

Managing Walking Together: The Challenge of Revolving Doors

Space and Culture
2014, Vol. 17(2) 122–136
© The Author(s) 2014
Reprints and permissions:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/1206331213508674
sac.sagepub.com



Alexandra Weilenmann¹, Daniel Normark^{1,2},
and Eric Laurier³

Abstract

There are a number of mundane technologies which shape pedestrian mobility such as pavements, corridors and stairs. In this paper we focus on the practical implications revolving doors as a technology have for the social organisation of people walking together. Drawing upon video recordings we analyse the observable intersubjective resources produced and used by members of the setting when walking through doors, and the interaction between formations of people as they do this. Revolving doors are turn-taking technologies that challenge mobile formations because the formations need to disassemble in order to pass through the doors, and then re-assemble again on the other side. Using an ethnomethodologically guided approach we shed light on some of the accomplishment of walking together in mobile formations.

Keywords

mobility, mobile formations, video analysis, ethnomethodology, doors, walking

Walking in Mobile Formations

Walking together is not an obscure activity; it is so commonplace that laypersons and social scientists take it for granted. We only tend to notice it when we have a problem with it, for instance, when the pavement is thronging with crowds or when one of the walkers is a small child who keeps wandering off. While being a mundane and often taken-for-granted activity, walking together has become a method that ethnographers have used to learn about both exotic and familiar walking cultures (Ingold & Vergunst, 2008; Lorimer, Ingold, & Lund, 2002; Middleton, 2010; Wylie, 2005).

In this article, we set out to study the work involved in maintaining a mobile pedestrian formation in the face of some everyday obstacles. We are interested in how a mobile unit of pedestrians is produced and repaired by its members. In their classic article on the social organization of walking, Ryave and Scheinken's (1974) analysis directs attention to the methods pedestrians use to render intelligible to relevant others on the pavement whether they are walking together or walking alone. As they note, spatial proximity, direction, and pace are crucial in the production and recognition of "walking-together."

¹University of Gothenburg, Gothenburg, Sweden

²Karolinska Institutet, Solna, Sweden

³University of Edinburgh, UK

Corresponding Author:

Alexandra Weilenmann, Department of Applied Information Technology, University of Gothenburg, Göteborg 412 96, Sweden.

Email: alexandra.weilenmann@gu.se

The requirement of spatial proximity is illustrated by the observations that (a) participants who have lost some proximity will engage in repair work ranging from hurrying or slowing to calling out or later explaining the separation, (b) relatedly, violation of the maintenance of spatial proximity fundamentally undermines the enterprise of walking-together and can be seen as a serious interactional breach, and (c) similarly related, spatial proximity is a requisite for the production of some of the togetherness-bound-activities like body contact and verbal exchanges. (p. 271)

Ryave and Scheinken's investigations into the organization of walking have been taken up by further studies of pedestrian mobility. Not least in Lee and Watson's (1993) extensive report on interaction in public spaces, where they then directly built on the centrality of people both showing that they are together and being seen as together (in transit spaces, see Haddington et al., 2012; for museums, see vom Lehn, Heath, & Hindmarsh, 2001). Their work has also extended into examining other forms of mobility: driving on the motorway (Laurier, 2004), learning to cycle as a family on the roads (McIlvenny, 2013), travelling in elevators (Hirschauer, 2005), and running together (Collinson, 2006).

When walking, groups encounter features that require their walking together to be reorganized, such as a narrow passage, another group of people, someone walking a dog, and so on. There are in fact a multitude of mundane urban technologies such as street poles and crossings (Latour, 2003), street furniture (Schuchat, 2001), and shopping carts (Cochoy & Grandclément, 2005) that all require adaptations of the basic forms of walking together documented by Ryave and Schenkein (1974) and Lee and Watson (1993). This article will focus on the production and recognition work of mobile formations as they move through one such of these public, mundane technologies—revolving doors.

Doors as Challenges for Mobile Formations

Walls are a nice invention, but if there were no holes in them there would be no way to get in or out—they would be mausoleums or tombs. The problem is that if you make holes in the walls, anything and anyone can get in and out (bears, visitors, dust, rats, noise. So architects invented this hybrid: a hole-wall, often called a *door*. (Latour a.k.a. Johnson, 1988, p. 298, italics in original).

Doors are underestimated inventions. The basic functionality of switching between being a hole and a wall was, according to Bruno Latour's classical articles (1992; 1988), complemented with other social dimensions delegated to it, such as force, value, duties, ethics, and so on. Yet we take them for granted and fail to realize how much work happens at them, around them, and through them. Furthermore, there are so many different doors around: public doors, bedroom doors, front doors, car doors, doors with windows, sliding doors, revolving doors. Social actors who are unable to operate doors tend to be immobilized in our society, as any cat or dog will tell you. Donald Norman (1998) has turned a designer's eye on what interaction with doors involves, acknowledging that if we ignore the design of doors it leads to all manner of problems for their users (consider, e.g., how users struggle to correctly identify first time whether the door should be opened by pushing it or pulling it). Our concern turns toward a door as a place to start formulating what is going to happen during and after using the door, after entering or exiting whatever space it connects. Doors, then, are not only devices that we deal with momentarily. They play a part in the larger courses of action that are unfolding when we are entering and exiting rooms, buildings, vehicles, and so on, and are therefore of central concern if we want to understand mobility in public places.

A door is what "makes space habitable" (Metcalf & Ferguson, 2001). Without doors there would not be an outside or an inside; the door separates and connects (Simmel, 1994), and constitutes borders between the frontstage and the backstage of the restaurant (Goffman, 1956). However, the door itself can therefore not be understood as a hole or a wall, it is both and neither; it is a "half-open being" (Metcalf & Ferguson, 2001). Doors are not only in-between inside and outside, quite often they are in-between public and private.

There is a peculiar type of door, which is in a sense open and closed at the same time: the revolving door. While the revolving door is a wall-hole as well, there are a number of obvious differences between a revolving door and the “regular” notion of a door that reformulates many of the before-mentioned problems. Commercially, revolving doors are marketed as opening without exposing the outside to the inside, reducing energy consumption, but also making it impossible or unnecessary to hold doors open, and so on.¹ The design solves the problem of making sure that people close the door after they have used it, something that Latour was concerned with. Revolving doors also simplify Norman’s design problem of showing whether we are to push or pull the door; they can only be pushed. The revolving door is actually several doors; as you open one door another door will be closing behind you.

While doors have received some attention in research, there has been little focus on the practical implications this type of technology have for the social organization of human mobility (though see Conein, Félix, & Relieu, 2013). As Livingston argues, “Getting through a door together consists of intrinsically social phenomena” (Livingston, 2008, p. 208). It is this phenomenon that we want to shed light on, focusing on *the joint action between and within groups of door users*, rather than on the interaction between one door and its user. Taking an ethnomethodological stance, we are interested in examining the observable intersubjective resources produced and used by members of the setting, rather than just examining one individual’s interaction with a physical object. Also, because we aim to make an empirical investigation of walking through doors and interaction between formations of people as they do this, our study is based on video-material of naturally occurring door use (Conein et al., 2013).

As we will see, while the revolving door solves some of the problems its marketers promised it would, it also creates new sets of problems. For instance, it excludes people who are not strong enough to push the door, as well as those with big or long parcels. Also, and this will be the focus of this article, the revolving door poses challenges for groups of people, entering or exiting doors as mobile formations.

Studying Walking Through Doors

The study was conducted at the main entrance of the School of Business, Economics and Law in the University of Gothenburg, Sweden. It is a circular building with a number of doors both revolving and swing, placed beside each other providing the possibility of getting into the building (Figure 1). The foyer and the doors connecting the foyer to the outside world is the scene for our fieldwork.

We first conducted a small-scale participant observation of the doors so that we could understand the various sequences of actions, using the same resources as the order-producing co-present cohort. Because we were part of the setting we participated in, our recognition-work was also reliant on the production-work of people walking in and out of the building. Video recordings augmented our on-site note-taking, allowing us to replay the organization of activities that are normally over in seconds. Also, one of the purposes of the workshop in which the recordings were collected was to experiment with data collection of mobility in public spaces.

Having selected a set of doors to study, we had to analyze the area around the doorway for the purposes of setting up the camera. After some scouting around, we placed it beside a plant with a pillar behind us and were thus already orienting toward the expected flow of traffic to and from the doors. Having made some recordings with the camera in this static set-up, we realized that when the doors became too busy, the crowd itself obscured our phenomenon.² On the second day of the data collection, we filmed from a balcony above the revolving doors, a classic *view from above*. This perspective distanced the camera from the action, importantly from the view from above we did not then have the same access to the production and recognition work as the door users themselves. We did, nevertheless, capture some of the exchange of glances between walkers through the doors.

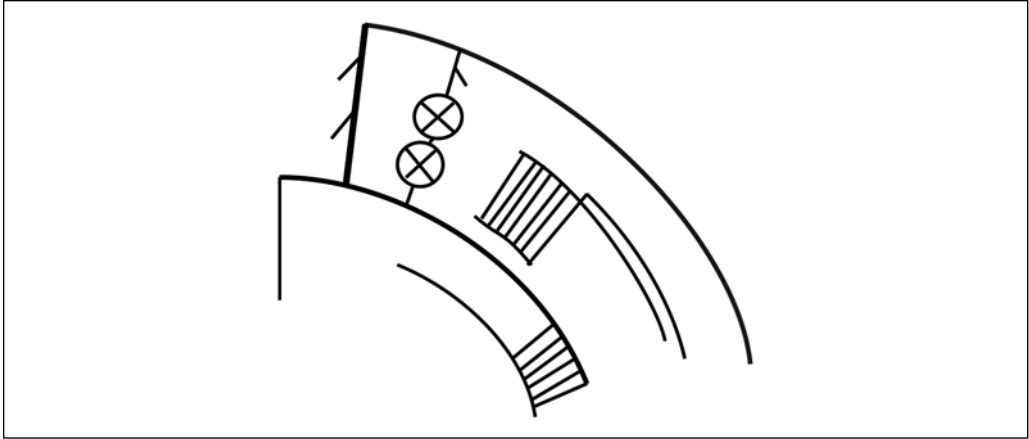


Figure 1. The set of doors and revolving doors studied in this article.

Source: Author.

Our next experiment with the camera followed the mobile subjects' perspectives during their walking out of the door, and we did this through taking turns at walking out of the building, while holding the video camera. Following the trajectory of the walkers allowed us to trace the changing visual perspectives as they passed through the doors. Finally, in a continuing pursuit of the *members' perspective*, we asked people exiting the building to film themselves as they walked out. In this way, we attempted to enroll the participants in the activity of recording the practice. To our dismay, we did not get recordings of the features of walking through doors that lent themselves to analysis. However, this experiment did reveal insights into the disruptions researchers inadvertently cause. The people who carried the camera for us diverged from their groups, opting out of the mobile formations of which they were taking part. In trying to get a perspective on their group for recording purposes, they either went in front of their friends or selected another door than their friends. For the participants, the work of recording the activity conflicted with the work of "doing walking together", as observed in the data collected using other perspectives.

Analysis

In the following, we present video fragments of a mobile formation's practices of walking through revolving doors. Our question was, "What happens when a mobile formation (a group of people), enter or exit through the doors?" The first part of the analysis investigates cases where all members of the mobile formation enter through the *same* revolving door. The second part deals with cases where members use *different* doors. Both these situations involve work in order to keep the flow moving in or out through the door, to avoid collision, and, what is most important for our purposes, to maintain the mobile formation passing through the doors. This section investigates the interactional resources available to get this work done.

Doing Not Walking Together

Below, we will look at a mobile formation consisting of two people exiting through the doors, while ensuring they do *not* give the appearance of walking together. We will show the ways in which doing walking together and doing not walking together differ, which is evident in the work it takes to make it be recognized as different. However, the same interactional resources, such as speed, body orientation, and glancing, are used in both cases.

Excerpt 1—Avoiding potential walking together

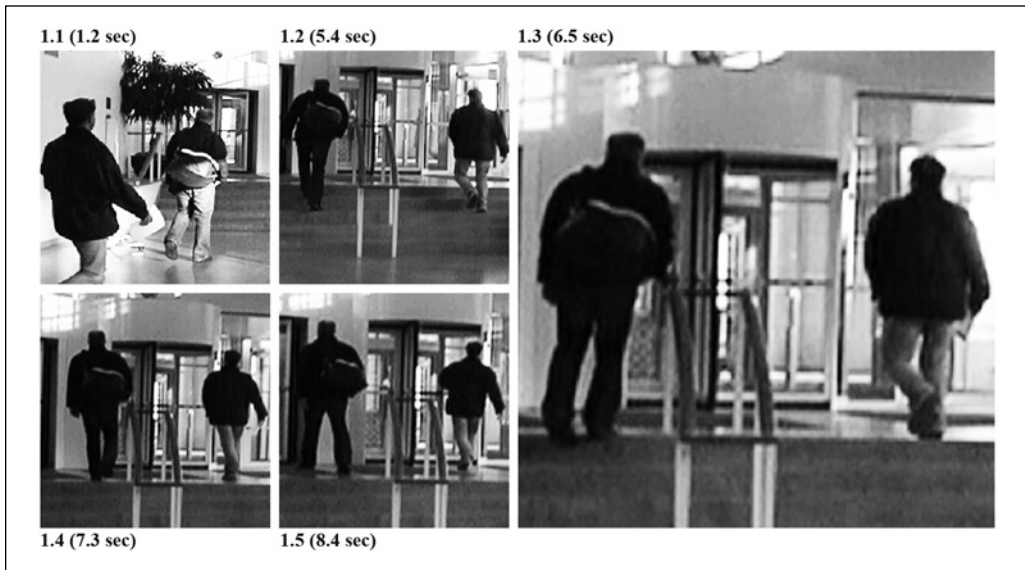


Figure 2. Excerpt 1: Avoiding potential walking together.

Source: Author.

C walks toward the doors, the direction of his body and face indicates that he is heading toward revolving door number 2. Behind him D, catches up, his face is directed to the left of C but he walks toward the right with a substantially higher speed [1.1]. Halfway up the staircase D shifts body direction slightly toward the left [1.2], changing his trajectory from heading toward the regular door to the revolving door no 2. Both C and D reach the top stairs at the same time [1.3] with the same trajectory (toward revolving door no 2). With a shift of center of gravity C turns his left foot to pointing leftwards [1.4] and then swings his right leg around and changes direction toward revolving door 1 [1.5]. They both pass through each revolving door almost simultaneously and leave the building. C uses the automatic door opener for the external doors, and in the distance one can see D passing in front of C as D is walking toward the left and C heads to the right.

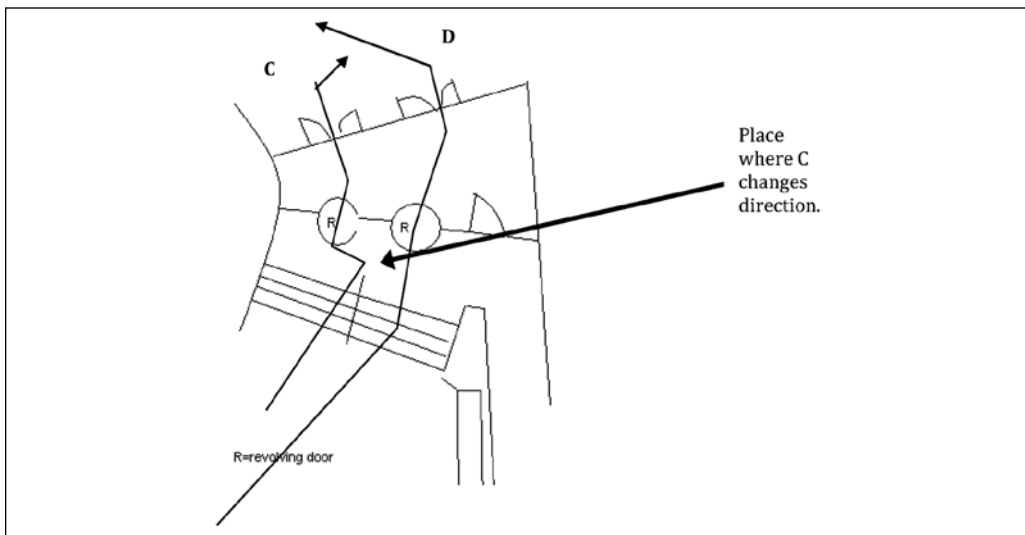


Figure 3. Trajectory through the revolving doors.

Source: Author.

In this excerpt, C and D simultaneously left the building, without participating in the same mobile formation. Their difference in speed was a key resource in their production work of recognizably not being together. Their exit as not together became problematic when they found themselves then recognizably selecting the same door with projectable convergent arrival times. The man with the higher speed continued, while the other had to give way with small shifts of his feet and body. The resources available for solving the problem of same door selection are thus speed, glancing, and bodily orientation, which can then also show visibly selecting another door.

Greater speed implies hurrying, which gains the walker some extra, though contestable, rights (Lee & Watson, 1993), in pedestrian (and other transport) situations. The door problem is an emerging one; the two men do not “see” it and maybe cannot see it from far away, their selection of the same door is not certain until they are close-up. You can select the same door as someone else without it being a problem, unless you will hit it at the same time. As Livingston (2008) has noted, “In seeing that they are heading for the same door, they’re ‘trapped’ in the collaborative production of getting through the door together” (p. 208).

Having shown that there is an effort in selecting doors when *not* walking together, and the resources involved in doing this, we move on to people walking together in mobile formations, and the work it takes to maintain the formation while using the doors.

Reforming the Group

Let us look now at how, having entered or exited the revolving door, the members of the group work to reform the group. The following two fragments show examples of groups passing through doors.

Excerpt 2—Waiting on exiting the door

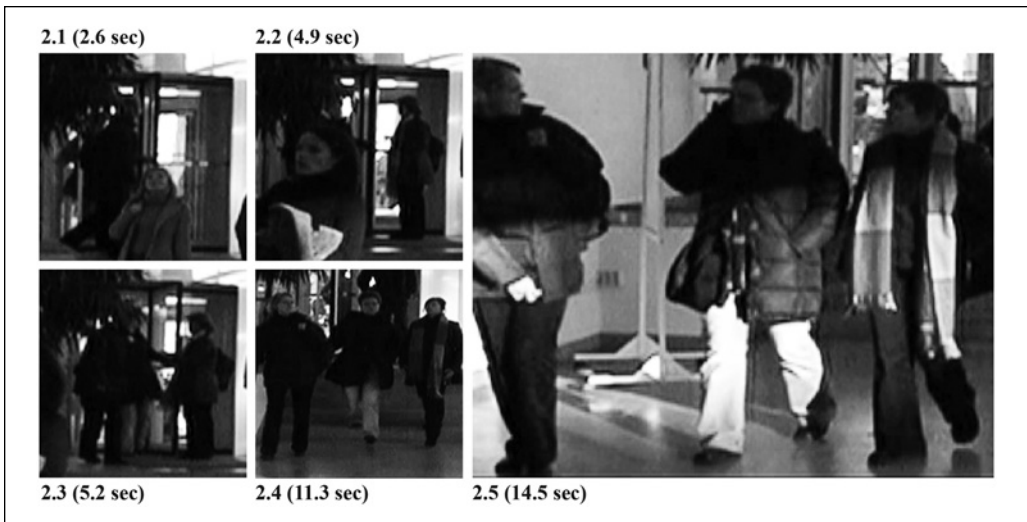


Figure 4. Excerpt 2: Waiting on exiting the door.

Source: Author.

Three women (E, F, & G) enter the building through revolving door 1. E is the first in the group to enter. As soon as she is inside she turns her head to the left, takes one step away from the door while turning her body to the left and then takes one step backwards to wait [2.1]. Thereby she creates a space for the next person entering through the revolving door. F emerges from the door next, turns her head to the right while she takes one step forward and then also stops in front of the door [2.2]. When G, the third

woman enters the building, E starts to move, hunching to avoid collision with the plant. Moving inwards and then down toward the stairs, slightly in front of the other two. E though keeps her left shoulder backwards so that she can turn her face back to her companions and then moves her face back and forth [2.3]. F also turns her body to align it with her direction of walking moving toward the stairs. G reaches the stairs slightly before F but after E. Once F and G are on the last step of the stairs they are both in parallel, and have the same rhythm in their steps [2.4]. F looks at G after leaving the stairs, while G looks back at F and similarly E turns her head looking at F then moving her focus over to G. F also shifts focus and looks at E while E continues to move forward, looking back over her shoulder [2.5].

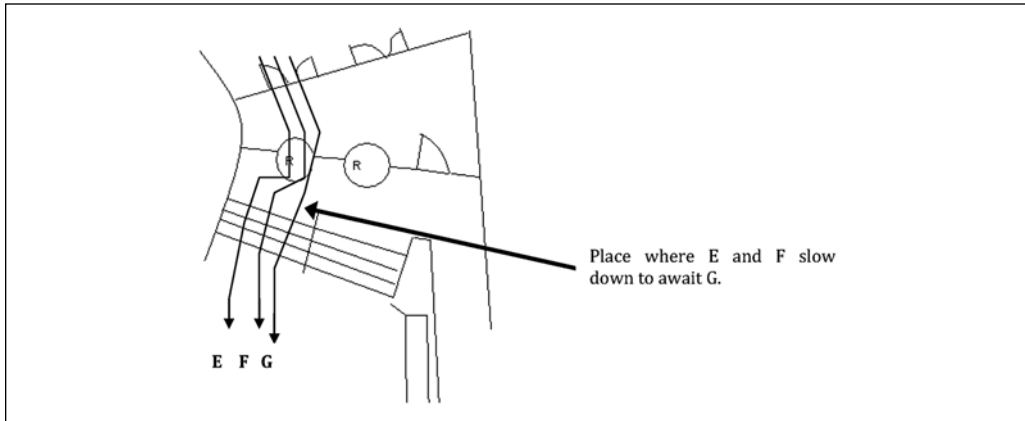


Figure 5. Trajectory through the revolving doors.

Source: Author.

There is nothing apparent in the way the first woman (E) entering through the door looks that makes her recognizable as part of a mobile formation; on the contrary, she looks as similar and different as a multitude of others that enter and exit through the revolving door. Instead it is the situated, embodied, and visual practices that unfold immediately after passing through the door that enables us to recognize her as part of a mobile formation—as a “walking together”. To begin with trajectories through the door, the expected motion on leaving the door is to continue onwards into the foyer. In E’s case, after leaving the revolving door, E stops, takes a step to the side. By her shift in trajectory, E takes herself out of the category of passing through. It is not yet recognizable what new door-relevant category she has entered.

However, her body orientation and glancing toward the door then recategorize her as searching for another who will come through the door and as then potentially with another rather than being up to some other door-relevant business. F then appears through the door and joins E producing a “possibly complete together”. However, they do not then move onward but remain at the doorside, thus making recognizable that there is more for them yet to do at the door.

Finely timed in relation to G’s exit from the door, E then re-embarks on walking toward the foyer. The mobile formation of side-by-side walking can then be reformed, with all members then reestablishing a shared pace and trajectory using the interactional resources already identified by Ryave and Schenkein (1974). There is a degree of looseness in their pedestrian practice; E is walking slightly in front of the others though she maintains her alignment through glances and body orientation, which are also then responded to with glances and adjustment from others in her party. Walking down the stairs (a further minor challenge for walking together) F and G shift their pace on lifting their legs smoothly so that once they are on the bottom of the staircase their rhythm is synchronized.

The door transforms what is a side-by-side formation into another familiar mobile formation—the file (see also Conein, Félix, & Relieu, 2013). Where side-by-side has left, middle, and right

as its organizational positions, the file as has first, second, and third. E on entering and exiting the door has become a first. As a first, she is then category-bound and should wait for the second in the together. F as a second of the three should then also stop to wait for the third. As a third, G need not wait and indeed their responsibility may be to rejoin the first and second with reasonable timing (otherwise he is keeping them waiting).

In the next fragment, a first of a together who exits the door does similar things to show that he is walking but complicating the togetherness work, in this case, he does not stop, but only slows down, letting his friend catch up.

Excerpt 3—Adjusting pace on exiting the door

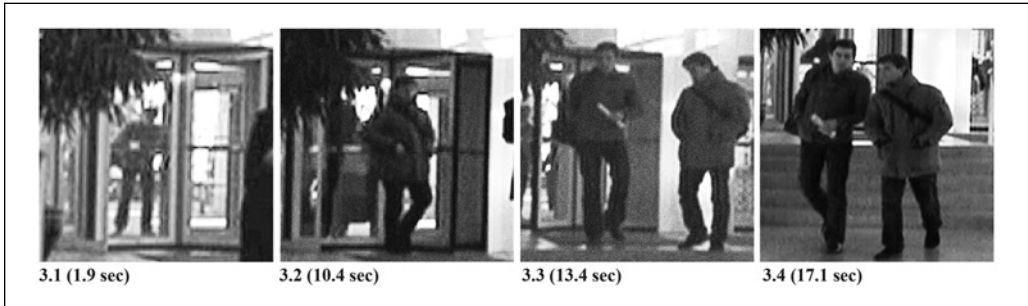


Figure 6. Excerpt 3: Adjusting pace on exiting the door.

Source: Author.

I enters revolving door 1 [3.1]. His face is turned slightly backwards looking over his left shoulder while he starts to walk through the revolving door. H stands behind him waiting for the door to revolve so that he can go through. I exits the revolving door and continues to walk straight ahead also looking straight into the foyer [3.2]. After two steps I tilts his head to the right slightly, with his right shoulder a bit back. I walks slowly while H is exiting the revolving door at this time [3.3]. When H and I reach the stairs they are parallel with each other. I continues with his torso a bit tilted toward his right. The men descend the stairs with their heads slightly toward each other [3.4].

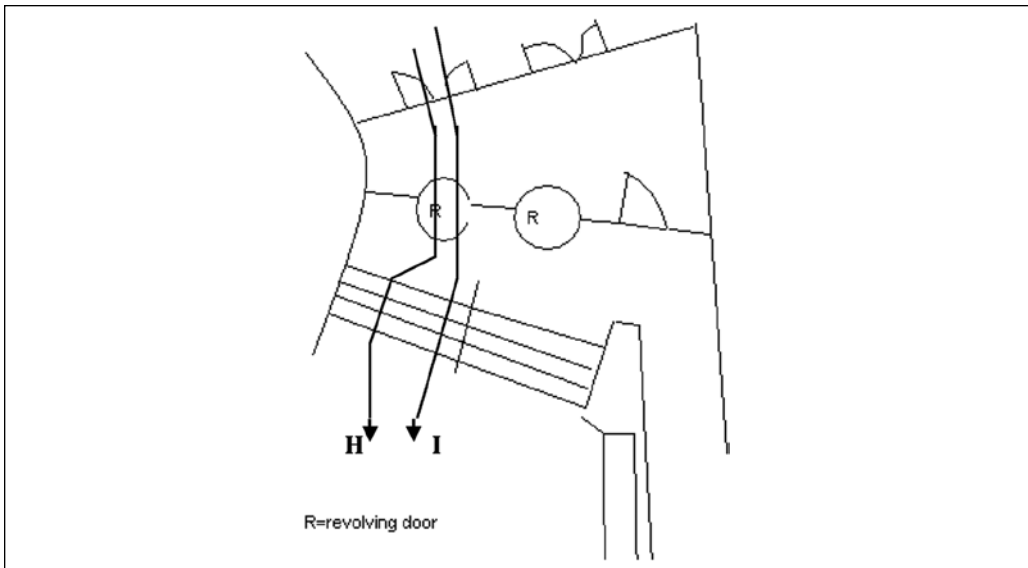


Figure 7. Trajectory through the revolving doors.

Source: Author.

The task on meeting a revolving door for both the group of three and the group of two is to disassemble and then reassemble a side-by-side formation. In disassembling, the side-by-side has to establish what members of their together go first in the file which then also establishes who will be each next person through the revolving door. Conein et al.'s (2013) study showed very nicely how files of pedestrians make their way through a swing door into a department store. Each party shifts through a series of categories. The first as a first becomes the door opener, as they continue to move they then also potentially become a door holder for the next in file. Conein et al. show that routinely they glance backward to see if there is a "next in file" behind them (and this may happen on approaching the door or once they are almost through the door). However, the revolving door precludes one member of the group becoming the door holder for the other(s). These doors are one-at-a-time rather than many-at-a-time because part of their peculiarity is the revolving door's mechanism that chops up files and/or groups into the number of bodies that will fit into its door quarter.

In the two earlier excerpts, the selection of who should go first was not easily accessible, however the reassembly work was. To reform the group, the person who became the first then has to initiate the reassembly work. One way of doing this was by showing that they are "doing waiting" by their bodily orientation and glancing toward the door and the next member approaching. The second excerpt exhibits another possibility: a reduction in pace on exiting and a twisting of the body to make visible an orientation toward another walker that is behind. It may be that this is also an exiting practice preferred by pairs rather than larger groups because of the smaller time that is projected for the entire together to pass through the revolving doors. As those who have ever tried to organize a larger group of walkers the disassembly and reassembly can take a great deal of time.

The two previous excerpts show how the "challenge" of reassembling after passing through a revolving door as a one-at-a-time device that requires filing through is smoothly managed by groups by changes in trajectory, pace, and bodily orientation. However, passing through the door as a mobile formation is not always as smooth. In the following example, a problem occurs when the second walker misjudges the size of the door. As we noted earlier, revolving doors are a one-unit-at-a-time technologies where mobile formations have to analyze what size the door's quarter will fit.

Just before Excerpt 4 begins, J was walking slightly ahead of K, becoming the first and thus also becoming the person responsible for putting the revolving door into motion. What this fragment reminded us of was that this also a further part of peculiarity of the revolving door. It is not closed/open, it is at-rest/in-motion. When it is in-motion, the job of those passing through it is to maintain a reasonable speed. This is something that becomes obvious when children pass through it and try to turn it into a roundabout.

Excerpt 4—Misjudging the revolving door's size

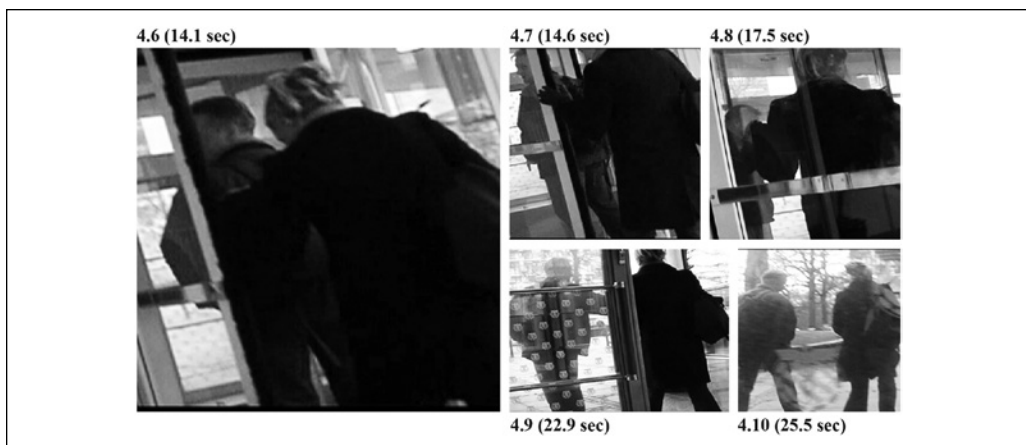


Figure 8. Excerpt 4: Misjudging the revolving door's size.

Source: Author.

J and K are involved in a conversation when approaching the door. K stops in front of the door waiting for J to pass in front of her. She then starts to walk closely behind J as he walks through the door. The door hits her left shoulder and she jumps sideways to her right, slightly backwards to avoid becoming stuck in the door [4.6]. Laughing she says: “I thought it was bigger like that it’s usually ((unhearable)). As she is saying this, she places her left hand on the back door of the revolving door she then steps into the next revolving door slot [4.7]. While J passed the door he looked back over his left shoulder. J stops outside the door, turning his body to the left. Once K finally is out he then walks toward the outer swing door [4.8]. J then opens the swing door. As J walks out in front of K he keeps holding the door handle with his right hand, stretching his arm as well as his upper body and looking back [4.9]. K also touches the door handle with her right hand stretching the arm slightly backwards, but K does not look back. Once they exit the building they continue their conversation while walking side by side [4.10].

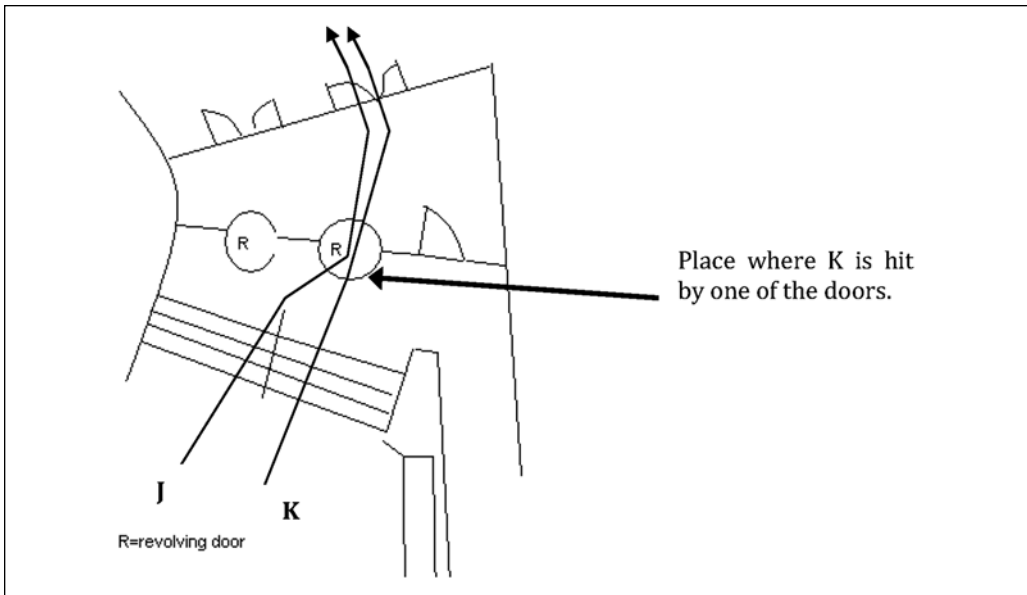


Figure 9. Trajectory through the revolving doors.

Source: Author.

In an effort to continue the simplest form of doing “walking together” through a revolving door, which is to keep the group together in the same quarter of the revolving door, it becomes apparent that K had not closely assessed the size of the quarter of this particular revolving door. From the transcript she accounts for this through using “I thought” to indicate a misperception of the size of the door (on uses of “I thought,” see Bennett & Hacker, 2003). She laughs when the door hits her and continues to laugh as she formulates her excuse. Providing this explanation also works to show that she was not someone who considered it acceptable to be so intimately close to her co-walker, but rather that her actions were based on a misjudgment. For K, the account is part of repairing the mistake of almost getting caught in the door given there are no mechanical repairs that can be done to transform the monstrous technology (Latour, 1992) that is the revolving door.

Revolving doors then require an analysis of the door in relation to the group size, and for larger doors this will mean that a mobile formation can pass through the door as a together. We

see this in shopping malls, airports, and so on, where groups fit themselves as one into the door's quarter. In those sites, we also how certain "togethers" such as a family may be given preference by another group in travelling as a unit in the quarter, while the other party allows itself to be disassembled by the door. One of the things that then also became apparent in this encounter with the door is the local knowledge we acquire of doors in our buildings. Inexperienced users can find themselves in comic struggles with these mundane building technologies. The experienced user of the door through their use will come to know what sort of revolving door it is: whether it takes one, two, or more.

Maintaining the Row-Formation While Exiting Through Different Doors

The above section dealt with togethers using the same door to enter or exit the building. In the following excerpt, members of a row-formation choose different doors. We assume that when losing side-by-side proximity, togetherness can be secured in other ways, especially if there are other available doors also arranged in a row. Using different doors is a way to avoid disassembling into a file while entering or exiting. The group is still split up by doors as one-at-a-time selection devices, but now the togetherness's row-format can be maintained.

Excerpt 5—Using multiple doors to stay in side-by-side formation

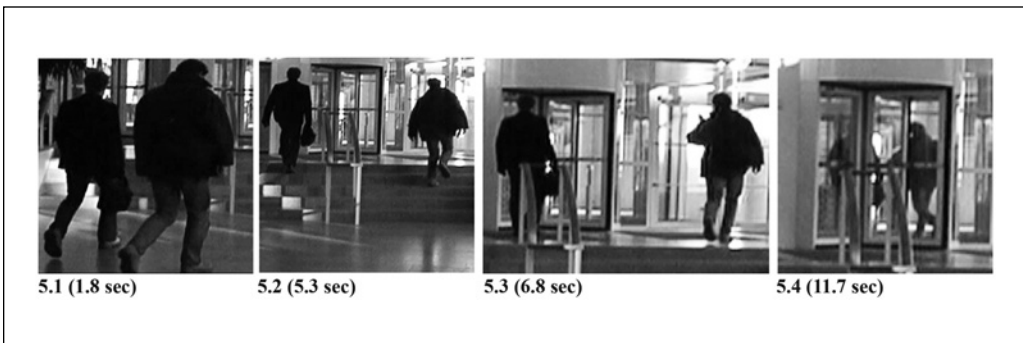


Figure 10. Excerpt 5: Using multiple doors to stay in side-by-side formation.

Source: Author.

Two men, L and M, walk toward the doors beside each other at the same pace [5.1]. The pace is maintained until L reaches the stairs. L's steps become smaller while M speeds up the pace on his way up the stairs, thereby they remain partly parallel even though M has a longer distance to the door [5.2]. L is walking toward revolving door 2 while M is walking toward the regular door to the right. A second before L reaches the revolving door M makes a gesture with his left hand [5.3]. L enters the revolving door slightly before M reaches the regular door, but M passes through the regular door quicker and walks to the external doors before L. Henceforth M also lifts his left arm as to open the external door and subsequently exits though the external door in front of L [5.4]. After exiting the door the two men can be seen outside walking beside each other in the same direction.

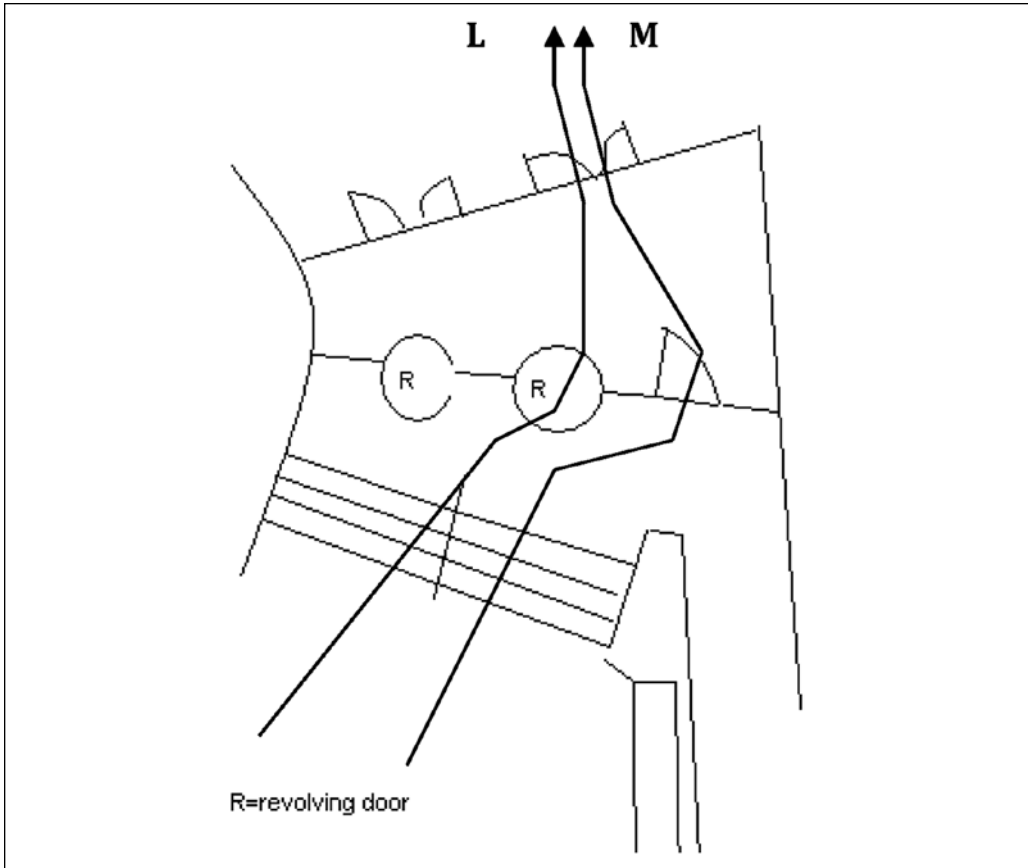


Figure 11. Trajectory through the revolving doors.

Source: Author.

Initially in this excerpt by walking close, parallel to each other at the same high speed, the two men maintain a “walking together” unit. When the distance between the two walkers changes we see, however, that they adjust pace to maintain a side-by-side rather than one or another beginning to establish a potential first or second through a file formation. The consequence of adopting this strategy is that at the doors they have to then select two doors rather than one for the mobile formation. When they select separate doors, it does carry also a mild challenge because the doors do produce a division of the together. More effort is made to use the gaze to then retain their mobile formation (and presumably to monitor position so that like separated figure skaters they can rejoin one another with near perfect coordination on exiting the doors). In fact, reforming the side-by-side arrangement requires a slight acceleration after M is through the door.

Without more data it is hard to be certain, but this may be a traffic-related analysis that leads to this multiple door solution. The absence of other walkers in the foyer or entering from the other side precludes the possibility of then becoming divided and/or out of step by others in the doorways.

A mobile formation engaged in the work of doing walking together can thus use different methods for handling the obstacles that they confront.

Final Remarks on Walking Through Revolving Doors in Mobile Formations

For people doing walking together in mobile formations, revolving doors are a challenging architectural feature that provide useful insights into how walking as a “together” is accomplished. The revolving door is a peculiar door that is never open or closed. It also a kind of mechanically blind turn-taking system, its walled-slots requiring its users to establish who goes into each slots and then take each next slot in the door, all under the time pressure of the constantly rotating door. Using the one-a-time turn-taking machine in our study required methods for disassembling and reassembling mobile groups. In short, our data revealed the following phenomena:

- Revolving doors are one-unit-at-a-time technologies that challenge mobile formations because they need to reform in order to pass through the doors. On approach, members of a side-by-side mobile formation analyze trajectories toward the door and disassemble the mobile formation, forming a single file formation, establishing who will become the first to pass through it, and selecting a person to go next.
- After passing through the door, the members of the single-file formation wait or adjust their speed and trajectory to begin to reassemble the side-by-side formation when the other group members have exited the door.
- People passing through the doors have to analyze the size of the slot and the number of persons it allows, in order to avoid getting caught and disrupting the flow of movement through the door.
- Members of the side-by-side formation make their selection process visible through shifts in gait and posture, body orientation, glancing, and changes in speed and trajectory.
- Door users who are *not* part of a togetherring draw on the same resources as those who are, in order to make sure that they are not seen as doing walking together.

Why should it be that it is so important that groups stay together in this complex doorway? It can in part be explained by the fact that doors make relevant the potential dismantling of togethers and the departure of individuals from the group. The spaces outside public buildings make relevant the inquiry into whether group members are continuing as a together, going in the same direction to go home or for lunch, and so on. External building doors, then, lie between the places where togethers start formulating what will happen next and whether they stay together or break apart. Should members of a group simply allow the doors to throw them apart and not do proper partings, then their status as a group at all becomes endangered.

While Latour and Norman were preoccupied with the lone human enmeshed in a material world, our interest has been aimed at the interaction between humans as they engage with a turn-taking technology such as the revolving door. This has enabled us to analyze not only the revolving door but also the accountability of mobile formations, how they accomplish walking together. Even though a revolving door can replace a door and function as a way of keeping things out and letting others in, it still is very different from a door. The door alternates between open and closed (it is a half open being), which the revolving door does not. It provides the possibility of entering and keeping out through motion—it is either still or revolving.

The data presented in this article were collected with the ambition to investigate different ways to capture a particular mobile formation passing through an everyday architectural feature: walking together through doors. Admittedly, in this article, we have presented only a small collection of video data, and also data that are from complex public doorways with multiple types of door and two layers of doors rather than simple private doorways into offices or homes. Our study here then

only begins to provide a small part of the picture of the practices and complexities that take place around doors and doorways. A number of recent studies of the interactional work around simpler institutional office doorways are showing that quite different forms of social practices occur there. For instance, in these internal settings, members of institutions pop their head out the door to catch passers-by (González-Martínez, Lê Van, & Bangerter, 2013) or pop into offices to greet or exchange news (Licoppe & Tuncer, 2013). We hope that studies of mobility, sociality, and architecture continue to examine the ubiquitous, mundane, and yet fascinating site that is the doorway.

Authors' Note

The authors have contributed equally to both the analysis and the writing of this article and are listed in reverse alphabetical order.

Acknowledgments

We wish to thank the participants of the workshop "Slow People and Mundane Technologies," held in Göteborg, Sweden, in November 2001, where this material was collected. Special thanks to Per Jacobsson for participating in the fieldwork and making the drawings of the trajectories through the revolving doors.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Notes

1. Cf. <http://www.eddoors.com/revolver.htm> (Eastern Door Service, Inc.) and <http://www.hortondoors.com> (Horton Automatic Doors).
2. As preliminary findings by Calvignac and Cochoy (2011) have shown the formation of groups (mobile formation) in their case "consumovers" change depending on the density of other co-present; hence, there might be differences in the ways mobile formations moved through the revolving door when the place was crowded that we have been unable to detect due to the crowdedness itself.

References

- Bennett, M., & Hacker, P. M. S. (2003). *Philosophical foundations of neuroscience*. Oxford, England: Blackwell.
- Calvignac, C., & Cochoy, F. (2011). *Street freeze frame: An attempt to depict hidden facts by studying artefacts on the move*. Paper presented at the CRESC conference, Manchester, England.
- Cochoy, F., & Grandclément, C. (2005). "Publicizing Goldilocks" choice at the supermarket: The political work of shopping packs, carts and talk. In B. Latour & P. Weibel (Eds.), *Making things public: Atmospheres of democracy* (pp. 646-659). London, England: MIT Press.
- Collinson, J. A. (2006). Running-together: Some ethnomethodological considerations. *Ethnographic Studies*, 8, 17-29.
- Concin, B., Félix, C., & Relieu, M. (2013, June). *The visual sense of togetherness. Passing through doors*. Paper presented at Workshops on Interaction and Mobility III: "Instructions, Learning in Mobility and Interaction," Maison des Sciences de l'Homme, Nice, France.
- Goffman, E. (1956). *The Presentation of Self in Everyday Life*. Edinburgh, UK: University of Edinburgh Press.
- González-Martínez, E., Lê Van, K., & Bangerter, A. (2013, June). *Passing-by work interactions at the hospital*. Paper presented at Workshops on Interaction and Mobility III: "Instructions, Learning in Mobility and Interaction," Maison des Sciences de l'Homme, Nice, France.
- Haddington, P., Frogell, S., Grubert, A., Huhta, H., Jussila, P., Kinnunen, J., . . . Vesisenaho, L. (2012). Civil Inattention in public places: Normalising unusual events through mobile and embodied practices.

- Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, 13(3). Retrieved from <http://www.qualitative-research.net/index.php/fqs/article/view/1794>
- Hirschauer, S. (2005). On doing being a stranger: The practical constitution of civil inattention. *Journal for the Theory of Social Behaviour*, 35(1), 41-67.
- Ingold, T., & Vergunst, J. (Eds.). (2008). *Ways of walking: Ethnography and practice on foot*. Aldershot, England: Ashgate.
- Latour, B. (1992). Where are the missing masses? The sociology of a few mundane artifacts. In W. Bijker & J. Law (Eds.), *Shaping technology, building society: Studies in sociotechnical change* (pp. 225-258). London, England: MIT Press.
- Latour, B. (2003). *Paris: Invisible city* (L. Libbrecht, Trans.). Paris, France. Retrieved from http://www.bruno-latour.fr/sites/default/files/downloads/viii_paris-city-gb.pdf
- Latour, B. (a.k.a. Johnson, J.). (1988). Mixing humans and nonhumans together: The sociology of a door-closer. *Social Problems*, 35, 298-310.
- Laurier, E. (2004). Doing office work on the motorway. *Theory, Culture & Society*, 4/5, 261-277.
- Lee, J. R. E., & Watson, R. (1993). *Interaction in public space: Final report to the plan urbain*. Paris, France: Plan Urbain.
- vom Lehn, D., Heath, C., & Hindmarsh, J. (2001). Exhibiting interaction: Conduct and collaboration in museums and galleries. *Symbolic Interaction*, 24, 189-216.
- Licoppe, C., & Tuncer, S. (2013, June). "Appearances" at the door: The initial stages of informal encounters at work. Paper presented at Workshops On Interaction And Mobility III: "Instructions. Learning in Mobility and Interaction," Maison des Sciences de l'Homme, Nice, France.
- Livingston, E. (2008). *Ethnographies of reason*. Aldershot, England: Ashgate.
- Lorimer, H., Ingold, T., & Lund, K. (2002). *Pedestrian geographies: Walking, knowing and placing Scotland's mountains*. Swindon, England: Departments of Geography and Anthropology, University of Aberdeen: Economic and Social Research Council.
- McIlvenny, P. (2013). The joy of biking together: Sharing everyday experiences of vélomobility. *Mobilities*. Advance online publication. doi: 10.1080/17450101.2013.844950
- Metcalfe, A., & Ferguson, L. (2001). Half-opened being. In J. May & N. Thrift (Eds.), *Timespace: Geographies of temporality* (pp. 240-261). London, England: Routledge.
- Middleton, J. (2010). Sense and the city: Exploring the embodied geographies of urban walking. *Social & Cultural Geography*, 11, 575-596.
- Norman, D. (1998). *The design of everyday things*. London, England: MIT Press.
- Ryave, A. L., & Schenkein, J. N. (1974). Notes on the art of walking. In R. Turner (Ed.), *Ethnomethodology* (pp. 265-274). Harmondsworth, England: Penguin.
- Schuchat, M. G. (2001). The ethnography of urban benches. *People and Places: The Ethnographic Connection*, 24, 50-52.
- Simmel, G. (1994). Bridge and door. *Theory, Culture & Society*, 11(1), 5-10.
- Wylie, J. (2005). A single day's walking: narrating self and landscape in the South West Coast Path. *Transactions of the Institute of British Geographers*, 30, 234-247.

Author Biographies

Alexandra Weilenmann investigates the use of mobile communication and information technologies. The aim is to reveal how these technologies are brought into play as part of everyday activities within different groups, something that has involved exploring different methods for capturing these activities in situ. Previous fieldwork includes mobile technology use among hunters, journalists, airport personnel, professional drivers, museum visitors, teenagers, and the elderly.

Daniel Normark is a researcher in science and technology studies with projects in both the history of biomedical research and ethnographic studies of consumer logistics. His research focuses on sites of negotiation—from scientific laboratories, meeting rooms, and hospital wards to mundane features of mobility along city streets, bus stops, roadsides, and petrol stations—looking at both the situated interpretative practice as well as tracing associations of interpretation.

Eric Laurier is a senior lecturer at the University of Edinburgh. He has studied car travel, suburban neighborhoods, cafes, video editing, wayfinding, iPhone use, and the secondhand trade. His approach to these topics draws on ethnomethodology, conversation analysis, and ordinary language philosophy.