fairy could help Maria to do the choices that would lead to many positives changes in her life. For Custódia, a dramatic intervention is needed to shake people to change their habits. If the approach is too smooth, people usually stay with their habits and do not make the effort to improve their situation (lines 9-12). Finally, we can identify more diseases that health agents need to deal with in her description, like cholera, leptospirosis and diarrhea (lines 15-17).

The main message the Good Fairy told us was a theme that helped to organize our design work: the importance of understanding Vila Rosario through its media consumption. When we looked at the themes people used to organize their imagination in Vila Rosario, we saw that among the few elements everyone was familiar with were football stars and the main telenovela characters. Compared to football, telenovelas gave us much richer design opportunities. As stereotypical as they may be, their characters inhabitate a social world rich in demographics, roles, positions, and ambitions. Building on media was useful for another reason as well.
Vila Rosario was largely analphabetic, and using information technology in it in any straightforward manner would have been a waste of resources. However, like anywhere else in Brazil, the inhabitants of Vila Rosario were keenly aware of the telenovelas on television, and they followed football with enthusiasm rarely found outside Brazil. With Good Fairies, the health agents told us that they would like to use the loved and trusted media figures to communicate their messages to patients and their families. Unlike local authorities that are seen as corrupt, the figures of doctors, nurses and teachers in the media provide a picture of what to expect from professionals. This picture is idealized, but yet real in its consequences.

Building on this observation, we built a fictional Vila Rosario and use this fictional village as a reference in creating designs. This story world became a reference point we came back to in doing more detailed designs for our products. In the center of the story world were characters that were created with a telenovela style, for several reasons. Everyone in Vila Rosário understands these characters. They are simultaneously stereotypical and detailed, easy to identify with, but not too close to any particular person. Furthermore, their behaviors and their impact on other people can be followed over time, which makes it easy to communicate things like how some behaviors lead to certain outcomes (like getting a TB diagnosis followed by a cure, and finally getting better) and how these behaviors affect other people (like what happens to the loved ones if one does not take care of TB properly, or stops the treatment early).

Figure 3. - Examples of characters in the fictive Rosário
This world was used throughout in our design work, giving it a unified look and feel that was also conceptual in its approach. It was also a significant reframing in our work. Before realizing the importance of media, we had entertained several design options. With the media observation, we rejected artistic and commercial styles, as they were alien to both Vila Rosario and the seriousness required by our topic, health. We also rejected medical style, i.e. typical medical design stressing white colors, simple, clean surfaces, and scientific shapes that communicate technical sophistication and reliability. These would have been out of place in Vila Rosario, given poverty on its streets and its tropical landscape.

6. Discussion

In the beginning of this paper, we speculated with the idea that design ethnography may differ in many ways from ethnography in such mother disciplines as anthropology and sociology (for example, Jordan and Lambert 2009; Jordan and Yamauchi 2008; Fulton Suri 2011). Although ethnography has Surreal roots, as Clifford has shown (1981), it has usually been taken as a scientific rather than artistic technique in design. The key dilemma we focused on was between focusing on what exists and what could be as defined by the designers’ imagination. We outlines a few responses designers have given when they have faced this dilemma, and focused on one of these, which is building fieldwork on Surrealist techniques that aim at eliciting dream-like products of imagination from people designers study. Design literature is
rich in references to techniques that owe their inspiration to Surrealism (see *Presence Project* 2001; Sanders 2000; Salvador and Howells 1998; Iacucci et al. 2000; on practical side, see Wood 2007), though as far as we can say, there are few sustained discussions of them.

In Vila Rosario, ethnographic methods proved to be an invaluable asset in our methodic approach. By doing fieldwork in Vila Rosario, we managed to create a rich understanding of the place, its people, and its culture. Our work was not designed to be an anthropological study of the village, and we did not go into depth in its culture or social organization. Yet, ethnography gave us an image of what we should do in our design work, and what would be out of the question. Our fieldwork was not pure ethnography, though. We used design-specific methods to make sure we could elicit dreams driven by primary process like associations. The two methods we built on were the Magic Things and Good Fairies, the former picked up from Iacucci et al. (2000), the latter being our own invention. These two methods aimed at freeing people’s imagination by giving our research a playful character; this was particularly important for us, as we dealt with people with little experience in information technology. Ethnography as such helped us to identify several tools they could use to address issues earlier identified on the study, but it focused on reality as it exists, not on how people imagine it could be made better. These projective methods gave us a way to tap into their dreams about Vila Rosario.

A few demurrers are needed before closing this paper. First, as usual in design, results of even Surrealist techniques, of course, are suggestions and recommendations for products, services and strategies, not art works. Second, these techniques are often used in combinations. Third, as designers have already led people into a product of their imagination, reactivity becomes a secondary concern, unlike in traditional ethnography. Finally, then designers work with these techniques, they share the same time pressures and limitations as their colleagues in industrial ethnography.

The researchers developed design products based on the inhabitants’ context to improve the Health Agents’ work in preventing tuberculosis and HIV/AIDS, and in improving inhabitants’ quality of life. According to people from the communities, the design allow people to understand easily the message permitting people to identify
themselves “established” in products and understand how it was built on their day-by-
day life. In 2015, almost ten years has gone from the beginning of our field work.
Although living in Brasilia and Hong Kong, we are still in contact with health agents,
and regard many of them our friends. The main method of contact is the Facebook.
Through it, we know that the IVR project is still going on, and our designs still facilitate its work. We have not been able to continue our work in Vila Rosario, but we still consult them when they need help in designing things like a leaflets and even Web pages. From anecdotal evidence, we can say that the project still lives, and our design work still lives with the. Perhaps even more importantly, as one of the health agents told us after our study, that fact that we had taken them seriously as partners in our effort taught them self-esteem. In her words, our work told her: “You are important!”

7. References

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