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Materiality in Discourse: The Influence of Space and Layout in Making Meaning

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THE RELATIONSHIP BETWEEN UTTERANCE and place of enunciation is a perplexing issue. On one hand, discourse is bound to spaces of actions and interactions. There is no discourse, knowledge, or social practice that stands outside of a social, historical, and physical space. On the other hand, discourse is also “about” space (Lefebvre 1991:132). It can formulate it, appropriate it, or participate in its transformation. Because of this dialectic dimension between space and discourse, it remains challenging to draw a map of the linkages between discourse and space. Language takes its significance from spaces of action, but how is this relationship of indexicality concretely realized in situated action? Space affects ongoing interactions, but how do ongoing interactions affect their spaces of action? The subject matter of this article is to examine empirically some interrelations between material and semiotic processes.

Discourse analysis (Conversation Analysis, Interactional Sociolinguistics, Critical Discourse Analysis, Pragmatics) has not traditionally paid attention to the physical and territorial placement of sign and systems of representation in much detail.¹ This absence of interest might be traceable in part to its methodological focus on audiotaped interaction and on verbal material. Research in discourse analysis has mainly focused on discourse types and settings involving a limited number of participants (dyads, triads, or small groups), where interactants are most often co-present and within hearing and speaking distance of each other. The conversations analyzed have also typically involved minimal movement of the participants during the interaction itself and maximal verbal interchange. These conditions have traditionally been considered most useful to facilitate the process of transcription of the interaction, which is often a prerequisite in these approaches to language. As a result, discourse analyses have often centered on activities such as dinner-table conversations, sociolinguistic interviews, gatekeeping encounters, counseling sessions, or classroom discourse. Many common forms of social interactions, however, fall outside of these “ideal” parameters for recording. Many daily interactions are characterized by participants moving across spaces, engaging in interaction with different individuals at a variety of sites, or managing several actions at a time. In these actions, discourse is sometimes little more than a few utterances interspersed in the midst of other nondiscursive actions, an instance of “textualization ‘in’ action” as Filliettaz (2002:261) puts it. The analysis of these forms of discourse cannot be cut off from reference to the world of action in which they take place without severing them from the meanings they acquire indexically from the embedding world. Because of its focus on verbal data, discourse analysis has thus not been in a position to analyze in

much detail the relationship between discourse and its spatial emplacement and to say much about instances of textualization in action.

Recently, however, discourse analysis has started to take a multimodal turn (Kress et al. 2001; Kress and Van Leeuwen 1996, 2001), and a developing body of research has started to investigate the relationship existing between different semiotic systems (gestures, language, actions, physical layout, space, time, images). The multimodal position seeks to develop new concepts and ideas to approach the old issue of communication, a global process that integrates different modes of making meaning, including or excluding language. This body of research seeks to take a fresh stance regarding the role and function of language, to “step outside it and take a satellite view of it” (Kress et al. 2001:8).

Within this multimodal perspective, geosemiotics (Scollon and Scollon 2003) has taken on the task of exploring how the physical and territorial placement of systems of representation contribute to their meaning. It centers on the relationship between semiotic signs, their placement in space, and the actions through which they are appropriated. Geosemiotics thereby examines signs in relation with the “lived spatialities” (Crag and Thrift 2000:4) they ecologically develop, transform, or exist in.

To date, geosemiotically inspired studies (de Saint-Georges and Norris 2000; Pan 1998; Scollon and Pan 1997; Scollon and Scollon 1998, 2000, 2003) have mostly focused on how the discourses of city signs (advertising posters, shop and business signs, road signs) get appropriated by passersby. They have also examined how the “visible arrangements of locomotion” (Lee and Watson 1993)—paths, barriers, lanes, doors, walls—orient individuals’ actions in public space (Scollon and Scollon 2003). I believe the concept of geosemiotics is expandable to examining layout and material organization of more private, organizational, spaces. I thus turn my attention in this research to scrutinizing (1) how a space becomes constructed as a space of action, (2) how actions and turns-at-talk are constrained and influenced by spatial layout; and (3) what is the role played by discourse in organizing spaces of action.

Data

The data for this research are drawn from six months of ethnographic fieldwork in a Belgian vocational training center. The center, which I call Horizons, is a registered nonprofit organization providing the unemployed with professional training in various trades. The individuals attending the training typically have little or no professional qualifications, live on social welfare, and have been unemployed for a long period of time. The task of the center is to provide them with appropriate work skills as a means to improve their adaptability in the job market. The data for this paper document the cleaning of the center’s attic by the group being trained to become professional cleaners.

The segments examined come from a 16’45” videotape shot on February 7, 2000. It shows Laura, Stéphanie, Corinne, Jean-Philippe, Anabelle, and their monitor, Natasha, at work.² The video shows different stages of the work, and the coordinated activities that lead to accomplishing the cleaning of the attic. In my analysis of this data, I examine first how, through anticipatory discourse, the attic is construed as a space of activity. Next, I turn to show how the spatial layout and architectural

design of the attic have a structuring effect on the discourse and actions produced. I next examine briefly how under the action of the participants, the space is being progressively transformed. Following that, I examine in more detail the role played by discourse in space transformation.

Emergence and Creation of an Eventful Space

The first issue I would like to explore concerns how the attic passes from being a perceptible but unnoticed aspect of the architectural design of Horizons’ building to becoming an element active in the training of the cleaners’ group. In other words, I am interested in examining how the space of the attic becomes constructed as an “eventful space” (Crag and Thrift 2000:6), a socially produced space for purposeful and motivated actions. I would like to show that the attic is not just the given setting within which the cleaning occurs. Rather, there is a dynamic, real-time creation of the attic as part of the practices of the group observed.

One such practice for the cleaners’ group is to have daily morning briefing sessions. In these sessions, the activities for the day are announced and various practical issues are settled. These sessions can be considered instances of what Scollon and Scollon (2000) term *anticipatory discourse*. Through this concept, Scollon and Scollon highlight that our actions usually “begin as preparation for action” (Scollon 2001b) and that one can understand the significance of an action in a sequence of action steps only by analyzing what motivations or course of actions have led to its accomplishment. Anticipatory discourses provide the “meta-discursive or reflective structure” (Scollon 2001b) that participates in lending meaning to actions.

Methodologically, anticipatory discourses are difficult to capture. By definition, because they occur outside and prior to action, they are spatially and temporally remote from the site and time of action. It is thus often difficult for the researcher to be present not only to capture the preparatory discourse that anticipates actions but also the corresponding performance of the action itself. As a result, capturing anticipatory discourses is often akin to archaeological reconstruction. I do not have a recording of the briefing session that introduced the attic as a space of action on February 7; however, several recordings of other briefing sessions display typical features of this activity. Fieldwork suggests that the following extract, recorded on February 2, is a representative case. This extract provides clues as to how a space first becomes available for further appropriation through action and discourse within the practices of the group observed.³

(1)

[Head]:

1. So, today e:r
2. / . . /
4. For the cleaners, there is [Elton] and [CRS].
5. So you share the work in the morning and Corinne is not here today okay
6. [Elton] and [CRS]
7. And then e:r [Chief Cook] e:r

8. You're done with [Chief Cook] around 12, 12:30?
 [Monitor 1]: 9. no, no we start at 12 =
 [Monitor 2]: 10. we start at 12:30.
 [Monitor 1]: 11. = when the shop is closed.
 [Head]: 12. Oh. Oh. Yes.
 13. And- and in the afternoon [Smith]
 14. But I thought it went the other way around, I forgot.
 15. Okay. [Smith].
 16. [. . .]

The briefing session that forms a prelude for the action serves to conjure up a space of action. The production of space and the process of signification thus begin outside of the sensory and experiential space of the working site and prior to physically engaging in transforming it. Anticipatory discourse's role is thus to make spaces of action relevant to the activities of the group. In the excerpt above, it appears that this relevance is constructed following two strands of logic: a logic of temporalization and a logic of spatialization (Weiss 2001).

The discourse first provides a periodizing of the activities of the participants. A line is drawn between morning and afternoon activities. The morning activities are further sequentially and chronologically organized: the cleaners will start with [Elton] and [CRS]/ *And then* e:r [Chief Cook] e:r.; and *in the afternoon* [Smith]. Through scheduling, anticipatory discourse thus organizes the social world according to various temporally ordered "units of work" (Kress 1998:65-66) that provide a time frame for the activities. Spaces of activities are bound to times of activities.

The anticipatory discourse, moreover, summons in trainees' minds places of activities. It is the second logic: the logic of spatialization or territorialization (Weiss 2001). The existential construction ("there is") introduces new referents in the discourse, which are also known names of contractors ([Elton] and [CRS]). For the trainees who have already spent some time at Horizons, those referents are in a state of "semi-active" consciousness (Chafe 1994), since they correspond to regular working sites. The evocation of these spaces of activities makes them referentially salient as well as cognitively activates associated domains of performative knowledge for its users (the site's location, the equipment that should be brought for work, the set of tasks to be performed on site). Because the briefing session refers to practices habitual to the members of the group, it is enough for the head to call into focus spaces of action and times of action, without further specifying what sets of actions are expected to be performed by the trainees at each site. Anticipatory discourse thus participates in scheduling actions to come by relying on the specific cluster of practices routinely enacted by the participants.

Space begins in this case as a cognitive and discursive representation (an act of imagination), caught within the practices, representations, and aims of a social group. By bringing spaces and times of action into focus, anticipatory discourse makes them available for cognitive and discursive appropriation. For the space to be available for

transformation, however, there also needs to be the emergence of a "practico-sensory" space (Lefebvre 1991:16). There needs to be a move from the textual space of anticipatory discourse to the physico-concrete space of situated actions. Filliettaz calls the emergence of a physical or perceptual space enabling an encounter "incursion." In his definition, the incursion is bracketed by opening and closing rituals, parenthesizing the encounter, and it is characterized by agents' readiness to engage in goal-directed activities (Filliettaz 2002; Goffman 1974). Beyond the incursion, agents will exert their agency within the space of action in an attempt to accomplish the tasks they recognize are expected from them. Their sense of purpose will organize and lend meaning to their actions and lead them to engage with various dimensions of the space at what we may call "sites of engagement," which can be defined as "real time window[s] that [are] opened through an intersection of social practices . . . and that make [an] action the focal point of attention of the relevant participants" (Scollon 2001a:3-4).

In the next section I examine sites of engagement and the structuring effect of the spatial layout and the spatial positions of the participants on the discourse produced at these sites.

Structuring Effects of Spatial Layout on Discourse

In the course of time, a variety of objects and documents are accumulated by an organization that threatens to clutter office space. The attic's *raison d'être* is to hold residual material that might still be of use. It is a place of dumping and archival memory, which, for lack of regular use, displays traces of abandonment. The space's layout, the objects accumulated and their arrangement, contribute to the unique atmosphere and material codification of the space (Ruesch and Kees 1956:89-147). The task of the cleaner is to shape these surroundings through inducing order and cleanliness. While doing so, the disposition of objects in space can be shown to affect their actions and discourse.

The overall setting plays a significant part in communication, providing not only topics for discussion but also positions for interaction (who may speak to whom at what point given the natural boundaries of the space). A rough map locating the attic within the Center's building and displaying sites relevant to the action of its cleaning will illustrate my upcoming argument (figure 7.1):

I have tried to show how a physical space is produced within the practices of a group. It obtains its signification and relevance from the motivations and purpose of the social actors entering the space. Their social practices structure routes, paths, and networks linking places for action in patterns unique to the goals sought to be accomplished. In the present case, the task of the group leads to the articulation of a nexus of scenes (areas of focal attention) including the following five interdependent regions. Together they are actively produced as the space of action:

1. Area 1: the attic. Under the roof, the attic can only be reached through climbing up on a ladder.
2. Area 2: the ladder. The ladder constitutes a temporary and mobile motion path to reach the attic from the hallway.

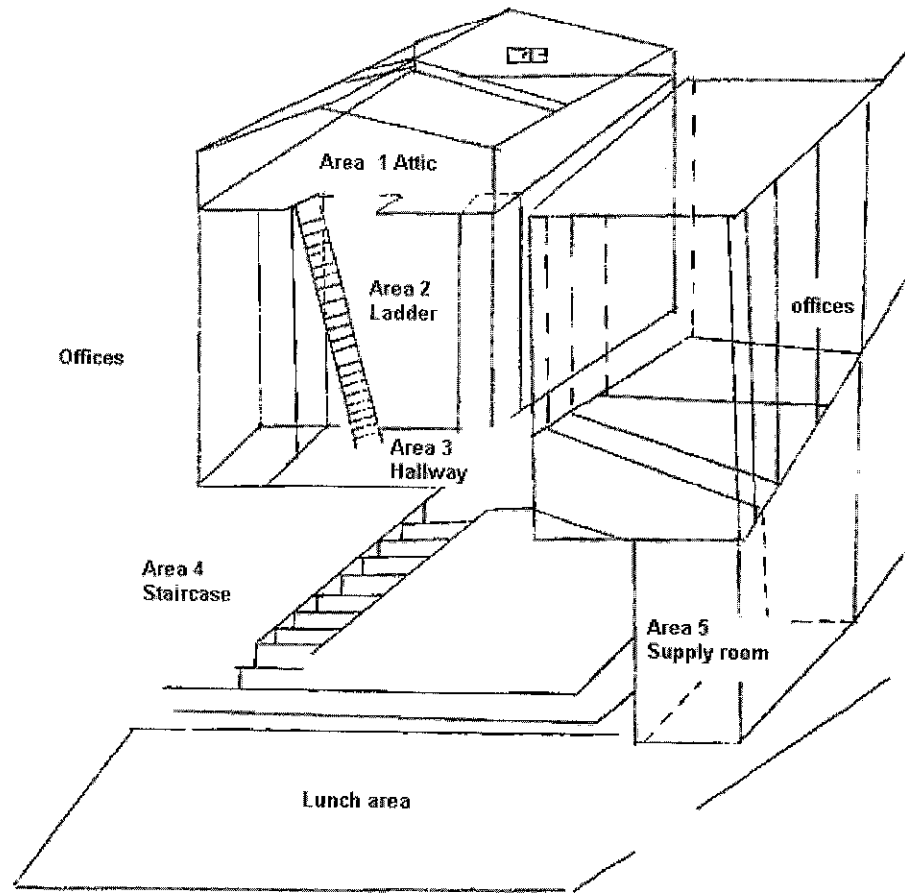


Figure 7.1. Map of the Attic.

3. Area 3: the hallway. A passage-way between offices on the first floor as well as a connecting trail between the ladder and the staircase for the purpose of the cleaning action.
4. Area 4: the staircase. A permanent junction linking the hallway to the ground floor.
5. Area 5: the supply room. In this room cleaning supplies and material are stored.

Cleaning the attic is a complex activity that involves the engagement and coordination of actions at various sites of engagement distributed across these different regions (areas 1 through 5). Some areas are continuous visually (e.g., through the open door of area 1 one can see areas 2, 3, and 4, but not area 5). Others are continuous acoustically (through adjusting one's voice volume and intonation contours it is

possible to be heard from area 1 through area 2, 3, or 4). If relays are set, participants can echo information to convey information to acoustically and visually remote participants. This spatial setup is not simply a juxtaposition of independent scenes. Rather, linked together, these scenes define the "communicative situation."

The examination of a 20" sequence of interaction can be used to illustrate how the topographical configuration of the attic can affect the discourse and actions produced.⁴ In excerpt (2), Anabelle has just started climbing down the ladder [1], when her monitor, Natasha, through the aperture of the door, requests some detergent ("Go and fetch me the Comet, please") [2]. Natasha then moves away from the door's aperture and starts scrutinizing the door's surface on both sides to evaluate its state of cleanliness [3]. In the meantime, Stéphanie, who was previously busy sweeping the floor, gets done with the broom and hands it to Anabelle [4] ("here it is"). She reiterates the request for detergent with the directive "the Comet!" Natasha, who by then has evaluated that the door needs cleaning, adds "and a sponge." Because the door's aperture is small and obstructed by Stéphanie's presence, it renders Natasha's direct interaction with Anabelle difficult. She could raise her voice but chooses instead to position Stéphanie as a relay for the interaction. Stéphanie takes on the role of "animator" (in Goffman's sense) to voice to Anabelle Natasha's subsequent requests (for a sponge, and a cloth). Laura behaves as a ratified hearer of the scene who manifests her engagement at the site through eye gaze and body hexis. The repetition rapidly appears comical to Natasha, and she turns away from the door laughing [5] (the interaction is transcribed below the visual representation of the scene).

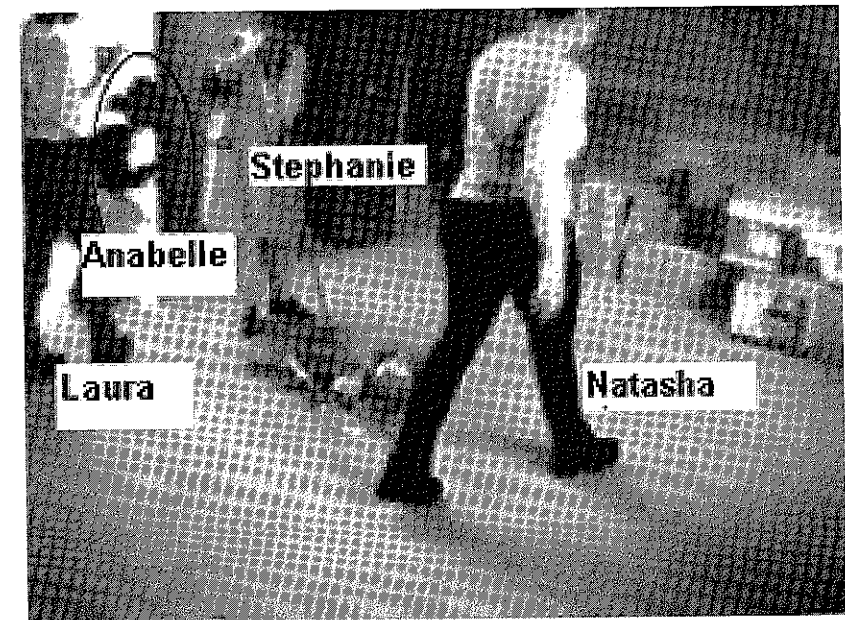


Photo 7.1.



Photo 7.4.

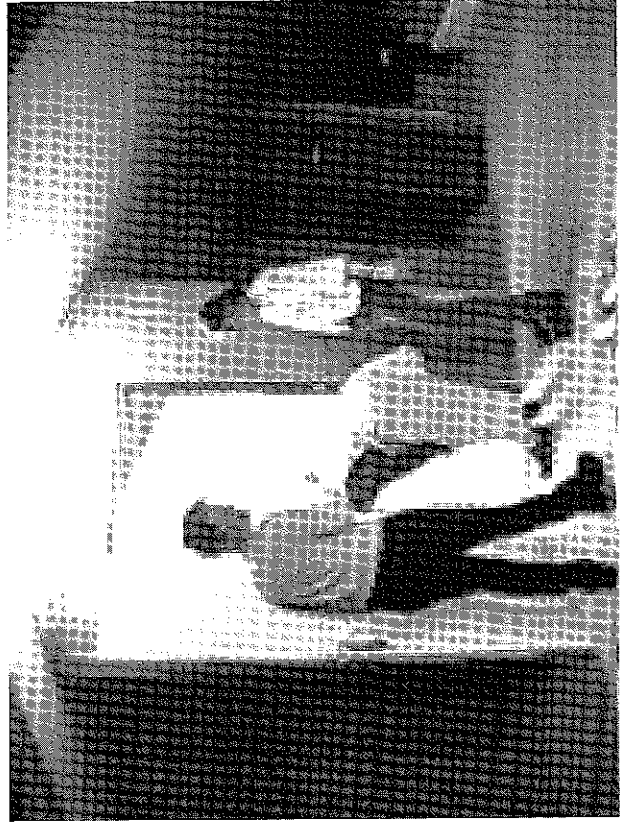


Photo 7.5.

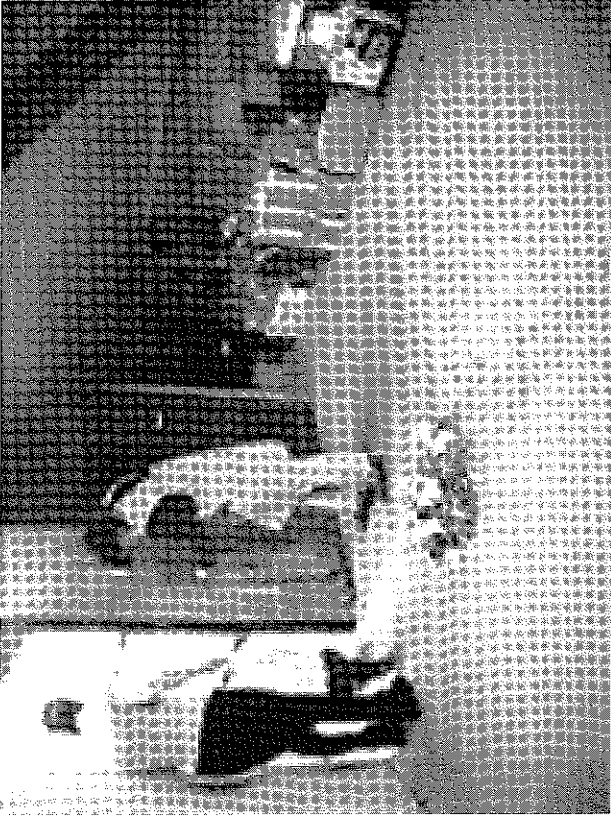


Photo 7.2.

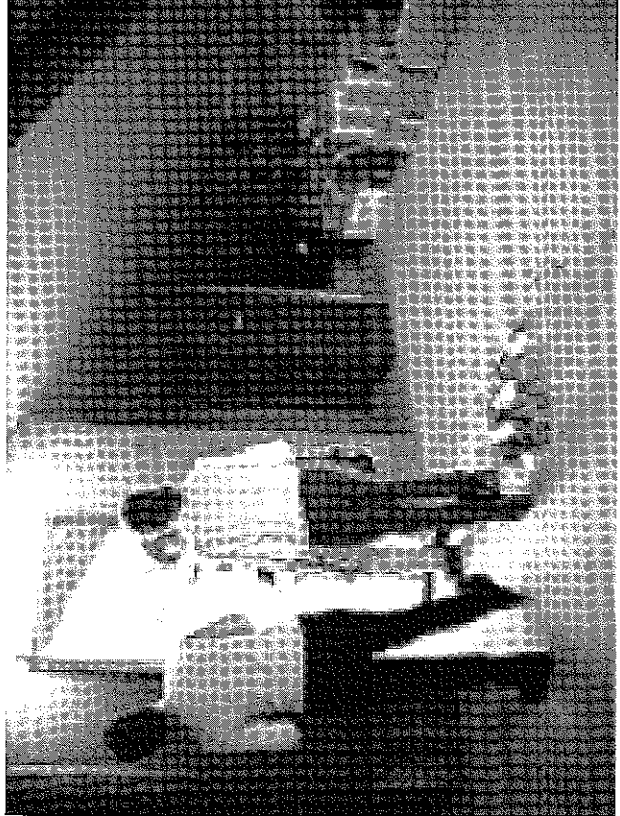


Photo 7.3.

Transcription⁵*Through the door*

N | → LOOKS TOWARD THE DOOR OPENING
 N | → "Go and fetch me the 'Comet,' Anabelle, please"
 N | → MOVES AWAY FROM DOOR OPENING
 N | → LOOKS AT THE DOOR'S SURFACE

By the door

N | → SWINGS THE DOOR

LOOK AT DOOR ← | N
 | → "and a sponge"

N | → "and a cloth"@@@

N | → MOVES AWAY FROM DOOR

Through the door

S | → LOOKS AT A ON THE LADDER ← | A

S | → "The 'Comet!'" ← | A

S | → GIVES BROOM TO A

S | → "here it is"

← | S | → A TAKES BROOM FROM S

S | → "and a sponge"

← | S | → LOOK AT A

S | → "and a cloth"

S | → STANDS UP AND MOVES AWAY FROM DOOR

On the ladder

← | A

← | A

On the ladder Toward the door

L | → WIPES HER FACE WITH HER SLEEVE

L | → WATCHES TOWARD THE DOOR ← | S/A

← | A

← | A

← | A

← | A

← | A

← | A

L | → LOOKS THROUGH DOOR

The repetitions are in this case a direct result of the configuration of the spatial layout (with its visual shields between linked scenes of actions) and of the manner in which the participants are constructing the space (which is to say, are bodily positioned in it and negotiating the participation framework of talk). This construction of interaction rapidly appears awkward to the participants themselves as attested by Natasha's laughing. The discomfort is created by the proxemics of the situation, with the interactants moving within a very small region. Although invisible, Anabelle is at a potential hearing distance from Natasha. The engagement shield is thus only visual and not auditory. The echoing of Natasha's requests consequently sounds like a parroting of her discourse more than a necessary device for ensuring communication.

With this analysis, I do not want to claim too much about the effect of layout on discourse in this excerpt except to emphasize that when observing interactions where talking is not an end in itself but occurs as part of other coordinated action ("textualization 'in' action"), the study of language cannot be cut free from reference to these other actions and the material space of their occurrence without cutting it free of its situated meaning. By examining jointly the spaces of action and the construction of interaction, we start to see how the spatial design of the attic participates in facilitating or obstructing certain configurations of interactions and how the boundaries of what would be traditionally called "the setting" is actively constructed around joint or individual sites of engagements. In the next section I examine how, under the actions of the participants, the space is moreover being progressively transformed.

Space as Process

While the structure of the attic (its walls, location on the premises) is relatively stable and could not be modified without considerable alteration to the integrity of the

building, space is not, however, just a "practico-inert container of action" (Crang and Thrift 2000:2). Under the actions of the participants and their interaction with its material constituents, the "economy of space" (Ruesch and Kees 1956:136) is being progressively modified. Mobile objects are displaced and reordered. Static constituents are wiped, cleaned, or swept, which contribute to transforming the overall atmosphere of the space. Each transformation has a further constraining effect on what actions can be taken next and what can be said about space.

In figure 7.2, I show the initial, final, and a few selected intermediate moments in the cleaning of the attic. The letters refer to various objects in the room. The representation, however schematic and partial, reveals nevertheless the evolving and emergent organization of space. Space appears "as process and in process (that is space and time combined in becoming)" (Crang and Thrift 2000:3, emphasis in original). As objects are being wiped, moved, piled, spread, dumped, or aligned and actors work at the maintenance of order (Ruesch and Kees 1956:135), the economy of space is being irreversibly altered.

Regarding the workings of the transformation process, it appears that space is being modified through objects being successively turned into "transactionally

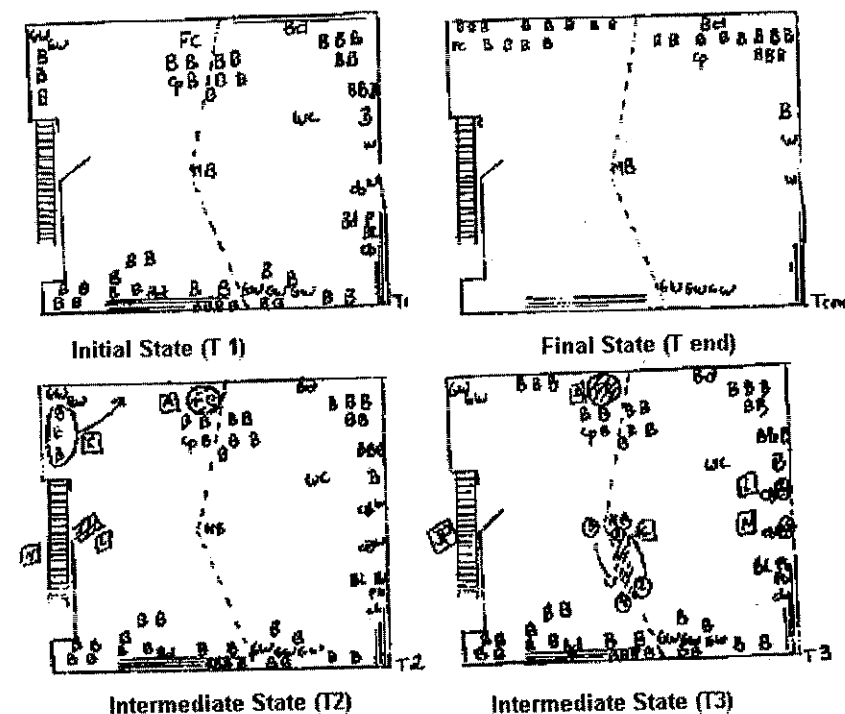


Figure 7.2. Initial, Final, and Two Intermediate States.

Note: B, boxes; Cp, computer; CB, cardboard; Pb, polystyrene board; Bd, polystyrene boards; FC, file cabinet; WC, working clothes; GW, glass wool; W, Window; D, door; C, chair; MB, metallic beam across the room; Bl, linoleum. C, Corinne; L, Laura; JP, Jean-Philippe; S, Stéphanie. Arrows indicate trajectories and hachures engagement with objects and surfaces (floors, etc.).

active objects” (Scollon 2001a:131). They pass from being a perceptible but unnoticed dimension of the space layout (a kind of “wallpaper”) (Scollon 1998: 11) to become appropriated for some purpose in action, before returning to their wallpapering function. The shape of objects and the practices of the group dictate the “kinesthetics of usage” (Ruesch and Kees 1956:127)—how each object will be handled, and thus “how” engagement will occur is to some extent predictable. It seems impossible, however, to determine in advance, nor to construct a general theory of, which elements will become relevant and thus activated in action or in discourse at any point in the interaction. All we can say is that at the beginning of the activity, agents have some liberty in choosing and constructing which objects and practices they will engage with first, but as they go on transforming the space around them the set of available options for action grows more and more limited: once all the objects have found their state and place of rest, the overall activity is over. Table 7.1 presents similar data to those shown in figure 7.2, but attempts to highlight this progression in availability, or what could be termed the *chronosemiosis* of the action. For example, at T1, all 6 objects ([B]ox 1, [B]ox 2, [W]orking [C]lothes, [W]indows, [G]lass [W]ool, [F]ile [C]abinet, and [D]oor) constitute a part of the wallpapering of the space. They thus all have the potentiality to become transactionally active objects or not. At T2, B[ox1] is moved from one side of the room to another where it find its resting place. It is not re-engaged with subsequently. At end time, it is thus still in this position. [W]orking [C]lothes, [W]indows, [B]ox2, [G]lass [W]ool, [F]ile [C]abinet, and [D]oor are still available for appropriation. At T3, the windows [W] are cleaned and the file cabinet [FC] is wiped. The file cabinet will be later moved (T9) (thus re-engaged with) but both windows and file cabinet will not be cleaned again. At T8, the roll of glass wool [GW] is thrown in a corner and at T10, the door [D] is cleaned, etc. At end time, all objects that needed to be moved have been moved and cleaned in the appropriate manner ([Bd]: a polystyrene board stayed put all along). The action is considered completed and the goal reached.

Table 7.1.
Evolution of the economy of space: Chronosemiosis of the activity

T1	T2	T3	T4	T5	T6	T7	T8	T9	T10 End t
B1	B1									B1T2
WC	WC	WC	WC							WCT4
W	W	W								WT3
B2	B2	B2	B2							B2T4
GW	GW	GW	GW	GW	GW	GW	GW			GWT8
FC	FC	FC						FC		FCT9
D	D	D	D	D	D	D	D	D	D	DT10
Bd	Bd	Bd	Bd	Bd	Bd	Bd	Bd	Bd	Bd	BdT1

Legend: grey = availability; light dots = engagement; white = no further engagement; lighter dots = re-engagement. This is a simplified version of the data for the sake of argument. Only a few times and objects are considered out of the sixty-six time-frames in the original analysis and more than seventy objects appropriated in the overall action.

Because space can be shown to be in process, the next point to establish concerns the relationship between these material processes and discursive processes: to what extent is language linked or pointing to transformative actions? Does it participate in modifying the space of action? If yes, how? If no, what is its role? I attempt to address these questions in the next section.

Discourse and the Economy of Space

Multimodal approaches to discourse point to the fact that utterances are only a moment in the continuous process of communication and that there is no necessary priority of language over other modes of meaning making in social actions (Kress et al. 2001; Kress and Van Leuwen 2001). Therefore, the analysis of language should be initiated only when language appears to play a significant role in the actions examined (Scollon 2001a, b). This proposition reverses what has traditionally been done in discourse analysis. Rather than presuppose that discourse plays a role in social action, it seeks to examine empirically if it does and what role it may have. In this case, because language is integral to the activity of cleaning the attic, it seems important to pay attention to when utterances are deployed and with what effect. In other words, in order to understand what roles it plays (and how directly) in the transformation of the material space, it seems useful to consider how discourse figures in this cleaning action more carefully than has been achieved so far. The first aspect that can be assessed is that turns-at-talk appear to fall within three broad categories in relation to action.⁶ There are in the data:

1. *action-preceding discourse and action steering discourse*, which anticipate or funnel action (e.g., *Jean-Philippe, il y a une caisse extrêmement lourde là, tu sais la prendre?* ‘Jean-Philippe, there is an extremely heavy box over there, can you take it?’; *Va un peu chercher là un p’tit sac* ‘Please, go and get me a small bag now’).
2. *action-following discourse*, which evaluate or comment already accomplished actions or the activity as a whole (e.g., *Fais déjà un peu plus propre* ‘It’s already a bit cleaner’; *J’ai trouvé un paquet de Marlboro vide* ‘I have found an empty Marlboro pack’).
3. *action-accompanying discourse* (e.g., showing traces on the window glass while talking: *Des deux côtés, ça c’est du produit des carreaux* ‘On both sides, that thing that’s detergent for windows’; e.g., handing an object: *tiens* ‘there you go’).

Action-following utterances tend to be slightly more frequent than action-preceding ones, as is shown by the distribution of turns in table 7.2. Further examination of the content of these turns reveals that action-preceding turns are most often directives. For example:

- Requests for information: *Qu’est-ce qu’on fait maintenant?* ‘What do we do now?’
- Ordering: *Regarde, il y a des toiles d’araignées autour. Faut faire ça.* ‘Look, there are spider webs around. That needs to be done.’

Table 7.2.
Distribution of utterances in relation to actions

	No.	%
Action-preceding utterances	163	37
Action-following utterances	191	44
Action-accompanying utterances	33	8
Unintelligible	49	11
TOTAL	436	100

Warning: *Fais attention à ne pas mouiller les cartons, Anabelle hein* 'Be careful not to wet the boxes, Anabelle, okay'

Action-following discourse is most often expressive (evaluation, assertions) or assertive (justification, explication). For example:

evaluating: *Ce coin là, euh, on sait pas faire plus, hein* 'This corner there, er, no more can be done, now'

asserting (after climbing): *Bon moi descendre, j'fais déjà plus* 'Well, going down [the ladder], that's something I won't do no more'

justifying: *mais c'est parce que c'est noté là en-dessous que je l'ai mis au-dessus* 'but it's because it's written there on the bottom that I have put it on top'

Action-accompanying discourse constitutes a verbalization as the action takes place. Deixis and simultaneous comment on action are examples of action-accompanying discourse:

comme ça 'like this': uttered to oneself while moving a box

là 'there': uttered while pointing at a spider web

The role played by discourse with regard to space transformation seems thus to relate broadly to three levels: instruction, evaluation, and social relationships.

1. Discourse participates in space transformation mainly in that it helps coordinating actions for modifying it. Through discourse, some objects are singled out, their trajectories defined, and the coordination of actions is regulated.

2. Also, discourse participates post hoc to the evaluation of physical actions. If the work is properly done, the objects do not usually come back as topics in discourse. If the work is deemed improperly realized, however, it is in precisely those cases that elements of the physical space become appropriated or reappropriated in discourse.

Discourse thus has a prospective function (calling into focus elements of the setting and turning them into transactionally active objects) and a commentary and evaluation function (critiquing the work after it has been performed). This function of critique might trigger another cycle of actions to improve the work. Discourse is thus capable of vision and retrospection about the state of space.

3. Discourse appears neither necessary (many actions are not accompanied, preceded or followed by discourse) nor completely contingent (there is no discourse which is not somewhat related to the overall activity, and despite some variances between discourse time and action time [Schiffrin 1987:250], topical organization is generally linked to action progression). Discourse is thus not dislocated from space, but neither is it completely constrained by it. If the overwhelming majority of actions in the course of the cleaning are not accompanied by discourse, and if space transformation is really the result of action more than a consequence of discursive moves, what is then ultimately the role of discourse in this activity? Space not only materializes systems of objects of which participants make practical use, but it also materializes social relationships. Evaluating or giving instruction presupposes a dialogic "other" in the space of interaction (instructions are always directed at someone; evaluations are evaluation of someone's work). The utterances thus also point to issues of competence (which expert can claim the knowledge for evaluating others' work) and power (which leader has the authority to command and instruct).

To illustrate this point, let us go back for a moment to example 2, which involved the setting of relays (Natasha to Stéphanie) to convey a message to a visually remote participant (Anabelle on her ladder). At the level of social relationships, the organization of the participant framework with a principal, an animator, and a recipient is an instance of "speaking for another" (Schiffrin 1994:107). Schiffrin shows how "speaking for another" is a discourse strategy that can be interpreted as a way of "taking the role of the other" (131). By delivering her monitor's words and by aligning interactionally with her in requesting Anabelle to perform some task, Stéphanie thus indexes a double social identity: she expresses solidarity and cooperation with Natasha and leadership and expertise in commanding Anabelle. She thus positions herself not only physically but also symbolically at the top of the ladder. In fact, this positioning is very much in line with the self displayed by Stéphanie throughout the cleaning activity. She is the participant who displays most initiative (she never interrupts her work, except to reflect upon it) and is also the most active organizer of the actions of others (after Natasha, the monitor). She thus constructs an authoritative position that goes unchallenged by the other participants who often ask her to instruct them what to do.

The orchestration of change in space and the achievement of the cleaning task as part of the training of the cleaners are thus also dependent on the claims to leadership and expertise made by the various actors and that are expressed in their discourse and their actions. The attic is thus not just a space of action, but also a space for identity claims and construction.

Final Comments

To recapitulate the argument, I have tried to show that diachronically and prior to entering the physical space of action, the role of discourse is to define the event to be situated in that space. At that stage, space is activated within the practices of a group and thus becomes caught within a discourse system through which it enters a process of signification. This anticipatory discourse funnels the course of actions and interactions that will take place within the physical space of action. As space becomes available for action, it becomes apparent that although space is caught within the practices

and objectives of the group, its own materiality also defines boundaries and constraints for which actions and turns can be taken within it. Further, although utterances derive their meaning from being situated in this material environment, discourse also plays a role in organizing the modification of the space through coordinating the actions that will transform it. This process of coordination is also a process of identity claims. As participants exert their agency in transforming space, they make claims regarding their expertise and ability to perform the changes, which get ratified or not. Meaning production and interpretation thus seems to arise from (at least) interrelations between agency, discourse, space, and action, and thus from the "coupling of material and semiotic processes." These levels dynamically and dialectically constitute each other within some social semiotic system of interpretation (Lemke 1993).

I have talked a lot about change and transformation. It seems that anyone who wants to be serious about understanding change (even the banal transformation undergone by an attic), and the role played by discourse with regard to this change will need to develop more consequent ethnographic and diachronic studies that will not just presuppose physical or symbolic spaces of action, or examine discourse independent from it, but consider how these are linked. The tools currently developed in geosemiotics, multimodal discourse analysis, and other currents attuned to multimodal data and social actions should help further our understanding of this issue. ■

NOTES

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1. Exception to this are, for example, Erickson (1990) and Whalen, Whalen, and Henderson (2002).
2. These are pseudonyms.
3. In this excerpt, [Head] is the chief supervisor of the cleaner's group, [Monitor 1] and [Monitor 2] are in charge of the training. All bracketed names (pseudonyms) refer to contractors for the cleaning group. Translations from French are the author's.
4. Pictures have been selected to give the gist of the interaction and to display the material configuration of the space of interaction. No one-to-one correspondence between lines of transcript and images has however been sought. The pictures are stills captured from an analog video film that was transferred onto digital support.
5. Transcription conventions adopt and adapt propositions by Filliettaz (2002, chap. 2).
 - | → ACTION ← | = "joint actions"; | → ACTION = "individual actions";
 - SMALL CAPS = 'content of action'; "spoken discourse" = 'utterance';
 - A, S, N, L = Anabelle, Stéphanie, Natasha, Laura; @ = laughter;
 - , = pausing in discourse ! = exclamation contour ? = interrogation contour
 Reading is line by line, with simultaneous action placed on a same line. Discourse is attributed to the participant situated at the left hand of the brackets.
6. This categorization is built upon Von Cranach (1982:63).

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