

Appendix I

Summary Table I: comparison between the observation methodologies of a solo researcher

Type of solo observation (with applicable theoretical sources)	Relationship with the field: familiarity, researcher's visibility, negotiation of access	Need for researcher to have expertise in the field	Who speaks in the data?	Who chooses the data?	Reflexivity and saturation	What access is there to the organizing?
<b>Observation without a role in the field, also called passive observation (Journé, 2008) or complete observation (Martineau, 2005)</b>	Familiarity is not essential. There is a need to negotiate access, and where appropriate, the option to film.	Expertise is required to understand the activity.	The researcher makes observation notes during or after the actual observation. Pre-set observation grids may also be used to collect data.	The researcher decides whom, where, and when to observe. He/she can increase the number of perspectives (points of view) for the observation (Chauvin and Journin, 2019).	The researcher has to set up a mechanism that allows reflexivity. Saturation may be reached by increasing the duration of the observation or by observing new actors or new situations. "A well-kept field diary is messy and repetitive. Far from being an epic poem, it lists phenomena, events, attitudes and relationships, and dialogues at their most banal and repetitive. Ultimately, it is supposed to reflect the 'saturation' of the terrain ad nauseam" (Chauvin and Journin, 2019, p. 158 – our translation).	One observation allows access to one flow. Possible observation of multiple flows and their connections if there are multiple observations, but no access to simultaneity. No observation in a spatial dimension. Little access to situated points of view.
<b>Observation with feedback from the observed person (Journé, 2008)</b>	The researcher is highly visible; long observation times may put a strain on the ground. The researcher pays "careful attention"; "The important thing is to be there with the people being observed and to find out from them how they feel" (Journé, 2008, p. 59 – our translation).	The researcher does not need to have relevant expertise and may be "naïve."	The researcher makes observation notes and adds feedback from the observed person. A clear distinction is made between the writings of the researcher and the words of the observed person.	idem	Reflexivity is co-constructed in part with the interviewees, who validate or modify the interpretations.	One observation allows access to one flow. Possibility to observe multiple flows and their connections in the case of multiple observations; but no access to simultaneity. No observation in a spatial dimension.
<b>Observant participation (Martineau, 2005; Soulé, 2007)</b>	Very familiar; the researcher already plays a role in the system. No strain on the ground.	The researcher needs expertise to participate.	The researcher makes observation notes after the actual observation.	The researcher decides whom, where, and when to observe. However, the data obtained depend on the researcher's position and role inside the organization. The researcher is "confined" to a single role (Chauvin and Journin, 2019).	The researcher has to set up a mechanism that allows reflexivity (distancing, in particular). Saturation may be reached by increasing the duration of the observation.	Access to the observed actors' located points of view. In-depth access to a flow (understanding of the researcher's own activity) and connections with other actors from the researcher's point of view. No observation in a spatial dimension. In-depth access to a situated point of view; little possibility of access to other points of view.

Continued

**Summary Table 1:** (Continued) comparison between the observation methodologies of a solo researcher

Type of solo observation (with applicable theoretical sources)	Relationship with the field: familiarity, researcher's visibility, negotiation of access	Need for researcher to have expertise in the field	Who speaks in the data?	Who chooses the data?	Reflexivity and saturation	What access is there to the organizing?
<b>Participant observation (Lapassade, 2002): the researcher is integrated into the group but only up to a point, without becoming a colleague (Martineau, 2005)</b>	A high degree of familiarity is required, and so is a role in the system being observed. However, it may be a naïve researcher occupying a role that did not exist before. The researcher becomes invisible over time. No strain on the ground.	The researcher may have the relevant expertise or be naïve, since he/she relies on explanations provided by those under observation.	The researcher makes observation notes after the actual observation.	The researcher decides whom, where, and when to observe. Data selection may depend on the space that is occupied.	The researcher has to set up a mechanism that allows reflexivity (distancing, in particular). Saturation may be reached by increasing the duration of the observation.	Possible access to several flows depending on the vantage point, which can change.  Possibility to choose one's place and, thus, one's point of view on the organizing.  Possibility to increase the number of situated points of view.
<b>Solo ethnography (Van Maanen, 1991, 2006, 2011; Watson, 2012; Beaud and Weber, 2019)</b>	Solo ethnography may or may not combine direct observation with other methods (e.g. interviews) (Beaud and Weber, 2019). Strong familiarity develops over time due to the long period of time spent on the ground. The researcher takes part in the life of the observed environment and may have to "live with" (Van Maanen, 2011). The need to negotiate access and to find the relevant "entry point" depends on the ethnographer's questions and opportunities that arise (Beaud and Weber 2019).	Expertise is not a requirement at the outset; it develops over time. He/she then writes descriptions, which are the most important materials before theorizing begins.	The researcher makes detailed observation notes (during or after the observation) and keeps a field diary. He/she then writes descriptions, which are the most important materials before theorizing begins.	The researcher decides whom, where, and when to observe. Data selection may depend on the space in the observed environment. The researcher writes down what he/she observes and feels (relationship with the observed environment, cultural dimension).	The researcher has to set up a mechanism that allows reflexivity. The researcher draws on his/her various writings, which are specific to the ethnographic method and make them easier to take a step back. Saturation may be reached by increasing the time the researcher spends in the observed environment or by increasing the number of interactions (establishing contact with other actors, inserting themselves more often into situations tied to the central issue).	No observation in a spatial dimension.  Possible access to several flows depending on the vantage point.  Possibility to choose one's place and, thus, one's point of view on the organizing.  The situated point of view is that of the researcher and not of the actors.  No explicit desire to access the spatial dimension.

Continued

**Summary Table 1:** (Continued) comparison between the observation methodologies of a solo researcher

Type of solo observation (with applicable theoretical sources)	Relationship with the field: familiarity, researcher's visibility, negotiation of access	Need for researcher to have expertise in the field	Who speaks in the data?	Who chooses the data?	Reflexivity and saturation	What access is there to the organizing?
<b>Mobile (Sheller and Urry, 2006; Novoa, 2015), multi-sited or global (Marcus, 1995), or multi-situated (Grosjean and Vidal, 2017) ethnography</b>	Strong familiarity. The places where the investigation is carried out are selected according to the phenomenon observed; the ethnography can take place at several sites. Need to negotiate access to the study of the phenomenon, which may lead to (a need to negotiate) access to different sites.	If it becomes necessary to define the different study sites <i>ex ante</i> , expertise may be required to do so; however, the discovery can also be made as the observation progresses or as the phenomenon is revealed.	The researcher makes detailed observation notes (during or after the observation) and keeps a field diary. He/she identifies the different locations of the observation and writes descriptions, which are the most important materials before theorizing begins.	The researcher selects the data according to the observed phenomenon, which develops at several sites.	The researcher has to set up a mechanism that allows reflexivity. The researcher draws on his/her various writings, which are specific to the ethnographic method and make them easier to take a step back. Saturation may be reached by increasing the duration of the observation, and/or by searching for new "sites."	The researcher moves around to gain (asynchronous) access to several flows in several locations. The situated point of view is that of the researcher and not that of the actors. Desire to have successive access to the different sites where the observed phenomenon develops.
<b>Process-centered ethnography (Jarzabkowski et al., 2014; Van Hulst et al., 2017)</b>	Strong familiarity. The researcher focuses on the following organizational processes and tracking actors, interactions, and artifacts in both time and space. The researcher may be mobile or position himself/herself in a specific location to observe mobility.	The researcher has to be an expert or find "informants" to explain the processes.	The researcher makes detailed observation notes (during or after the observation) and keeps a field diary. He/she identifies the different locations of the observation and writes descriptions, which are the most important materials before theorizing begins.	The researcher, whose goal is to follow the processes observes the organization in a temporal dimension at the level of micro- or macro-processes.	The researcher has to set up a mechanism that allows reflexivity. The researcher draws on his/her various writings, which are specific to the ethnographic method and make them easier to take a step back. Saturation may be reached by increasing the duration of the observation.	Desire to access several flows, which are deliberately analyzed from a temporal perspective (of the processes) but are not simultaneous. The researcher can more or less choose their place and, therefore, their point of view on the organizing. The situated point of view is that of the researcher and not that of the actors. No explicit desire to access the spatial dimension.

Continued

**Summary Table I:** (Continued) comparison between the observation methodologies of a solo researcher

Type of solo observation (with applicable theoretical sources)	Relationship with the field: familiarity; researcher's visibility; negotiation of access	Need for researcher to have expertise in the field	Who speaks in the data?	Who chooses the data?	Reflexivity and saturation	What access is there to the organizing?
<b>Flashlight strategy (Journé, 2005, 2008): during the observation, the researcher switches between actors for the sake of a phenomenon or to stay with a storyline</b>	The researcher follows the thread of a storyline (Journé, 2005, 2008) or a practice. Average familiarity. High visibility.	Researcher has to have moderate expertise to set up the data collection mechanism (good knowledge of the terrain, but he/she can discover the storyline as it plays out).	The researcher makes observation notes.	The researcher selects the data but follows the development of a storyline; he/she moves from one observed individual to another according to this development.	The flashlight strategy is accompanied by other forms of observation (Journé, 2005): systematic observation of the actors and a detailed observation over a limited period of time. Saturation may be reached by increasing the access to the storyline (interviews with actors involved up to the point of saturation, reconstitution of the storyline over a long period of time). "The objective is that of the relevance of the data collected, sometimes to the detriment of completeness" (Journé, 2008, p. 81 – our translation).	Possible access to several flows and their connections within the context of following the storyline. Access to organizing insofar as it relates to the storyline.
<b>Shadowing: following a person as they perform their day-to-day activities (Mintzberg, 1970, 1973; Sclavi, 2007; Czarniawska, 2007; McDonald and Simpson, 2014)</b>	Familiarity not required. The researcher may ask the observer to comment on his or her actions. The researcher is visible.	Possible to be a nonexpert; explanations are obtained from those being observed.	Essentially, the observed person is the one who speaks, and their words are recorded; sometimes, the researcher's words about the situations experienced and/or the spaces crossed – or even the emotions felt – are added.	The observed person decides where he/she goes and when. The researcher follows and does not have complete control over the data collection, since he/she follows the observed person.	Reflexivity can be co-constructed in part with the observed person, if there are moments of joint inquiry to improve understanding. Saturation may be reached by increasing the number of shadowings carried out (with different types of actors) or extending the duration of the shadowing.	Access to an actor's situated point of view and to their contribution to organizing. Time-based understanding of a flow contributing to the activity.
<b>Spatial shadowing: following a person and taking into account the space they pass through (commented walk) (Grosjean and Thibaut, 2001; Augoyard, 1979; Rault-Croset &amp; Borzeix, 2014) – "close to walking interview" (Jones, Bunce, Evans Gibbs and Ricketts Hein, 2008) or "go along interviews" (Carpiano, 2009; Kusenbach, 2003)</b>	idem	idem	idem	The observed person decides where he/she goes and when. Doing so allows him/her to identify his/her link to space (crossing borders invisible to the naked eye; identifying emotions linked to the crossing of a space, etc.).	idem	Access to an actor's situated point of view and their contribution to organizing. Time-based understanding of a flow contributing to the activity. Possibility to analyze the space as a constituent resource of the activity.

## Appendix 2

### Sources of inspiration for shadowing

A few key authors inspired the shadowing method by using it in a pioneering way to access the reality of an activity from the point of view of the actors experiencing it: Mintzberg in his observation of managers (Mintzberg, 1970, 1973) and Sclavi (1989) – cited by Czarniawska (2007) – in her study of Bronx residents. McDonald and Simpson (2014) also point out that the shadowing method had already existed empirically in an older format in many (particularly, anthropological and sociological) traditions in the social sciences. In the 1950s, several researchers followed managers (Walker, Guest and Turner, 1956, cited by McDonald and Simpson, 2014) in a manner that was similar to the one Mintzberg would later adopt. Vásquez (2013) emphasizes the diversity of contexts, in which the first shadowing experiences took place and, in particular, the role of shadowing in training programs in medicine, education, and social work and recalls the “empathy walk” proposed by Lewin and cited by Schein (1999) (Vásquez, 2013, p. 71). One of the forms of conducting shadowing mentioned by McDonald (2005) is shadowing as a learning experience.

Another characteristic of shadowing, which is intrinsically linked to its mobile nature, is its capacity to further develop the relationship between activities and the spaces, in which they take place or that support them. As a result, shadowing is also closely related to research methods developed in disciplines concerned with the relationship between actors and their living and working spaces – in particular, geography and urban sociology. Thus, in urban sociology, under the label of “commented walks,” we find methodological proposals to analyze the relationships of different types of actors using a space, namely residents and urban space (Augoyard, 1979; Grosjean and Thibaut, 2001; Thibaut, 2001) or travelers in railway stations – organizations that are strongly rooted in their spaces (Bayart et al., 1997; Lévy, 2001); the fact of “walking” is said to allow observation that is specific and space-centric (Thomas, 2010). In geography, “walking interviews” (Jones, Bunce, Evans, Gibbs and Ricketts Hein, 2008) and “go along interviews” (Carpiano, 2009; Kusenbach, 2003) are used to identify individuals’ relationships with geographic space. These different methods are close to spatial shadowing (Raulet-Croset and Borzeix, 2014), which highlights the relationship with space.

## Appendix 3

**Summary Table 2:** comparison between the observation methodologies of multiple researchers

Type of multiple-researcher observation (with applicable theoretical sources)	Relationship with the field: familiarity, researcher's visibility, negotiation of access	Need for researcher to have expertise in the field	Who speaks in the data?	Who chooses the data?	Reflexivity and saturation	What access is there to the organizing?
<b>Team ethnography (Erickson and Stull, 1998; Creese et al., 2008): several people in the same place or around the same phenomenon</b>	Need to negotiate access to the field; gradually developing a strong familiarity; invisibility of researchers	Possibility of being a nonexpert; understanding of what is being observed improves over time; need to find informants.	Researchers write down what they experience (i.e., they make field notes), talk about it among themselves, and may eventually supplement or discuss in writing the notes of their team colleagues. The observation notes do more than just refresh the researchers' memories; they are used for collective discussion and the production of ideas (Creese et al., 2008).	The researchers jointly choose the data collected (observation grid).	The collective is used to produce reflexivity. According to Erickson and Stull (1998), there are three possible approaches: collectively discussing the same event witnessed by everyone; sharing and working on individual observation notes; and holding regular debriefing sessions.  Collective saturation is reached by accumulating data within the team.	Access to the research team's points of view on a phenomenon, a mechanism, or an element of the organizing: the researchers write their analysis collectively. The observed actors' own words are not used.  No access to the spatial or temporal dimensions is sought.
<b>Global (team and multi-sited) ethnography (Jarzabkowski, Bednarek, and Cabantous, 2015)</b>	idem	Researcher has moderate expertise in the phenomenon/ practice observed and takes part (ahead of time) in deciding about the nature of the observation at each site.	Not necessary present at the same time, present together in the same place.  Not necessary present at the same time, not present together in the same place.	Same modes of reflexivity as for team ethnography, with distancing taken into account (sending e-mails, using videoconferencing for debriefings, etc.).  Saturation is reached based on a double dimension: per site (by accumulating data at each site) and concerning the global phenomenon.	Access to the research team's points of view on a phenomenon, a mechanism, or an element of the organizing, the researchers write their analysis collectively. The observed actors' own words are not used.  Desire to access the different sites where the observed phenomenon is developing. Simultaneous vision but no timing (broad simultaneity).  No access to the temporal dimension is sought.	

Continued

**Summary Table 2:** (Continued) comparison between the observation methodologies of multiple researchers

Type of multiple-researcher observation (with applicable theoretical sources)	Relationship with the field: familiarity, researchers' visibility, negotiation of access	Need for researcher to have expertise in the field	Who speaks in the data?	Who chooses the data?	Reflexivity and saturation	What access is there to the organizing?
<b>Observatory of the organizing (Rix-Lièvre &amp; Lièvre, 2010; Lièvre and Rix-Lièvre, 2013): an observatory comprising a team of two researchers who have different observation positions and conduct reflexive interviews</b>	Access to the field is not negotiated; for Rix-Lièvre & Lièvre, 2010 and Lièvre & Rix-Lièvre, 2013), one of the researchers is in "observant participation" and has a strong familiarity with the field; the other is in "participant observation" and is integrated into the team but as a naive observer without a preexisting place in the system.	One (expert) researcher's observation centers on organization and the collective; the other (naive) researcher focuses on observing individual practices.	The expert researcher encourages the writing of a collective logbook, i.e., a narrative that traces the collective organization. The "naive" researcher conducts reflexive interviews on practices with each of the different actors.  They are present at the same time (synchrony) but not together in the same place.	The researchers collect the data and make a selection from them for analysis.	Reflexivity through dialogue between researchers, based on the different observation posts.  Reflexivity, in addition to the actors in the field during reflexive interviews.  Saturation is reached by increasing the observation time and the number of reflexive interviews.	Access to the research team's and the actors' situated points of view; collective writing of the analysis highlighting the actors' situated points of view.  Access to the temporal dimension by keeping a diary and building a narrative. Broad simultaneity.  Ability to identify connections.  No access to the spatial dimension is sought.
<b>Diaries: data are collected simultaneously but come from the actors other than the researcher, who recruits field actors (Czarniawska, 2007, 2008)</b>	The researcher asks the actors to write out a schedule of their actions. The researcher is not visible and does not interfere but asks the actor to collect the data based on a grid provided by the researcher.	The researcher has to be an expert in order to construct the data collection mechanism.	Those who are being observed make notes about their actions, how long they take, and moments (schedules).	The researcher tells the actor what to make notes of. The people being observed decide what to write down in the observation notebooks.	The researcher has to set up a mechanism that allows reflexivity.  Saturation is reached by extending the time to collect data or by increasing the number of field actors "put to work" by being involved in data collection.	Simultaneous access to different flows; ability to identify when flows cross each other (connections).  Construction of the researcher's situated point of view, use of the data produced by the participating actors.  No access to the spatial dimension is sought.

Continued

**Summary Table 2:** (Continued) comparison between the observation methodologies of multiple researchers

Type of multiple-researcher observation (with applicable theoretical sources)	Relationship with the field: familiarity, researchers' visibility, negotiation of access	Need for researcher to have expertise in the field	Who speaks in the data?	Who chooses the data?	Reflexivity and saturation	What access is there to the organizing?
<b>Multi-shadowing</b>	<p>Access and agreement for each shadowing are negotiated.</p> <p>Familiarity is not required.</p> <p>Less field fatigue than with simple repeated shadowing.</p> <p>The researchers are visible.</p> <p>The researchers can ask the observed person on the spot to comment on what they are doing.</p>	<p>Possibility to be a nonexpert; explanations are provided by those being observed.</p> <p>Sometimes, the researchers add words reflecting on the situations they have experienced. Depending on the specific research subject, the researchers make notes of their encounters with other actors (crossings) and the places and spaces passed through.</p> <p>They are present at the same time (synchronism), together in the same place at the beginning and at the end but not during the observation.</p>	<p>Essentially, the people who are being observed are the ones who speak, and their words are recorded.</p> <p>Sometimes, the researchers add words reflecting on the situations they have experienced. Depending on the specific research subject, the researchers make notes of their encounters with other actors (crossings) and the places and spaces passed through.</p> <p>They are present at the same time (synchronism), together in the same place at the beginning and at the end but not during the observation.</p>	<p>Co-construction between the people being followed and the researchers (choice of itineraries, answers to questions, spontaneous explanations of the events observed, etc.).</p> <p>Letting the observed individuals decide can be a crucial part of the methodology.</p>	<p>Reflexivity on observations, shadowing through discussions with those being observed.</p> <p>Reflexivity through interactions between researchers at the end of each shadowing episode.</p> <p>Saturation is reached by increasing the instances of multi-shadowing.</p>	<p>Simultaneous access to different flows.</p> <p>Construction of the researchers' and the actors' situated points of view, and an understanding of the activities.</p> <p>Possibility to access the spatial dimension and to consider space as a central part of the activity.</p>
<b>Timed multi-shadowing</b>	<p>idem</p>	<p>idem</p>	<p>They are present at the same time (synchronism and time-measured/-stamped), together at the same place at the beginning and at the end but not during the observation.</p>	<p>The different shadowings have to start at exactly the same time (the research subject has a temporal dimension).</p>	<p>Reflexivity on observations, shadowing through discussions with those being observed.</p> <p>Reflexivity through interactions between researchers at the end of each shadowing episode.</p> <p>Saturation is reached by increasing the instances of timed multi-shadowing (when the research subject has a temporal dimension).</p>	<p>Simultaneous access to different flows; possibility to identify connections between flows with precision, when they cross each other.</p> <p>Construction of the researchers' and the actors' situated points of view, and an understanding of the activities.</p> <p>Possibility to access the spatial dimension and to consider space as a central part of the activity.</p>



## Appendix 4

**Summary Table:** hunting observation sessions

Date	Type of hunt and location	Type of observation
10 November 2012	Roe deer hunt, V. forest, Saint-Hubert ceremony	Initial observation, global observation
9 December 2012	Roe deer hunt, V. forest	Observer #1 shadows Claire Observer #2 shadows Jean
17 February 2013	Roe deer hunt, V. forest	Observer #1 shadows Julie Observer #2 shadows Sabine
1 March 2013	Roe deer hunt, C. forest	Observer #2 shadows Anthony Observer #3 shadows David
5 October 2013	Red deer hunt, V. forest	Observer #1 shadows Bernard Observer #2 shadows Emilie and Michel
19 October 2013	Red deer hunt, C. forest	Observer #2 shadows Henri
26 October 2013	Red deer hunt, V. forest	Observer #2 shadows Annie, Alain, and Antoine Observer #3 first shadows Elisabeth, then switches to shadow Stéphane