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The Image of Ethnography—Making Sense of the Social Through Images: A Structured Method

Ricardo A. Ayala[1,2] and Tomas F. Koch[1,3]

Abstract

Although systematic observation and interviews are the most common techniques in ethnography, a deep understanding requires research tools adapted to exploring beyond the observational scope. Nonconventional methods can support ethnography and complement observations and thus refine the construction of meaning. Qualitative research literature deals disproportionately more with some forms of data, typically text, lacking a structured method for visuals. This article arises from a case study using nonconventional methods, such as sociograms and participant-made drawings, and presents a structured method to attain enriched ethnographic analysis. Using this structured method, the research then draws on representation, visualization, and interaction as ports of entry into group dynamics. The aim being to open a way to discovery when visual and interactional representations do not easily translate into words. Spoken language presupposes an ability to capture and convey thought with precision and clarity and to know how the interlocutor may interpret words. A structured method to analyze images can fruitfully assist in the process. Since every research participant has a view on or a way of making sense of the research subject, the method is universal in application.

Keywords

ethnography, methods in qualitative inquiry, photo elicitation, constructivist GT, interpretive description

Introduction

Over the past few decades, sociologists have become more familiar with ethnography than they were in the past (Desmond, 2014; Emerson, 2009; Goldthorpe, 2007; Harper, 2012; Nadai & Maeder, 2005; Pink, 2001, 2013). Ethnographic methods have moved into a respectable position in the sociological tradition, right at the core of inductive thinking, generating a number of influential studies, largely led by the development of the Chicago School. Ethnographic tools in sociology have been encouraged by the fact that sociologists often study their own society (Knoblauch, 2005), and the use of systematic observation and interviews discloses practices and phenomena of everyday life (Plummer, 1999, 2007). Sociological ethnography has thus developed a prominent and intimate understanding of social life.

On entering the field, researchers set up their toolboxes; most of the time comprising pens, notebooks, recorders, batteries, and photographic equipment. These devices are used in registering what the ethnographer sees, hears, thinks, and feels concerning the particular social phenomenon under investigation and his or her own participation in the field. Regardless of the degree of the researcher's participation, social realities are often so complex that it may be virtually impossible to reach a full understanding solely by observing, taking notes, and interviewing.

Noticeably, there is an imbalance in the literature of ethnography. It separates ethnographic observation and interviewing techniques from material which remains as difficult to articulate during the analysis. Visual methods have been used for over half a century now, yet as Pink (2001) notices, "little has been written on the storage and analysis of qualitative visual research materials" (p. 94). Despite some progress on the subject (Bayre, Harper, & Alfonso, 2016; Kuschnir, 2016; Pink, 2013), there is still a dearth of structured methods to analyze

[1] Department of Sociology, Ghent University, Ghent, Belgium
[2] Research Foundation Flanders, Brussels, Belgium
[3] Faculty of Social Sciences, University of Playa Ancha, Valparaíso, Chile

Corresponding Author:
Ricardo A. Ayala, Department of Sociology, Ghent University, Korte Meer 5, B 9000 Ghent, Belgium.
Email: ricardoalexis.ayalavalenzuela@ugent.be

drawings. Additionally, literature focusing on the use of ethnography in sociology tends to address epistemological concerns rather than the practicalities involved in the analysis, triangulation, and construction of meaning. The aim of this article is to contribute to these areas by adding to the renewed growing interest in how textual analysis and visual techniques articulate: We present a structured method.

The article first recapitulates the methodological challenges arising from a large ethnographic study investigating social dynamics in a university setting. We consider that ethnography is the study of cultural forms by researching people in their natural contexts (Atkinson, Coffey, Delamont, Lofland & Lofland, 2007; Frey, Botan, & Kreps, 2000). Our study encountered several areas in which we felt that cultural forms remained closed to us by using conventional techniques, such as observations and interviews, and that there was a need for further enhancement of the fieldwork experience, thus of the method, though lacking further explanation from mainstream literature. Like others before (Kearney & Hyle, 2004; Leonard & McKnight, 2015; Packard, 2008), we decided to address the problem by including "creative" techniques, such as participant-made drawings and sociograms, tools that were used both in the data gathering process and in the analysis and interpretation of the data. Through this strategy, not only did our research benefit from the use of these techniques as previously reported (Harper, 2012; Pink, 2001, 2013), producing an alter language that reconstructed and expanded the limits of discourses (Gadamer, 1990); these nonconventional techniques also helped participants become more committed to the research and in the process facilitated the construction of meaning (Holstein & Gubrium, 2008).

It is not our concern here to present the findings of that study, as they have been published elsewhere (Ayala, 2010; Ayala, Koch, & Messing, 2019). Rather, this article includes two major areas of methodological relevance arising from post hoc reflection, namely, the articulation of textual and nontextual data and a method of analysis. In facing the limitations of spoken language, we explored group dynamics by drawing on representation, visualization, and interaction. After providing relevant background information, we emphasize the layered nature of constructed meanings by proposing a series of steps that render this emerging method systematic.

In the main, the article provides an incremental contribution about the usefulness of participant-made drawings, shows the effectiveness of sociograms as a qualitative medium in ethnography, and offers a structured method for analysis and conceptual integration.

Background: The Study Under Consideration

Our ethnography was concerned with practices involved in students' interactions in a university setting (see Ayala et al., 2019). More specifically, it dealt with the transition of learning methodologies from conventional lectures to tutorials and the ideologies and cultural practices that lay beneath the process, such as learning philosophy, assessment of learning, and power relations, and students' strategies of adjustment during this transition. Our main concern was the rather uncritical use of such methodologies—often explored at a theoretical level and through result-oriented approaches—which led us to analyze the complexities of interactions in the tutorials from a bottom-up perspective. Most accounts of these aspects in university settings are often based on quantitative scales of acceptance, evaluating self-learning in reference to learning goal attainment resulting from each approach (Holen, 2000; Nieminen, Sauru, & Lonka, 2006; Venturelli, 1997). There has long been lip service to the analysis of interactions in higher education contexts, and more importantly, how a methodological change such as this implies transference of power. Our research stressed the dimension of power as the driving force of the transformation of the curriculum and the way this dimension is constructed.

To examine the topic of concern, one of the listed authors had a two fold involvement: as a participant observer and as a tutor. Aside from regular observations as the tutorials unfolded, we also interviewed the students, individually and as a group, encouraging them to speak of what such change in the learning methodology was about. The contents of the interviews, although insightful, tended to focus on dominant discourses of the benefits of self-directed learning, likely a result of the power asymmetries between tutor (researcher) and students (participants), and yet giving a hint of otherwise loose ends about more controversial topics, such as the performance of the tutor in the view of the students. Crucial for the present discussion, this challenge brought into discussion whether to substitute the interviewer or introduce some nonconventional tools that would enable a more open dialog. The challenge with switching interviewers would have been the difficulty in rapport building; therefore, the latter seemed a more meaningful solution. By using the prompt, "How do you see the tutorial? Could you please draw how you see it?," the students were given paper and coloring pencils and requested to provide their response through an illustration. Additionally, they were asked to complete a survey about their likes and dislikes regarding their classmates both in work setting and in social setting. The answers provided were later digitized to construct an automated sociogram that was eventually contrasted against researcher-produced interaction diagrams based on observations he recorded in the field diary.

Toward the end of the fieldwork period, we had collected a voluminous amount of ethnographic records: observational and reflective notes from a yearlong period, the corpus of individual and group interviews, corporative documents that colleagues made available to us, along with a number of schemes, maps, and drawings. However, a method was necessary—partly in response to the inconsistencies we found in textual information we generated and also partly in response to the uneasiness with the methods of visual analysis that were available by the mid-2000s. At best, they did not specifically allow for the analysis of materials that were different in nature within a single process. And at worst, they offered a deterministic, overly simplistic "cross-check" procedure, which has

been largely criticized elsewhere (Denzin, 2010; Fielding & Fielding, 1986; Moran-Ellis et al., 2006).

When Nonconventional Methods Are Useful

Ethnography involves conceptualization and meaning making within the theory–data interplay that develops from the fieldwork experience. Such interplay implies that the researcher constructs a continuous process of revision and adaptation of techniques and strategies deliberately as data emerge. In this section, we discuss the ways the two nonconventional techniques involved in this method—the drawing and the sociogram—were useful as visual data.

Drawings: Seeing Your Thoughts

Drawings are not new in qualitative research (see Gilbert, Fiske, & Lindzey, 1998; Guillemin, 2004; Myers, Saunders, & Garret, 2003; Palmberg & Kuru, 2000; Tay-Lim & Lim, 2013), but in sociology, drawings are both an underused resource and an insufficiently theorized tool. To a large extent, a drawing reflects representations of experiences that take place in social life (Kearney & Hyle, 2004); it offers a wide range of data that otherwise would be difficult to access only by observing and interviewing people, as it is often the case in ethnography (McCoy, 2008). In the study under consideration, drawings helped fill a number of gaps.

We encountered a major problem concerning trust building with one particular participant, resulting in research outcomes that one could label as "failed interviews." Failing to succeed the course in which the observer participated as a tutor, the student/interviewee became hesitant toward the interviews, and despite her initial willingness to participate, she backed out of several scheduled encounters. Eventually she attended once but was doubtful, even irresponsive to certain matters, such as what being a "failed" self-learner meant to her and her view on the tutor/researcher's performance in the tutorials. From her demeanor, it was inferred that she found the transition from "unsuccessful student" to study participant difficult. This lack of access only allowed us to explore surface layers of the interview subject. Seeming at first sight trivial data, because of the lack of structure and consistency, that interview in fact highlighted the need for an alternative language—the drawings produced by herself and other classmates and sociograms reflecting group interaction (both techniques applied previously during a group interview) used for elicitation and collaborative analysis. The method proved effective several times in similar situations thereafter. The fact that the drawings eventually allowed a participant to switch contexts and take on the role of research participant thus became a fruitful way of contributing to the ethnography. Methodologically, at least three elements mediate here: (a) the participant's representation of the group experience expressed through an alternative language, (b) the visualization of the participant herself as depicted in the drawings, and (c) the mutually constructing relation between interaction and representation.

We deliberately opted for using drawings instead of photos as a means of addressing the challenge. Whereas the photographic tradition as a means of understanding and presenting cultural realities is long standing (i.e., Pink, 2013; Schwartz, 1989), the ethnographic value of a participant-made drawing in this case was outstanding. Despite not seeming the "ideal participant" at first sight, our interviewee appeared to feel comfortable while drawing, adding, and removing elements and features into and from her drawing spontaneously. Furthermore, she distorted the image and created an utterly unexpected allegory of the tutorials from her particular standpoint (Figure 1). As she drew, she expressed (and visualized) a clearer representation of the group interaction. Did this picture reflect surface layers only? It would not seem to be so. This ethnographic register opened a completely new analytical path that resulted in further problematization of the group culture and its internal rules at much deeper levels: Her drawing was a metaphor of the tutorial as a soccer match, with the tutor dressed as a referee penalizing a player's misconduct with a red card.

Having gained insights through this metaphor, this landmark made a turn in the way of approaching and producing data, which enabled more coherent connections among the disparate field notes. This result can be understood with reference to Leonard and McKnight (2015, p. 2) who explain that images "bring to the fore memories, ideas or social worlds that may easily be missed, misinterpreted or seen as unimportant." By using this particular drawing as an elicitor, one participant stated:

> You see? [eyes wide open] This is exactly what I mean! There were three subgroups here: those leading the group, those who were led, and some others doing little for the discussion. And you . . . you're the referee, the one who has to regulate the game, according to her. Me, of course, I had to be penalized because I was very frontal, they didn't like me being honest about what they didn't do. It's like that; some guys here were kind of free riders.

In another drawing, it was represented what had remained as a taboo issue—the rather poor performance of some of the participants (far right in Figure 2). During the interviews, this subject was generally avoided or spoken of only indirectly. Once again, the language of the image, conveniently, prompted a discursive shift.

The plasticity of the drawings brings it into a privileged meaning-making place. And although it can be argued that photographs can also reflect subjective realities—as in the movement named "participant photography" (Allen, 2012)—drawings helped us bridge a hermeneutical link between the researcher and the participant, as they were constructed, assembled, modified, and retouched freely and genuinely *by* the participant, instead of *with* the participant. This offered the necessary plasticity to express herself. We thus obtained a register of what the participant saw, felt, and thought from their particular conception (Figure 3), insofar as the image provided a new version of reality. Through the drawing, we not only

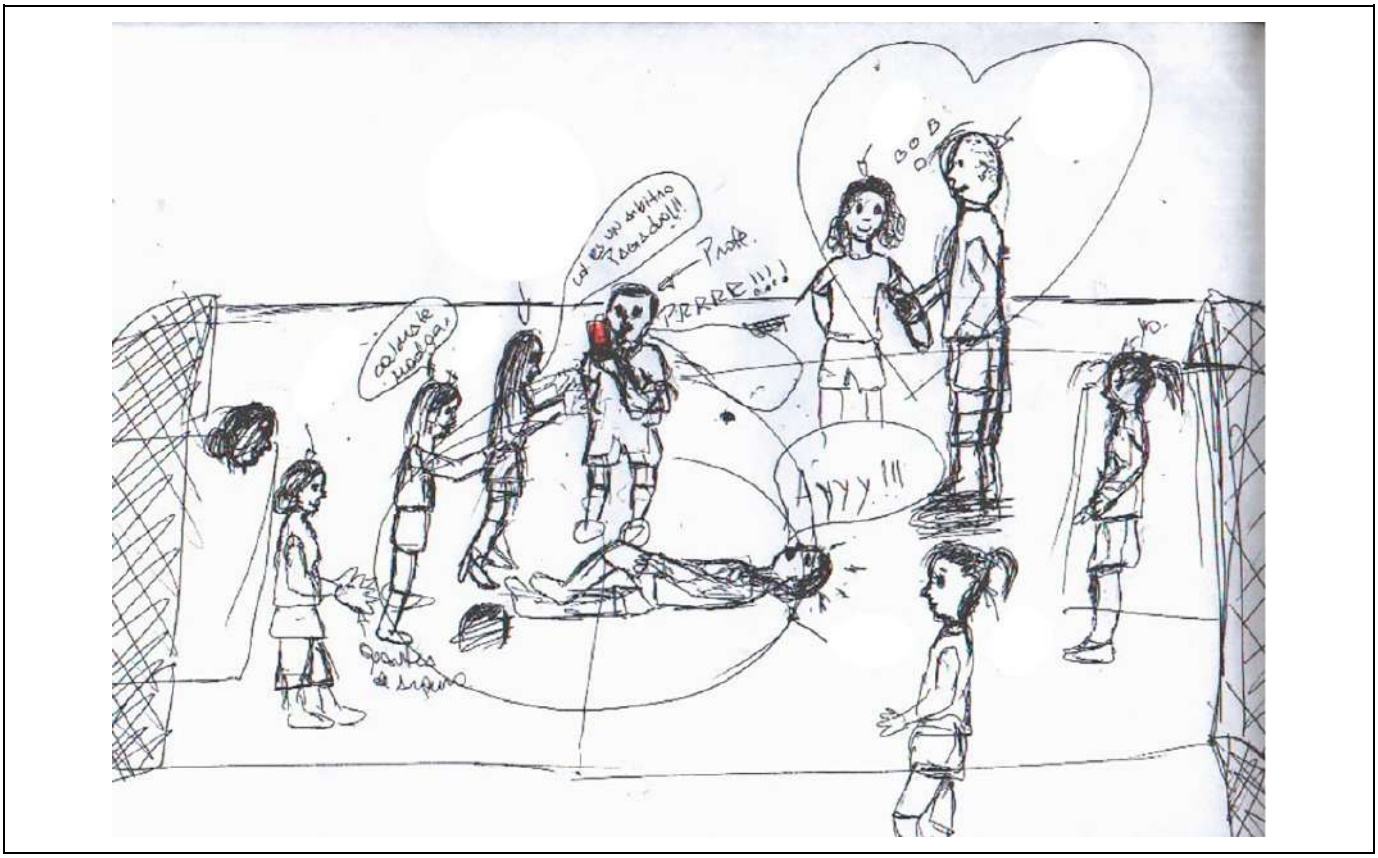

Figure 1. Ethnographic register: Participant-produced drawing. The red card is the only colored object in the picture.

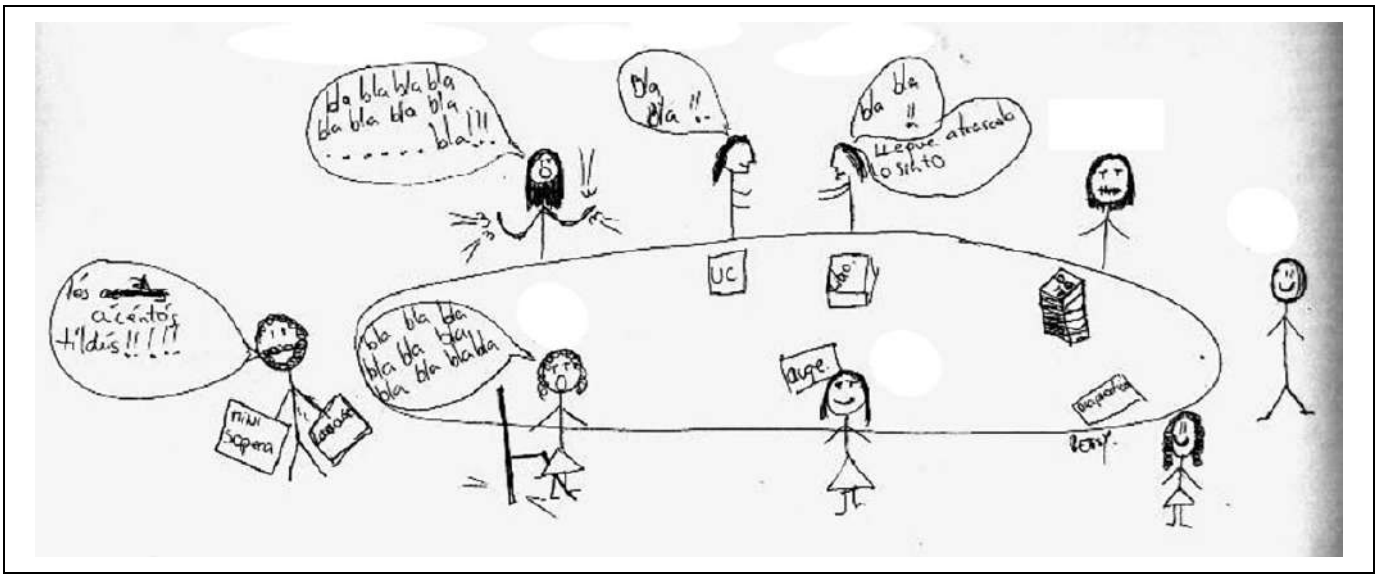

Figure 2. Ethnographic register: Participant-produced drawing.

learnt about the participant's expectations, memories, and fears but also experimented with the methodological power of images. The linguistic flexibility enabled a shift away from power imbalances between researcher and researched that verbal representation so often betray (Harper, 2012; Leonard, 2006; Leonard & McKnight, 2015; Pink, 2001, 2013).

When confronted with the drawing in question, the other participants felt that they also had another piece of information

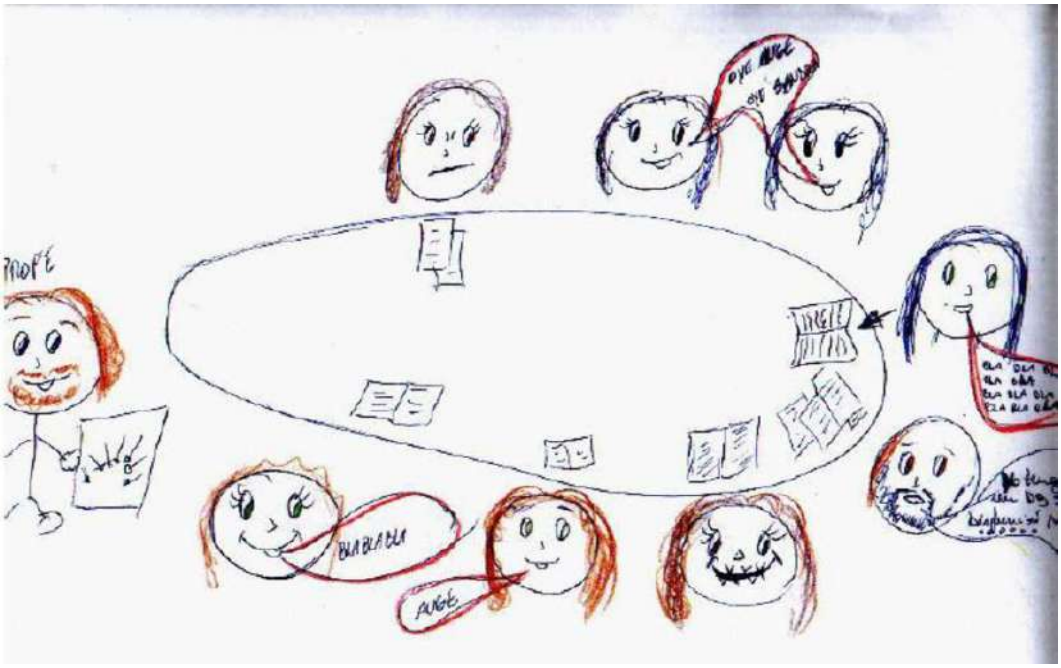

Figure 3. Ethnographic register: Participant-produced drawing. Students understand that the tutor's records translate into grades.

to communicate. The drawings were again used as memory triggers for collaborative discussions (Kearney & Hyle, 2004). This was done by contrasting the pictures with the content of previous interviews that focused on dominant discourses. Nevertheless, it was important to keep in mind the focus on group interaction and the discourse shift as the participants visualized the representations.

In subsequent meetings and interviews, participants were amazed by their own drawings, as if seeing the drawing again with the benefit of a time lapse helped them to better understand what they had been thinking at the time of drawing and also realize their "unrecognized insights" (Donnelly & Hogan, 2013). They also felt much more engaged with and open toward the interviews, filling in significant information that had been previously omitted (i.e., the way the evaluation culture forces their participation in the tutorials and how unspoken internal rules of the group worked). Similarly, using the drawings during group interviews prevented the group discourse from developing around a set of dominant ideas. This process eventually provided a more nuanced representation of the tutorials for the research project.

In summary, drawings operated as an *alter* language to communicate representations in a very plastic fashion, and by visualizing the drawing, it offered more possibilities for self-expression. Drawings facilitated an access to the symbolic, one that articulates what we do not have words for, be it because interviews may raise questions of topics we do not normally think of or because we have not fully conceptualized the experiences being researched. Spoken language is, of course, more articulate than thought. Yet, it presupposes an ability to use it accurately enough in a way that captures and conveys thought with precision and clarity, and it implies an awareness of the way words may be interpreted by the interlocutor.

Sociograms: Graphing the Social

Sociograms are more commonly used in social research, yet very seldom approached from a qualitative perspective. Although these diagrams of interaction are somewhat different in nature, we gave them a similar treatment to that of the drawings. There are, nonetheless, some differences to bear in mind. Unlike drawings, sociograms are the result of *collective* viewpoints, where the answer of a participant to a questionnaire about preferences is a fragment of the whole. In that sense, the resulting image cannot be attributed to a single participant, which is important when contrasting discourses against visuals. Similarly, once the questionnaire has been answered, the sociogram cannot be modified by the participants, so that they have less control over the result. Another difference is that the sociogram typically derives from close-ended questions, which gives less chances for expression, while the control remains largely on the researcher's hands, especially in formulating the questions and the way that can be answered.

However, Umoquit, Tso, Varga-Atkins, O'Brien, and Wheeldon (2013) highlight that the terms diagramming and drawing are often used interchangeably, which suggests a close epistemic proximity. They provide a useful definition of a diagram: a type of (nonverbal) graphic communication able to simplify complex ideas. Copeland and Agosto (2012), in turn, refer to diagrams as "visual matrices" or "relational maps" that illustrate the conceptual distance between the participant and other people or objects. This definition was meaningful to our

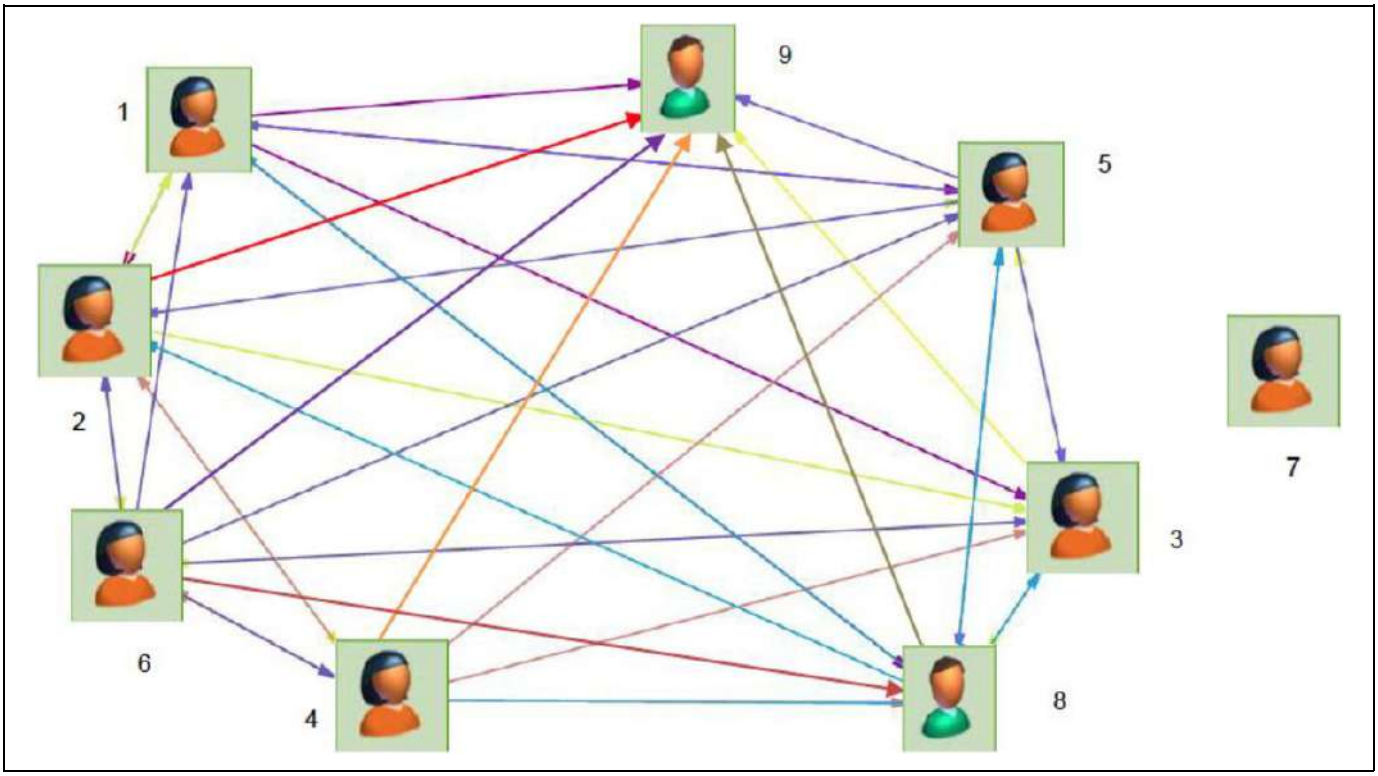

Figure 4. Sociogram for work.

analysis, as we needed an intelligible record of the symbolic dimension of the tutorial at different stages of the fieldwork. For example, in an early stage of our study, the sociogram worked as a net that showed personal relationships, affections, conflicts, and hierarchies that did not seem evident to the observer. The sociogram thus became a means of being aware of "what was going on" in the tutorial and enabled contrasting the researcher's impressions and field notes with the participants' views. During the data gathering process, a series of sociograms (Figures 4 and 5) may also be remarkably valuable for analyzing group dynamics and translating them into a tangible set of data.

Given the powerful position of the observer, one of the difficulties we encountered was that the participants' desire not to be labeled as a "problematic" or "dysfunctional" group. Social skills were one of the aims of the tutorials. Toward the end of the fieldwork experience, the participants expressed that the sociogram was a smoother way to express their opinions concerning their classmates. In their view, words may have felt too personal and potentially hurting. The resulting net was consistent with the notion of "conflicting teams" depicted in one of the drawings (Figure 1) and at the same time uncovered inconsistencies in the grades they assigned to one another on peer evaluation sheets. While their grades for social skills were relatively high and even, the sociograms helped us access that which initial interviews were unable to capture. This opened another window for further exploration of the effect of individual behavior on group dynamics, as surfaced in these interview excerpts where the interviewees' narratives are reflected in and reinforced by the sociograms:

> [looking at a sociogram] Actually, I kind of expected this result (. . .) I don't want to sound egocentric, but I can see that people tend to rely on me [as in the sociogram]. I don't know, perhaps I should let them do the job without me.

The following one was quite theatrical in that the interviewee was faced unexpectedly with the bitterness of social rejection—the realization that people had, eventually, opened up about "the elephant in the room." She only learnt in that very moment how the others had assessed her behavior (see also Figure 4):

> [regretful voice] Well, we can see here [sociograms] that I was like . . . alone [. . .] One can see who's friendly and who isn't [. . .] , people's likes and dislikes for work [. . .] and for socializing [. . .] we choose to work with people we like . . .

Similarly, sociograms helped identify dyads and triads within their relational net, as well as their dynamics they created in the patterns of interaction. With this information at hand, it was easier to plan the interviews and to structure the information. This, too, favored visualization and representation.

Although sociograms are often regarded as a sociometric technique (Hogan, Carrasco, & Wellman, 2007), from our standpoint, two arguments can be set forth. Firstly, quantitative tools within a qualitative study may provide a reasonable

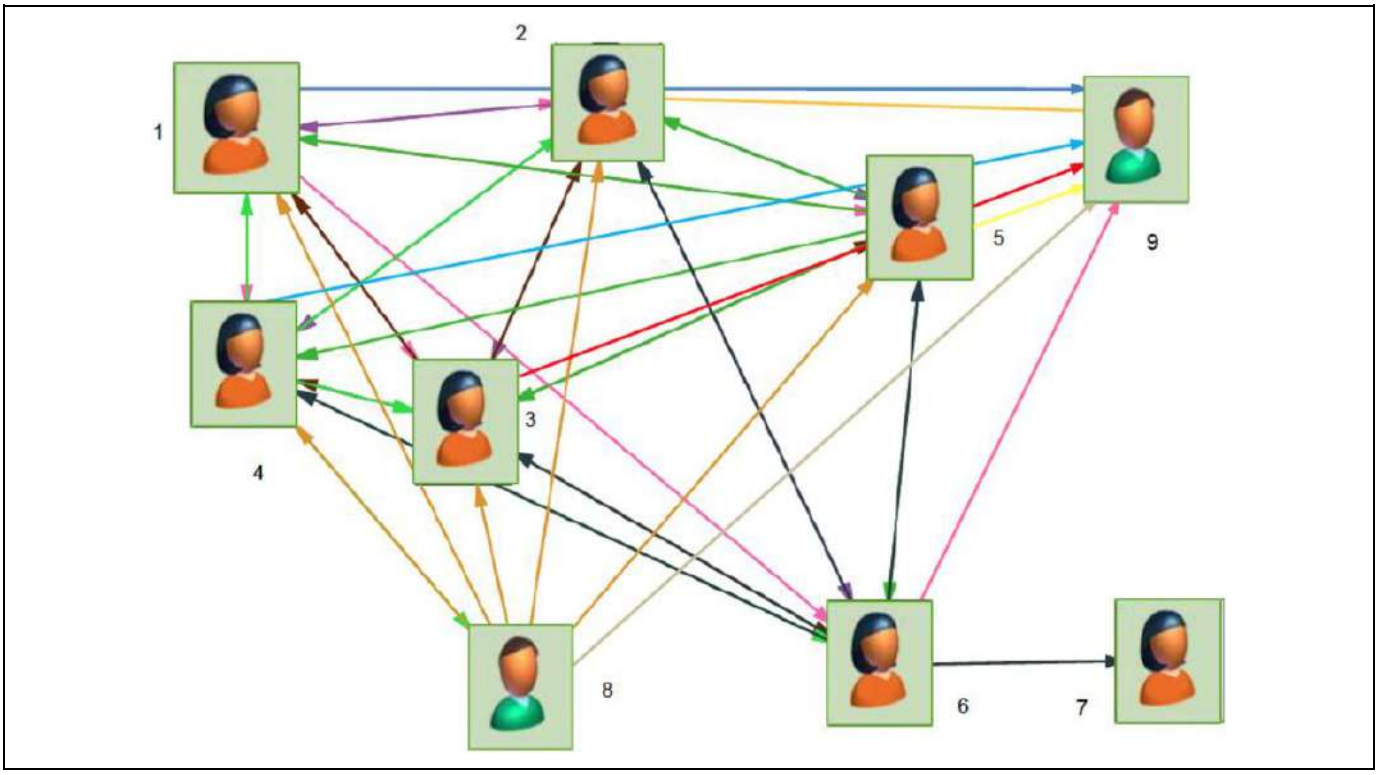

Figure 5. Sociogram for socializing.

solution for specific research problems (Morse, 2005; Morse, 2016), as it is the case in identifying internal networks in a given group. For example, one may use the diagram as a point of reference in exploring cohesion or segregation of a group (see Figures 4 and 5), or to develop a series of diagrams so as to register the evolutionary aspects or the outputs of a given process, or even to weigh up whether the participant observer has been accepted by the group as an insider. References to the dynamics of the group, in fact, surfaced in a discussion about one of the sociograms:

> I think once formed, our dynamics were very uniform—same participants talking, leading the tutorial, everyone sitting on their same seats, having kind of the same discussions each session, like routine, you see? Not boring, but routine after all.

The second argument is that the nature of the data source, either qualitative or quantitative, depends largely on the type of question that motivates its use, and more importantly, the standpoint from which the ethnographer approaches the research question. Yet, the main point here is not to discern how quantitative or qualitative sociograms are, because that depends on the type of information one extracts from them. And, as we will show, sociograms can be analyzed as images.

Nevertheless, the fact that drawings and sociograms as nonconventional methods hold a very low scientific status within disciplinary cultures (Cooper, Glaesser, Gomm, & Hammersley, 2012) is very telling of the lack of a systematic method. This problem made our data seem nonorthodox, difficult to present as a serious and trustworthy fieldwork outcome, and eventually a piece of data that was open to biased interpretation and problematic to integrate and analyze through a traceable process. In light of recent developments (Leonard & McKnight, 2015; Packard, 2008; Schyns, Tymon, Kiefer, & Kerschreiter, 2013; Tracy, Lutgen-Sandvik & Alberts, 2006) and the present experience, this idea may thus be revisited. In fact, problems may arise because of researchers' lack of familiarity with data sources that are not typically ethnographic, because of how well or how poorly visuals are used, and because of the availability of an appropriate method for a qualitatively oriented analysis. In our method, the analysis moves in a nonlinear way from the corpus of the interviews and field notes, to the drawings and sociograms, as if blending the latent content of words and images in an iterative process, thus bridging data that are difficult to articulate. As Farnsworth and Boon (2010) put it, this combination expands "method's sensitivity." The images uncover the untold, while the words define the "how," the "how much," and the "why" of an image. In what follows, we present a structured method to deal with this problem.

The Method

Generalities

Our method comprises a sequence of steps, each designed to bring the researcher closer to the multilayered representations of group interaction by tuning in different aspects of textual and

visual data. While part of the analysis is undertaken by the researcher alone as they go through the theory–data interplay, a significant portion necessitates the active engagement of the participants. The views of the analyst are not explicitly brought into the process, making it clear that the account is produced from the perspective of the participants, though keeping in mind that any form of participation as a participant observer does have a role in the construction of the group dynamics. We note our own social positioning as lecturers/researchers in relation to the students/participants, our own views on the research subject and the nature of our relationships during the events being studied.

The bases of the method lie in the authors' work on classroom interaction in higher education, beginning in 2006. The effort to develop a systematic method to combine textual and visual data was undertaken in collaborative discussion over a period of about 10 years. The work has been presented in a number of conferences (i.e., Ayala & Koch, 2007; Ayala & Koch, 2009; Ayala & Koch, 2012; Koch & Ayala, 2012), where we were advised to publish the method, and many insights from those colleagues and journal editors have helped us rethink and refine our approach—up until then it had been a process that we always did and talked about but never wrote. Originally, the method picks up on the classic work of Krippendorff (1969) on combining sources in the analysis of imprecise contents that most data convey, that of Blumer (1969) on the constructed nature of social reality through the symbolism of human interaction, and that of Charmaz (2006) on inductivism in producing middle-range theories. Although in different ways, these works emphasize the importance of intended meanings as something different from manifest meanings, both now understood as constructions. More recently, however, the method draws from the need of procedures for organizing and analyzing visual data more specifically (Pink, 2001, 2013).

Our method is centered on a set of basic questions: What is done and by whom, what happens and why, and what does that mean? These framing questions are not meant to categorize or quantify the content of images but rather to approach them in light of the observations, interviews, and other materials. Having reviewed those materials, we examine the pictures carefully several times, first looking for pieces of data that are echoed in the images and then the reverse order looking for pieces of visual data that are echoed (or not) in the other data. We tend to place more emphasis on the drawings because we aim to infer results from the alternative visual language. The prime interest here is to deconstruct discursive realities while doing the analysis. We draw openly on other procedures of content coding, notably constructivist grounded theory (Charmaz, 2006), and although analyzing text is more prescribed a technique, it is the constant contrast between text and image that is different. And the process is different in that it looks purposefully on resonance, "presents," and "missings."

There is an inherent sociological interest in our method and we strongly emphasize visualization (Becker, 1995; Becker, 2002; Knoblauch, Baer, Laurier, Petschke, & Schnettler, 2008). It vindicates the status of images in a disciplinary system dominated by textual information, where nontextual sources had been systematically considered inferior and silenced. It is also similar to existing approaches in that it advocates the expansion of the boundaries of our knowledge system, stimulating in the process sociological imagination. And in that underneath those interests lie a basic question: What can images tell us about society?

Furthermore, our method adds to classic visual sociology in at least three aspects. We do not treat images as a cultural production, on the macrolevel at least. The emphasis and the way in which the method developed purely respond to the particular methodological challenges we encountered. Similarly, and although we do not aim at widening the (artificial) gap between visual sociology and "textual sociology," it is fair to acknowledge that, since our method uses images, many of its traits fit Pauwel's (2010) classification of visual approaches in sociology and are as such applicable here.

The Specifics of the Method: Procedures

The specific analysis varies across research studies and depends to some extent on the fitness and quality of data with respect to the problem of interest. Nevertheless, the method would follow six stages that are recurring, overlapping, and flexible but still distinct.

Step 1: Contrasting sources. The first reading of the data is concerned with variations. We contrast information both within data from single participants and across participants, a process that renders discursive and nondiscursive variations clearer. The need for different types of data arises from the idea that personal views may vary and co-occur (i.e., reformulation, second thoughts, spontaneous contradiction, etc.), leading to a more nuanced representation of reality. As recorded in excerpts from interviews with a participant, "That's how I see the interaction, nobody is gonna change it," and then in another interview exploring a classmate's drawing, "I never thought of our group that way, but it makes perfect sense" (Ayala, 2010). Jotting down notes, registering the first impressions, underscoring what seems peculiar, these are all helpful "do's" to start off with before moving on to more intricate analysis. For now it is important to gain a sense of the main ideas contained in the text and the images and how they weave together.

The flow of ideas through the data can be traced in a manner akin to watching somebody walk into a crowd and follow their journey to see where they finish or disappear, and then repeating this process with a different person. Our minds focus on how the journeys differ, what exactly it is that is different, and what the possible variations are. This step is designed to make the researcher familiar with the contents of the data more purposefully.

Step 2: Visualization, memories, and interpretation. For this step to work, the aid of the participants in a second sitting is needed; this time the focus is on data generated by themselves, notably images. As detailed in the example, the analysis of a given

picture might begin with the hypothetization from differences, contrasts, gradients, and ranges, both within a single visual and among a series of visuals. In this second sitting, the differences between representations become more evident, which in turn enabled a richer coding process due to the wider contrast.

The use of visualization during this second round of interviews operates as a memory trigger and an elicitor of information. It also has an important function in our methodology, namely that of assisting the interpretation process. The interviewees must participate in the analysis—we intentionally avoid proposing an a priori interpretation of the sociograms and drawings, which would be unjustifiably deterministic. The focus here is upon the view of the participant, who is interviewed while visualizing a sequence of sociograms, his or her own drawing and those of other participants. It is also useful, during this phase, to have a set of broad questions at hand. Examples of these may be, what did you want to tell with this drawing? Could you tell me more about that? Earlier the importance of the nature of the interactions was outlined, as this is a method originally designed to analyze group dynamics. Regarding interaction, one might want to start off with the most "exemplary" participant or the most "striking" drawing and then choose a contrasting case. In our study, we identified an advanced student who had a lot to tell and then we moved on to the most silent one in the group, who in turn drew the most theoretically startling image. Afterward, we identified other distinct cases, the ones who moved the group dynamics forward in other ways (i.e., those who constantly shared life experiences or promoted a sense of humor).

It is a constant feature of qualitative analysis to challenge coherence and consistency. Our method does the same, but not just yet. The present step is meant to open analytical possibilities in the understanding of representations in ways that facilitate the coding process, which is the next step of the method.

Step 3: Doing coding and generating hypotheses. The next step focuses in on coding and recurrences. The researcher interrogates data and proposes hypotheses and in the process generates a more focused type of annotations in the form of codes. We find it easiest to begin by using very mundane codes, which are later discarded in favor of more conceptual ones; coding may result in the need to go through the data several times as more insights, questions, and hypotheses emerge. One might prefer doing this by hand, using the printed corpus saved in plastic sleeves so that it can be tagged with flags or colored pens and then changed easily without wearing the text. If working with a large corpus, it may be wiser to use a specialized software or online platform to filter and retrieve the tagged pieces more easily. This will also make it easier to organize them using the tags and put them next to each other to compare them.

Nevertheless, at this stage, the coding is approached with an open-minded attitude. We bracket what we already know about the subject and keep this knowledge at the back of our mind while exploring the data to be able to propose various hypotheses. By now we should have, too, an intimate knowledge about the data as explored through the initial broad questions, as explained above, which gave us a sense of variations. The coding itself, tending to be general in nature, reflects variations and possibilities. Once all the materials have been coded, we go onto more specific codes, depending on what the research problem is.

The reason for coding is to sift relevant pieces of data from the initial corpus and in so doing obtain condensed data through reduction. It is crucial at this point to listen to the audio files while reading the transcript text, for although *the* most widely used medium in qualitative research, text is the result of a transliteration process, and this process alone cannot always fully capture the meaning of what is said by the participant.

So far, however, this does not look like a coding process that differs from similar methods. What contrasts it to many styles of qualitative research is one additional move: the integration of images into the analysis of text and sound. Here, images are not processed through a procedure that is partly separate from the main source, where images are to be added in a report as supporting evidence of a claim. Images are central to our analytical method. They receive a similar treatment to that of text by using elements of inductivism. The researcher codes as many portions of the image as necessary—be they persons, objects, colors, depth, sizes, backgrounds, allegories, and so on—as if they were passages of interviews. Those portions are pieces of information after all. In fact, different elements of a single drawing in our case were coded with tags such as "power," "control," "competition," and "rivalry," as were areas of the sociograms with tags like "density," "preference," and "task." The researcher then continues to develop conjectures about participants' representations and verifies the adequacy of these conjectures by connecting the codes of the images with the codes of the text until patterns begin to form. The coding and recoding of pieces of data, now integrating both types of data, continues alongside further formulation of questions and hypotheses insofar as the analysis progresses.

Other relevant materials can be treated in a similar fashion. We resorted to grading sheets and corporative documents to explain certain behaviors, particularly concerning students' practices of peer evaluation. In the statistics, for example, we used codes like "peer evaluation," "dispersion," and "expectation," which served later on to contrast numerical information against discourses and images. Depending on the necessities of the research, researchers might also want to incorporate other materials, such as blueprints, maps, catalogues, photographs, paintings, mock-ups, sketches, charts, diagrams, flowcharts, websites, and whatever other visuals may be pertinent to the case.

In doing the coding, asking oneself questions and trying out hypothesis, the text can serve to interrogate visuals. But it is often the other way around because visualization tends to act as a prompt in a much more effective, and sometimes provoking, manner.

Step 4: Confronting participants against the data. This step brings the analysis back into relationship with the participants. It

offers a way of explaining discrepancies and enhancing consistency as it revisits loose ends, unasked questions, and remaining hypotheses. Regarding the integration of sociograms and drawings into the analysis, there is a sense in which this method relies heavily on the increase of the ethnographer's level of involvement with the research participants, just as the success of using these devices reflects the participants' level of confidence to make their mind speak. Confrontation, therefore, is a step that we leave for a very late stage, once trustworthiness and rapport are guaranteed. Obviously, in some sense, all analytical steps involve some form of confrontation between pieces of information and interrogation of the sources. Here, confrontation is oriented to divergent, unclear, or confusing answers of the participants, and the researcher would want to see evidence to dispel doubts—to a reasonable extent—by using the participants' own explanations.

The aim cannot always be to diminish contradiction or divergence but to add these nuances to the argument and, whenever possible, to offer a perspective on why it is so. When used judiciously, confrontation is analytically powerful, though not foolproof. That is why we would be more cautious when looking for discursive coherence, especially considering that answers are limited by the participants' boundaries of the understanding on the subject and of the ability to articulate representation in language. Thus, it is wise (and ethical) to identify the point upon which confrontation might become pointlessly forceful. Again, some questions asked at a calm pace may be of help. A question we used in our research may serve as an example:

> Do you remember last time you mentioned honesty in peer-evaluation? Look, I found this grading sheet and I'd need your help to understand the low statistical dispersion in the grades . . . And this drawing, too, may seem to tell something about the assessment.

The interviewee needed some time to examine the material and to think about it and make sense of the disparities; also because however motivated, interviewees will not want to sound inconsistent and, even less so, dishonest. After some reflection, she provided an answer that pointed to a conflict of values that arose when grading peers' performance and when the students strove to find a good balance between giving negative feedback and maintaining collegial support. Having no longer any chance of modifying her grades, the neutral position of the researcher/tutor was most reassuring for the participant in opening up about these matters. Additionally, fruitful confrontation is a form of collaborative work; therefore, we would avoid openings such as "But you said that . . . " in favor of more indirect ones such as "I felt/I had the impression/I thought it was more like . . . ," which sets the tone for a more horizontal encounter and prevents the participant from adopting a defensive position.

As illustrated in the example, two sources were used to interrogate a discursive construction: sociograms and drawings. This is not always the case, since confrontation can simply involve contents of interviews, either of one participant alone or doing cross-check with somebody else's. Equally, while contrasting data, observational notes can be interrogated, so as to confirm, refine, or discard the impressions registered on the field diary or to put recorded behaviors in perspective.

Step 5: Refining coding. This step offers a way of rereading the data to refine the codes. The codes themselves are organized into larger categories with a view to developing an understanding of the research problem as it bears on the question being raised. At this point, we have analyzed how group interaction develops and is transformed into representations, having visualization as the prime medium to recall memories, elicit information, interrogate discourses, and control for coherence. Without suggesting that using images is an end in and of itself, once it is decided to use them, they become a central device. Refining the coding thus relates inevitably to the images' centrality. In so doing, we now look for general patterns that will contribute to providing an answer to the problem. But the price of establishing what is general is more often than not to filter out the bits that do not fit the patterns. Researchers will therefore need to ponder the choices and make decisions in regard to conceptual integration. Asking oneself what part of social reality is being accounted for may be of great help in overcoming the discomfort. In our study, many codes were discarded for fitting neither the patterns nor each other, while others were rethought and relabeled (i.e., "cheating" became "value conflict" and "world of the tutorial" became "expectations").

Step 6: Constructing an answer. In the final step of the method, having gone through the data at least 5 times (contrast, visualization, coding, confrontation, and refinement), once memos, arrows, flags, and tags are no longer dominating the scene, it is time to tie up what has been learnt about the case in a meaningful answer to the research question. This process is, at its heart, a composition of an argument in light of the new knowledge. In looking back to the research question, several other questions may arise, which may be worth considering in the discussion of the research process. Eventual questions may be, what is the concrete evidence we have to support our claims and how consistent is it or how do we know that which is being claimed. Since this is an inductive process, it might be the case that the initial research question and the aim of the study need to be reformulated or adjusted. Often times the initial questions are posed only as a way to begin exploring what we do not know will find. For in this case, both the question and the study aims continuously evolved from a primitive form insofar as new insights were formed from feedback throughout the entire research process.

While any attempt to building a systematic method introduces some degree of structuration of the analysis, the method does not in any way seek to restrict the analyst to a mechanical one-way sequence of procedures. Using this method is not just about joining the dots, following one step slavishly and then moving on to the next. In analyzing data, as in constructing it, one must constantly reflect on whether the procedures and choices help to understand the way others construct their

worlds. The essence of the method is to expand the boundaries of the analysis, and in so doing, the proposed steps are not analytically discreet. They tend to cover more or less the tasks and even overlap. Accordingly, the analyst is not bound to this sequence of steps; in some cases, one may need to repeat certain procedures, develop substeps, or go backward, giving the method—and by extension the researchers themselves—enough flexibility to adjust recurrently the created process. Recurrences occur most often when access to the field remains open, so that the analysis can be further refined while it is needed. Nevertheless, it is reflection that acts as the driving force of the method, necessary in the initial choice of cases, participants, and techniques, in redirecting the procedures as new insights and questions arise, and in the abstract conceptualization for drawing conclusions.

Evaluating the Method: A Note on Quality Assessment

Having explained the way our method works, it is equally important to provide insights into how to assess it. Expectedly, our methodology raised questions toward the final stage of the analysis, while moving from codes and categories to concepts. The criticisms ranged from the "infantile" character of drawings in scientific communication to the objectivity issue. Similarly, one might comment upon the sociograms as a statistical construct. As for assessing the quality of the analysis, however, we focus more on the process than we do on the products and outcomes.

When stripped of their infantile appearance, drawings still make for sound epistemic richness that ethnographers can invoke to produce accounts such as the one we, and others, have. Likewise, sociograms are used here as a "picture" of interpersonal interaction. The focus should thus be upon quality. Assessment criteria are issues of unceasing discussion in qualitative research (Corbin & Strauss, 1990; Duneier, 2012; Glaser & Strauss, 1967; Weed, 2008), as reflected in the, largely overcome, "criteriology project" (Schwandt, 1996). However, the criteria have moved into more flexible and contextually situated standards (Tracy, 2010). Otherwise stated, they have become referential canons of evaluation, enriching the research process instead of constricting it. This premise was central to developing a method from early drafts and, more pointedly, from the very idea of proposing visual materials as part of a systematic method of analysis.

Likewise, the method emphasizes reflection on the theory–data interplay at this stage. If we have come this far in using the method, evaluating it implies an honest judgment of the construction and processing of the data and the intricate practicalities involved in such a process. As Duneier (2011, p. 10, emphasis in the original) puts it, this equates to "engaging in practices that reassure our readers that they can trust; they know *how* they have been convinced [of what we write]"; he continues, "Our goal should be to institutionalize methods that make it normative for us to be as up front as possible about how we have achieved our effects." Gaining a substantive understanding of group interaction was our primary aim. Therefore, standards such as worthy topic, rich rigor, sincerity, credibility, resonance, significant contribution, ethics, and meaningful coherence (Tracy, 2010) were crucial in this process. Further discussion helped translate these standards into the particularities of "creative" qualitative methods on at least two levels: the private process of analysis as undertaken by the research team and the public accountability of our work as communicated to the larger community of educators and researchers. In evaluating the method on these two levels, an active decision to translate standards of quality into decisions, procedures, and techniques is necessary.

Even if we still are to defend the objective nature of the process, Kirk and Miller (1986) and Shapiro (1997) illuminate these matters. Objectivity, they suggest, is but a result of the confrontation of ideas and the consensus of those who research, as opposed to that view of objectivity as a set of static, demonstrable facts. Like most qualitative methods, if not all, ours is about the construction of an understanding, and accordingly creation and consensus are key to it. It is adequate then to evaluate the extent to which consensus has been reached, reflecting on whether the series of decisions in analyzing image and text conjointly are aligned with the researcher's philosophical affiliation and evaluating whether the construction of meaning arises from the study as a creation that explores the unknown.

Conclusions

Drawing on interaction, representation, and visualization, this method offers a novel approach to integrate nonconventional images into ethnographic research. Specifically, we have made the case for drawings and sociograms and illustrated their usefulness by reporting on a case study where they increased richness and diversity and helped overcome major challenges in an ethnographic study. While these devices can also expand plasticity, language, and imagination in doing analyses and building theory, they may complement a more comprehensive toolbox for new understandings insofar as they are used judiciously. We introduced a six-step method for analyzing participant-made drawings and sociograms as elicitors of information and integrating them into field notes and corpus of interviews to enhance the analysis. It would be meandering to imply that these steps occur sequentially and in this particular order, since in practice much of the process of qualitative analysis has no clear-cut distinction between sets of tasks. This structuring nevertheless renders the method systematic.

As sociology experiences a growing openness toward innovative ethnographic methods in the construction of meaning, the challenges of fieldwork adjustment with nonconventional materials will also grow. Many other questions may arise regarding the quality of the analysis of nonconventional material. However, researchers could benefit greatly from their advantages.

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ORCID iD


Ricardo A. Ayala https://orcid.org/0000-0001-7840-1072

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