The gap between instruction (plan) and situated action—A challenge to semiotics?

Abstract: In this study, I describe a potential challenge to semiotics, which exists in the fact that no interpretation of an instruction (text) can get us closer to doing what the instructional text describes. I provide a praxeological description of a situation in a software development firm where the instructions (rules) for a particular type of meeting are inscribed on the whiteboard in front of which the meetings were held. I discuss the gap between instructions and the behavior they describe and the moral order of praxis that is not inscribed in instructions.

Keywords: instructions, following instructions, rules, plans, situated actions

There is a certain way of reading the text as instructions. If you don’t read the text instructionally, but instead you read the text straight-out, say, as a description of a procedure that was done, and with that procedure what was found out, then you will not fail to get it as a sense. In the way that you get it as a sense, you will fail to get what is to be done and what is to be learned when the text is read as instructions for doing what the text describes—doing in an actual case; just in an actual case; just in any actual case. (Garfinkel 2002: 147, original emphasis, underline added)

In this study, I describe and discuss a potential challenge to semiotics that has arisen within an area of sociology: ethnomethodology. The challenge is posed, among others, in the introductory quotation, which is about reading a text constituting instructions. As in the introductory quotation by the founder of ethnomethodology states, an instructional text can be read “straight-out,” that is, for its literal sense. When it is read in this way, readers will indeed succeed in getting the sense of the instruction. But, when readers get a sense they fail precisely to achieve the purpose of the instruction, that is, finding out what is to be done, and, in the process, learning what the instruction describes. Why might this be? One reason that has been advanced is that descriptions such as they appear in instructions are maps of behavior (Bateson 1986); and it is impossible to explain how the descriptions are the map of the behavior, or what the rules are for interpreting the map (Wittgenstein 1997). The challenge to semiotics is this: When we read in the ways that reading normally is taken, by means of interpreting (the process of semiosis), then we miss doing what the instructional text tells to do. This is so because any text designated to be an instruction falls short of saying or may fail to say what we have to do and how we have to do it such that we, or someone else, will be able say that we have followed the instruction (Suchman 2007); even leading scientists with over 30 years of experience in their field may find out at the end of the day that they had not done what they had planned to do (Roth 2009). All interpretive efforts to locate in the text what we have to do will come up empty. Thus, to achieve the purpose of an instruction, the text has to be misread, that is, read instructionally, in which case we will arrive at exhibiting “the thing—without incongruities, errors, absurdities, changing the subject, ‘trading up resemblances,’ faking, passing, or hiding out” (Garfinkel 2002: 147). Where necessary,
we mark the difference between {instructional text} or short {instruction} and doing
what the instructional text describes or short «following instruction» using braces and
guillemets, respectively. We do not mark the terms in these ways when they are used in
the ordinary way, that is, not as what we actually find and see.

In the research literature, one can find some obvious cases where {instructions} are
found in the practice of «following instructions». These include the (a) inscriptions that
come with furniture to be assembled by the customer (Garfinkel 2002), (b) {laboratory
instructions} in school and university science lessons (Amerine and Bilmes 1988; Lynch
et al. 1983), or (c) how to operate a photocopier with a help system (Suchman 2007). In
those studies, the {instructions} pertain to doing something in the material world. More
rarely are {instructions} for social behavior found in the pertinent settings, publicly
accessible to those present. Such settings include school classrooms where one might find
an area of the chalkboard or a poster containing items such as {Listen when others are
talking}, {Follow directions}, and {Work quietly and do not disturb others}. Much more
rare are such instructional texts (rules) found in situations where adults congregate. In the
present study, however, we do find such {instructions} pertaining to the social behavior
in a software development firm. In this firm, the {instructions} for the conduct of the
“huddles,” stand-up meetings where available members of the software development
team update each other, are posted in the physical location where the meetings take place,
in front of a floor-to-ceiling whiteboard (Figure 1). For us, this is an occasion for
studying in vivo the relationship between {instructions} for social behavior and the work
«following instructions».

The purpose of this study is to describe and analyze the work surrounding some of the
{instructions} for social behavior in a software development firm. I then turn to discuss
the possible challenges to semiotics posed by the problem arising from the observations. I
also adhere to the advice to produce “careful* descriptions,” which “are descriptions that
being written in just so many words of natural language therein motivate alternate
readings in vivo, as instructed actions, without absurd errors and other incongruities”
(Garfinkel 2002: 100). In other words, I describe “the ways members have of making
clear to each other and to themselves what is going on to locate to our own satisfaction an
account of what it is that they are doing with each other” (McDermott et al. 1987: 247).
My interest is in a social phenomenon sui generis, which means that the group of people
involved constitutes only the staff that brings the phenomenon to life. I therefore focus on
what members to the setting make available to each other, and, therefore, to themselves—
rather than speculating about inaccessible contents of mind. I deliberately choose a social
phenomenon that the participants themselves would consider to be unproblematic, even
uninteresting, because of its utterly mundane nature. I do so because it is precisely in
such phenomena that one may observe the “produced ordinariness of ordinary action”
(Livingston 2008: 217). This is an integral and defining part of a demonstrative
sociology, which aims at discovering rather than talking about how people do things,
including how they actually use signs, «read instructions», and «follow instructions». It is
precisely at the point when we start talking about phenomena in professional sociological
(semiotic, philosophical) terms that the very mundaneness of the everyday world becomes
invisible (Pollner 1987), and, with it, the ways in which signs, instructions, or rules
actually function.
1 Background and issue

1.1 Ethnographic context

In this text, I write about instructions, which, when they are used to hold others accountable for their actions, constitute the social rules in play. In my descriptions, I draw on a database collected at BeamCoffer, a software development firm that produces a suite of Internet and client applications that allow families and friends to connect and stay in touch online (Socha 2015). The study extended over 18 months; but most of the data were collected over an 11-day period. During this period, nearly 400 hours of video recordings were made simultaneously using 9 GoPro cameras—posted at workstations, a huddle area, a full-room time lapse, and one roaming—and one hand-held (roaming) camera. There are 292 hours of screen capture, thousands of photographs, and numerous interviews with key stakeholders.

1.2 The huddle setting

The software developers meet thrice daily for a huddle, each preceding a two-hour work session, where they update each other on the work in progress. The huddle takes place in a special area in front of a floor-to-ceiling whiteboard (Figure 1). On the whiteboard, there is an area entitled “HUDDLE,” below which, in bullet form, there are phrases that competent English speakers can recognize to be {instructions (rules)}. These include, {One person speak at a time}, {If you have to speak (while someone else is speaking), leave the huddle}, {If you have questions, comments, or responses, then add topics to parking lot}, {No electronics during check-ups and updates}, and, prefaced by a bold red asterisk and surrounded by a red border, {Full team check-ins & updates} (for the first huddle) and {Full team succinct updates} (for the second and third huddle). Next to the huddle column, there is a bordered area entitled “Parking Lot.”

1.3 The issue

The instructions for conducting the huddle, read normatively, constitute a set of rules that members can use to hold each other accountable. They constitute accounts of actions. What these instructions do not articulate, however, is the work of «following instructions». This means that the {instruction} cannot be the causal origins of the work conducted in situ to produce behavior that subsequently is said to have been consistent with and is described by the instruction. This is so because there cannot be a causal relation between a map of social conduct and the form of social conduct that it names (Bateson 1987). We do indeed see behavior that varies from the instructions, for example, when individuals do check their electronic devices, when two individuals do communicate out of turn (whispering), or when there is a move to end the meeting even

1 All proper names are pseudonyms, as the production of confidentiality was part of the ethics procedures.
though there is still an item in the “parking lot.” The set of instructions therefore is incomplete in two ways. First, in response to complaints about the incompleteness of these instructions, it would always be possible to add additional and more refined instructions, thereby increasing and elaborating the text to be used prospectively in the conduct of behavior and retrospectively for assessing behavior normatively. But such a procedure does not get us back from the map into the territory of actual, lived social conduct (Bateson 1987). For example, the instructions could include descriptions of where to find the parking lot, where to {add topic}, when to address added items within the instructions {full team check-ins & updates} or {full team succinct updates}, or what «succinct updating» looks like (when compared to one that is not). But such elaboration can go on forever without ever being complete (Garfinkel 1967). Second, instructions do not tell participants what it feels and looks like to behave so that it will have been consistent with an instruction specifically and the set of instructions generally: the experience of «following instructions» “are more alive than the dry bones of the program” (Bateson 1987: 236), that is, the associated {instruction}. This form of incompleteness can already be noted in actions with tools or upon materials (e.g. kneading dough according to a recipe), but appears even more so when they pertain to social behavior and social relations. Despite both forms of incompleteness, as the following sections show, participants successfully pull off the huddles. It is in their concerted behavior that they, and we, can see what «following (an) instruction» looks and feels like.

2 «Adding a topic»

What «following instructions» looks like in its full extent can only be observed in actual praxis. Reading {if you have questions, comments, or responses, then add topics to parking lot} reveals that the parking lot contains added topics; these are topics in addition to topics presupposed but unarticulated in the phrase. Those topics to which others are added, go without saying. They are in addition to those made thematic in another bullet: {full team succinct updates}. That is, the added topics are in addition to those that are covered by the instruction {full team succinct updates}.

2.1 The visibility of «adding a topic»

A topic does not mysteriously appear in the parking lot; work is required to get an inscription on the whiteboard. This requires actually going to the whiteboard, and, therefore is part of the visual order of the huddle (Figure 2a). In walking, the intention of putting some item in the parking lot becomes noticeable in the phenomenal field. The action itself is a “natural expression of an intention” (Wittgenstein 1997: 165 [§647]). That is, there is a sense to the action of walking across the room that “is not condemned to remain private . . . but immediately takes on a public character” (Ricoeur 1986: 265). Every time someone is walking across the floor, there are gazes following the person towards the parking lot, making an inscription, and returning. That is, the work that actually gets an item onto the whiteboard, the writing, not only is visible in principle but also is actually observed (Figure 2b). Gazing towards the parking lot makes visible the
event of writing as much as the topic. It affords anticipating not only that there will be
some «covering of added items» but also an advance notice of what to look out for when
the writer of the topic begins to speak. There is no walking across the floor other than
adding to the parking lot. Not only do the gazes follow the person, but they also inspect
the parking lot for its added topic. That is, «adding a topic» is notable, is to be noticed,
and indeed is noticed. It is noticed not merely in itself, an independent action, but as part
of the larger situation where the results of the actions entail further actions on the part of
all. In that the action of walking across orients itself to the behavior of all, does
something that will be taken up by the group. The action is social through and through.²

Walking towards the whiteboard makes visible in a practical form the distinction
between (a) the instruction {leave the huddle} that would have to be followed if there had
been a need to speak while someone else is speaking and (b) the instruction {add topic
to the parking lot} that is to be followed if there are questions, comments, or responses. The
event of walking is part of a chronological and spatial unity, which exhibits particular
perceptual structures that go together and do not have to be interpreted (e.g. Bateson
1987). Now that something has been added to the parking lot, members can and do
anticipate that there is an extension to the instruction {full team succinct updates}.
Throughout {succinct updating}, glances are visible in the direction of the parking lot,
where topics are added or have been there already by the time members aggregate.

2.2 «Adding topic to parking lot» outside of the huddle

The inscription reads {if you have questions, comments, or responses, then add topic
to parking lot}. This instruction leaves open whether a topic may be added when they
pertain to something other than questions, comments, or responses; and it leaves open
whether topics may be added at times other than in the huddle. Members do add topics to
the parking lot even before the huddle begins. Indeed «adding topics» occurs at any point
during the working day; {added topics} become the beginning of the list of topics when
the next huddle starts. Although topics added before the huddle began could have been
dealt with before (or as) {(succinct) update}, members treat them in the same way as
topics added during the {(succinct) updates}, and, therefore, as items that followed a first
round of turns.

In inscribing a topic (e.g., Front-end dev[elopment]) in the parking lot, a member also
marks that she is not going to talk about whatever “Front-end dev” is a gloss of while it is
her turn in that part of the huddle corresponding to the {1:00 full team succinct updates}
instruction.³ Instead, in being noted on the whiteboard, the topic marks the prospective
content (gloss, account) of another turn, definitively following when everyone has had a
first turn. Having been marked “Front-end dev” at the very top of the space underneath
“Parking lot,” it is also designated as the first of the issues to be addressed, and, therefore,
denoting the writer to be the first speaker after those of the team present have given their

² It is precisely this inseparability of the produced and witnessed order from the practical action
that achieves it that constitutes the topics of ethnomethodological inquiry (e.g. Livingston 1987).
³ Frontend development is an industry term that names the practice of developing websites—
using tools such as HTML, CSS, or Java script—as seen by the user (“frontend”). The “backend”
includes aspects not directly seen by the user, such as the server, an application, and a database.
succinct updates. Being designated for the parking lot in this way, “Front-end dev” also goes beyond what can be covered in the immediately succinct update, such as when the same member was last in «succinct updating» and first in «covering added topics».

The practices surrounding the parking lot also determine an order of things. In placing “Front-end dev” on the very top of the vertical space below parking lot, the developer makes it available as the first item for any gaze that moves in the for the Western history classical reading direction from top left to bottom right. The order of the entries in the parking lot therefore also is taken to be the order of service, where the individual having written the item is the next person to speak. The order of service also is available in the sequence of the people walking to the board. It is in that same order in which the {topics} were produced that they would be treated once the first round was completed. Those present may consult one or the other form for determining the next speaker.

2.3 «Further adding»

«Following instructions» may be observed especially in those instances that do not seem to have an equivalent in the {instructions} on the whiteboard. Thus, something may be added to the parking lot without constituting a topic or someone «speaking to a topic» may talk about something else. In each case, work is involved to achieve coherence.

First, the parking lot is reserved for topics. But the space may also be used in other ways, for example, in the way a whiteboard is used generally, that is, for writing something to be retained. How do members recognize that what is written is not an ordinary topic? It is a topic but written at the time of talking, such as to be retained and as a resource for making subsequent indexical reference. The first thing I became aware of the phenomenon is this: noticing is more easily done than describing it. I immediately (rather than by means of interpretation) recognize that a note rather than a topic is written. In one instance, the speaker said, “We set up a metric that we are targeting,” while the hand hovers over the {parking lot}, then the hand moves away while he is saying, “for the success of this (circling hand gesture) of the feature, that we are aiming at for app store rank of less than a hundred” (writing “App store rank < 100), we are at two hundred now, by three twelve (writes 3/12).” The inscription says what the speech articulates; and it is in this correspondence that one can see the inscription as an account rather than as the listing of a topic to be addressed some time later. The current speaker also writes, whereas the topics are written before the huddle or during the huddle while someone else talks.

Second, a member may get a turn but then adds a topic that is not been written on the board. Work is done to be able to insert this, as apparent from Fragment 1. The current speaker is oriented towards the whiteboard where another member is adding to the parking lot (turn 01). There is a long pause (turn 02), an invitation to speak, which, as the first name exhibits, is the writer of the latest topic, and, following a brief pause, an interjection that de facto accepts the invitation (turn 05). There is a long pause between the interjection, here functioning as indication of accepting the turn offered, and the actual continuation (turn 05). The hand gesture covering the mouth and the waiting may be seen as a time taken to search for what to say. Then there is a deictic reference to the topic, followed by a verbal deixis (“before I get to that”) together with the offer of talking about something different. There are long pauses immediately following that could have
been used as space for verbally responding to the offer. As nobody takes the floor, the offer for adding another topic is de facto accepted.

Fragment 1

01 Sc: ((watching Simon write a {topic})) and I am able to get it
02 (3.4)
03 D: next simon
04 (0.3)
05 Si: u:m=da (2.4) (lH covering chin, mouth, and upper lip) yea ((pointing towards the parking lot)(0.2) before igettothat (0.5) u:h: (0.6) its=separate >technical problems< you may or may not be able to help with. (0.4) >des anyone have< anything in nee:d (0.4) fo::r (0.3) the spikethon.

If this work had not been done, work would have been required on the part of the recipients to figure out the relationship between the topic on top of the list and the talk. Generally, however, once a topic is enunciated, the person who has been seen (recorded) writing it on the whiteboard begins to speak.

3 «Talking added topics»

Events, such as beginning or ending a conversation, do not just mysteriously end: work is required to institute its beginning, conduct, and ending (Sacks 1992). Throughout this part of the huddle concerning added topics, we observe «instructed actions» at work that do not have their equivalent in an {instruction}. In the following, I exhibit some of these.

3.1 There is a topic to be covered

Members orient to and monitor the parking lot while others are still speaking. That list of topics constitutes what has been called a visibility arrangement (Watson 1997), which, here, also marks an order of service. Orientation is public and joint work; members participate in making orientations available to each other, and, thereby, «following instructions» pertaining to the parking lot. In such orientation, it is not just a member trying to see if there is a topic or what topic there is, but the member is making available this orientation to the parking lot. The parking lot becomes present, something to be oriented to. The orientation also makes available for anyone who might have forgotten that there is something to come after everyone has had a turn at «succinct updating». This work of consulting is itself available in the practices of the huddle. Sometimes we hear the name of person, and it is the named speaking next. Any topic on the whiteboard, therefore, is an instruction that something else is to come, and, therefore, additional work is required. If there is a topic, then we call for it when everyone has had a turn; if there is none, then team can go on with other business, e.g., by breaking into groups and addressing issues prior to getting into pairing arrangements and other development work. Consulting the parking lot affords seeing whether and how close we are to the end of the whole group huddle. When an item is completed, it is wiped off; this
wiping off is public. At some point, only one topic remains, foreshadowing the work of ending the huddle. The last topic is an {instruction} that the work of «ending the huddle» is to be done.

3.2 From «succinctly updating» to «covering parking lot topics»

Social phenomena do not just happen: they constitute orderly and ordered phenomena that are the result of performances. Thus, for example, the performance of a lecture includes phenomena such as “The lecture hasn’t begun,” “He erases the board,” “Topical organization,” and “Closing the meeting” (Garfinkel 2002: 220). In the huddle, too, work is required to end «succinct updating» and to transit to «talking the added topics». It is that work that the instructions on the whiteboard do not and cannot describe. The perceptual order of the situation, as shown here, is an integral part of the organization of that work. This is not done by means of interpreting “the end,” because the end of «succinctly updating» is an achievement that is available only after it will have ended. The work required can be perceived. After analyzing a small number of few videotapes, or following instructions, observers can see the transition happening with the sound turned off. For example, the current speaker turns to the left. But, rather than beginning to speak, the turned-to makes a gesture, bending knees that lowers his body with the eyes directed towards the ceiling, which can be seen as indicating that he has already had his turn. He turns his head towards the parking lot, and then many heads turn creating a wave-like motion among the members until all heads not already in position have been turned towards the parking lot (Figure 3). The group has begun the work of «covering added topics».

The work of moving from one to another part of the huddle is performed even when the last speaker in the «succinct updating» comes to be the first speaker in the «talking added topics». This is apparent in Fragment 2 and the associated Figure 4, which transcribes the movements seen during the 3.5-second pause (turn 02). In this fragment, Caleb has a turn; in fact, it will have been the last turn in the round of {succinct updates}. We can see «following {succinct update}» in all its phenomenal detail.

Fragment 2

01 Ca: u:::h (0.5) °this° (0.4) cleaning is then (0.4) got back into the:: (0.6) thee (0.3) °uh° rowans group (0.3) >worked a little bit< and then:: (clean?)

02 (3.5)

03 To: front end dev;

04 (0.2)

05 Ca: u:::h (0.6) our first candidate (0.4) is (0.2) (???) so

While Caleb is speaking, the gazes of the others are oriented towards him. Caleb himself gazes towards the floor in front of him, speaking interrupted by pauses, as if seeking his words. After what will have been the end of Caleb’s turn, a long pause begins to develop, which is ended when Todd says “front-end dev,” which is one of the added topics. However, there is not just a pause in which nothing happens. As the extended
transcription of the pause shows (Figure 4), out of the eight individuals who have to turn heads or bodies to be able to have their gazes oriented to the parking lot, six individuals will have oriented towards the parking lot. There is a visible order, a structure in the phenomenal field that participants produce for one another and to which they orient.

### 3.3 The list of topics: an order of service

Members may be turning to the parking lot while others are speaking and prior to the end of «succinct updating». This is especially so when someone walks across, in the recognizable intent of “adding (a) topic.” But none of these are seen as inviting the discussion of the topmost topic. But when the «succinct updating» comes to its end, in fact, initiated by it, members begin turning towards the parking lot area of the whiteboard consulting it for determining the first topic and speaker. Whereas during «succinct updating» the next speaker selected stands to the left of the current speaker, during «covering added topics», the order of service follows the order of the items from top to the bottom, wherever the items may be and however much space there is.

In turning towards the whiteboard area below the inscription “Parking lot,” members make available their orientation towards the list, which constitutes an instruction for selecting the next speaker and topic. Consulting the parking lot is becomes part of the visible order in a member’s turning towards the whiteboard. It may be treated as a query for finding out who is next. Such turning does not just occur but is itself monitored. This is treated as interactionally relevant. For example, in Fragment 3a, a pause is developing. Some members already gaze towards the individual who will have been taking a turn, whereas one member (To) visibly is turned towards the parking lot (offprint, turn 03). In response, the individual immediately to his left (J) raises the pointing finger until it is directed words the person across the circle towards whom others are already oriented.

**Fragment 3a**

01 Ca: yea
02 Sc: uh-so: there wuz a: there is a (build) (by) (gon?); and then um I think simon fixed that one, and then it revealed that- a review like it still (went) on, for the: um smoke=test=accept- the <smoke (. ) test> >accepter=system will go<. and then I fixed that, and >that cleared and it went like< still↑ O:n;

Here the orientation towards the parking lot is treated as a consultation for the purpose of finding out the next topic and the speaker. The orientation is part of the visible order, and an index is provided for finding who is speaking next (in fact, just starting to speak). There is a change in the organization of the meeting, which is part of the visibility arrangements that afford the distinction between the two parts of the huddle. Should someone begin talking who has not written the current top-most topic, this will be articulated and then needs to be addressed and resolved. Someone, rather than talking to a
topic, may note that the item that was listed before already has been covered, which is in fact an account corresponding to erasing a topic. The topics are listed in the parking lot. The parking lot is consulted for determining the next turn, which falls to the topic highest on the list. In this, the list is treated as an order of service of the type first-come-first-serve.

The instruction does not describe where in the parking lot an added topic is to be placed. In the predominant number of instances, an added topic comes to be placed below an already existing topic or list of topics. But there are occasions when a new item comes to be placed elsewhere, for example, above the current top-most topic, or, between existing items. In this case, there may be competing efforts in attributing or taking the next turn. Work is then required to resolve the provision of space for a next turn and who is to access that space. The instruction for what to do in such case does not exist, and what is to be done has to be figured out in any event through in the living praxis of the huddle. It is precisely here that «following a rule» is available, in the same way that grammatical sentences are produced on the part of children even before they know any formal grammar.

In a particular case observed, a new item was added between two existing topics that the same person (Simon) had written. Noticeable to everyone present, therefore, that person would have had two consecutive turns. This is available to anyone who consulted the parking lot prior to “RC cut today?” being the next item. There is then the issue of dealing with the “client xml updates?” after what will have been the end of addressing the “RC cut today.”

Fragment 4

01 J: okay
02 (0.4)
03 Si: um=
04 J: =you got that client xml thing
05 (0.2)
06 Si: yea
07 (0.2)
08 Tr: that was just yea just [for fun for (?) else
09 Si: so
10 Si: so
11 Si: so minor phrase plan um i:s-s (0.6) to:::: have us as a group (0.5) um (0.6)
12 “and i think (amerilee?) jared and (senti?) dont know what (0.5) i=m talking
13 about-° (0.4) during (chem?ex?) exercise we did that shield exercise where
14 we do that with the personal shields
15
16 In this situation, the issue is who is talking next. Jason says “okay,” which, by taking the floor using an interjection (turn 03), is treated as completing “RC cut today.” But the next turn, in latching and by reading out “client xml updates?,” contests and takes the floor. There is therefore a conflict between the fact that a member (Simon) has written two consecutive items, but that now another item that has been inserted between the two. Although there is another attempt to take the floor (turn 06), another member (Trina) then begins to speak. But as she does, Simon twice uses the adverb “so,” which can be heard as introductory particle to mark the beginning of a turn. It is only when Trina has come to
the end of noting that her item had been “just for fun” that Simon, beginning with the same particle, actually gets to have the turn. The normal order of things therefore has been upset when an item came to be inserted between two other items that the same person had inscribed into the parking lot. The determination of the actual order of turns was additional work required. Turn 08 actually offers up an explanation (excuse) for adding this item, similar to people butting into a queue ahead of others who have been there for a while. In those instances when items were added above already existing topics, which was only the case prior to the meeting, the order of turns was not upset. These were dealt with in the actual order that they appeared when the time had come for doing the parking lot.

Research has shown that conversational topics do not just end, are replaced by other topics; instead, there is work to move from topic to topic (Erickson 1982; Sacks 1992). The impending movement to another topic may be perceived in the position of a brush near the current topic. Holding the brush over the item a member had written and now is addressing in talking makes visible that it is this rather than some other topic that has its turn. The brush also marks that the impending end of «covering this topic». In Fragment 3b a member standing next to the parking lot (Ch) has picked up a brush, turned and has readied to wipe the preceding (first) item off the parking lot. His turning is visible, here seen by another member (Ne). Wiping an item marks that whatever work the item is associated with has been done In fact, already while the speaker following the reading out of the current topic is speaking, a hand holding the brush is hovering next to the top-most item, visibly ready to wipe it off, once it is done and the next topic has started or part of the work of achieving its end. In the parking lot, there now is one less item to be attended to.

Fragment 3b

04 M: o:h my
05 Sc: u:m, and it looked like- tha, i=m not sure if it’s the (high?) ((gesturing)) you need to change to really dig into, because these ((points to whiteboard)) external dependencies um, this ((Ne turns to parking lot)) thing has been failing for (.) hours and hours and hours, and hours >and then it turns around<, i don’t know if anybody knows anything about that, but it’s a good chance da really dig and dig into that. so I’m not sure- i think it’s k two or- some (sort) (inaudible).

As some item is erased, the remaining list again has an item on top, which, thereby, becomes the first one to be served. This also affords the search for a gloss of what is the current topic—especially when there are several items on the whiteboard and when the relation between actual talk and topics is unclear.

While «covering topics», questioning, commenting, or responding can be observed. That is, although the instruction for the huddle reads {if you have questions, comments, or responses, then add topics to parking lot}, when covering topics from the parking lot,
recipients do question, comment, and respond. Thus, when a topic is added during this part of the huddle, then this new topic notably is not pertinent to the present topic, therefore requiring another «adding topic». A literal interpretation of the new topic or of the act of «adding a topic» cannot reveal this status of this latest topic as a new topic rather than a commentary or response to the present topic. But this status is available in the phenomenal field of the huddle.

3.4 The {topic}

There are many textual genres; and there are many ways in which words can be read. How does reading know to read the [topic] in this rather than another way? As shown in the anthropology of reading, the text itself organizes reading and, therefore, acts like a set of instruction for reading the text in this way (Livingston 1995; Roth 2010). Take the example of {Front-end dev}. Reading finds “Front,” the hyphen, and then “end.” Here, two nouns are connected by means of a hyphen as this may occur when they are combined to form a compound adjectival noun. The abbreviation of another noun follows: “dev.” This confirms the preceding as an adjectival noun combination.

The {topic} foreshadows something important enough to be articulated and talked about. But what is it that is to come? What is it that warrants this inscription rather than another to mark the {topic}? First and foremost, a {topic} is an instruction to speak, and to do so in ways so that the {topic} in the parking lot can be seen as a projective account of what is said after the speaker has obtained the turn. It is precisely the nature to be an {instruction} that is irrecoverable by a literal interpretation of the {topic}. For example, an anthropologist might read {Front-end dev} and then begin to interpret what this text might “mean”; but, in so doing, the function would be missed that {Front-end dev} has in the local praxis of doing the huddle. Thus, its first function is part of the work of selecting the next speaker (see Section 1.3.1). Its second function is like that of titles in newspapers or online articles (e.g., Hester and Eglin 1997; Roth 2010). They are glosses that can be consulted when someone has started to speak, especially when that gloss itself does not feature in the beginning of the talk. The {topic} constitutes an instruction for organizing the work of hearing. For example, they orient the recipients to what is said in ways that they can scrutinize the said for what it is that has occasioned this topic. This relation provides a resource for hearing what will have been said as a whole. What the speaker says can be scrutinized for the purpose of revealing just what the topic and how the sign could be read to hear what the said was to reveal. Consider Fragment 3c, which occurred in response to the item {external dependencies fail}.

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**Fragment 3c**

03 Sc: * uh- so:. there wuz a:::- there is a (build) (by) logon; and then um I think simon fixed that one, and then it revealed that- a review like it still (went) on, for the: um smoke=test=accept- the <smoke (.) test> >accepter=system will go<. and then I fixed that, and >that cleared and it went like< still↑ O:n:,

04 M: o:h my

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4 In software development, “external dependencies” are other applications and devices on which the product to be developed depends.
We notice that the topic itself only appears after some time into the talk (turn 05, grey highlight). However, members present, having oriented to the parking lot and found {external dependency fail}, orient to hear the talk from its beginning for the external dependency fail. In fact, the speaker talks about a smoke test, which names an initial test to reveal whether a piece of software in development is ready for further testing. More then a text to be interpreted in a literal way, {the topic} is part of the event in which «covering the topic» is the complement. Much as any title, it glosses the talk and particularly marks whatever is newsworthy about it. It is an instruction for orienting in a particular way to the talk that follows when the turn at talk has been initiated by someone saying, “external dependencies fail.” It is both part of the whole and stands out of the whole as a summary of it. The nature of what is to come—a comment, question, response, or anything else that can be accountably added to the list—is not available in the {topic}. Hearing, as reading (Livingston 1995), is a self-organizing process, as it configures itself in the course of the unfolding task, seeking to identify something in the «covering the topic» that corresponds to the {topic}. Whatever the text, it can be scrutinized for its pertinence to the topic, and the topic can be scrutinized for its pertinence to the «doing topic talk».

### 3.5 «Ending covering added topics»

The end of the huddle, which coincides with the end of «talking topics», also is the result of joint work. Someone might utter the invitation “work!,” which, when other members walk towards stations, comes to be accepted as the turning point from huddle to the next phase of the work day. “Alright, that’s it,” “Anything else?,” someone clapping, or someone offering up a gesture a body frozen in walking off are other forms of invitations that, in members walking away, come to be accepted as invitations to end. When an end is initiated while there appears to be another topic not yet covered in the parking lot, there is trouble that requires work to be resolved. An instance of this occurs in Fragment 5, where a speaker initiates an end of turn. Following pauses and an interjection, turn 13 treats turn 12 as having omitted an item and as having done something else. The resolution of the problem is offered in turn 16, which characterizes the item on the board as pertaining to something else related to a conference.

**Fragment 5**

08 Ds: thats it (0.2) °thank you°
09           (0.7)
10 Ch: oo:
11           (0.5)
→ 12 Si: now’m gonna have t’figure’what (.° what what=°
→ 13 G: =s that a new item on the top doesn’t doesn’t
[all heads turning towards parking lot])
14 Ne: yea (points to Jackson)
15 (0.5)
→ 16 J: no ’swhat whatever whatever where we at the conference

In this instance, there is a behavior that is observably contrary to the rule of working through the list of topics in the parking lot. It is noticeable by the fact that there is still an item, though it may have escaped attention. The articulation of an item that is new, rather than an existing item not yet wiped out is a social one. It is recognizably there, and it has recognizably not yet been covered. Huddle members then turn to making this topic the content of the talk.

4 Discussion: praxeology of {instruction} and «instructed (situatd) action»

In this study, I analyze how the members of a software development firm produce a particular type of event for which the instructions (rules) are also posted in that very setting. I take an approach that aims at “the praxeological validity of instructed action” (Garfinkel 2002: 126). I take this to mean that “at and as the work site,” “misreading a descriptive account instructionally,” gets us to “the work of following which exhibits the phenomenon that the text describes” (2002: 126). In so doing, I make possible observing both {instructions} and «following instructions», which allows us to consider the relation between the two. Phenomena such as «adding a topic» are social through and through: not because there is a group when it occurs, topics also are added when individuals are on their own. Something such as «adding a topic» is for the group and, as such, not only is observable in the phenomenal field but also is done for the purpose to be seen. Even when nobody else is around, «adding a topic» involves orientations that make it observable in principle, and, therefore, an instructed and instructable matter. I describe a number of aspects that the huddle {instructions} do not explicitly gloss but that are integral to the phenomenal field that is required for such things as finding who has the next turn, what is the content of the next (current) turn, there is (or is not) at least one turn after everyone has had a turn, and so forth. Some readers might think that the instructions are observable just because things like {One person speak at a time} or {1:00 full team succinct updates} are available on the whiteboard right next to the huddles. However, as the present study shows, that totality of the work that accomplishes the instructions or deviations is available only in every this time that a huddle occurs and something appears in the space below the parking lot. That is, it is in the doing of the huddle generally and in the doing of the parking lot-related things specifically that «instructed actions» become observable. It is precisely through extended observations that we, the authors, learned to see what is happening and to anticipate what comes next. That is, the instructions are hopelessly embedded in and embodied by the lived work of following; it is only in that lived work that we can find the instructions in their true sense.
In this study, I describe the different orders of service associated with the two parts of the huddle practice. In the first part, members are arranged in a circle and the turn-related work gives the person the left of the current speaker a turn. During the parking lot-related part of the huddle, the order of the items in the list of topics determines the order of service. These constitute two different visibility arrangements, each “display[ing] a turn order of service” (Watson 1997: 71). I show how members unproblematically shift from one to the other. The shift not only appears unproblematic but also so mundane that it goes without saying. Neither turn order is inscribed in the instructions on the whiteboard.

The organization of the meeting is emerging from these orientations, because who is to speak next or what is the next topic can apparently be found wherever the different participants are turning in the publicly available work of consulting the whiteboard. I describe the local production of a public and therefore witnessable order. The witnessable order is the result of the interactional order. Its production takes the form of instructed and instructable action. I discovered the instructions (rules) in and through my first-time-through analysis conducted after having been provided access to the data set. My experience with instructions in other settings provided us with no more than a general sense; but this sense by far underdetermined what we would be observing in any specific instance that we would subsequently observe. It is in the observations of the actual practice «following instructions» that I found how to read the associated {instructions}. I witnessed members producing conduct such that it was consistent with what the {instructions} describe. What is exhibited in my study, therefore, also may be read as instruction to any newcomer of how the huddle works generally, and how the instruction {if you have questions, comments, or responses, then add topic to the parking lot} looks and feels like specifically. None of the contextual particulars, none of the varying ways in which the «following instructions» looks or feels like is contained in the instruction. That is, the coherence that we might identify as lacking in the instructions, their inherent incompleteness, is observable in each concrete case of «following instructions» or a deviation therefrom (Rawls 2002).

In the course of the preceding analyses, I developed a sense of the huddle in general and the parking lot related events in particular. I discovered the sense of the instructions not by reading {instructions} but by vicariously participating in a number of huddles where «following instructions» is witnessable. Turning off the sound, and scanning through a video recording, I came to see who is talking, when a turn to the next person occurred, when the succinct updating transitioned into parking lot items, that I could anticipate a transition to the parking lot to be occurring, and many other features to which members do not consciously attend. All of this is part of a patterned visibility arrangement. We can describe much of the behavior in the form of rules, or use statements to serve as instructions. However, this does not mean that the members themselves were aware of, or did follow some rule in the classical sense of cause–effect relation. Nor do we, the analysts, require a rule for seeing when some aspect happens before our eyes. As in other situation where we get some phenomenon (e.g., diagram or photograph) with some subtext (e.g. caption) there is a mutually constitutive relation in that the subtext motivates particular readings of the text, but the text motivates the subtext (Livingston 1995; Roth 2010). The reflexive relation between the posted {instructions} and the «following (of) instructions» in the praxis of the huddle serves as a sort of pedagogy for newcomers to the firm. Each huddle has a pedagogical function in
that what people do, their «following instructions», has pedagogical function in teaching how to read (understand) the subtext, gloss, or caption. Software development is a highly mobile field. Members frequently change companies: within a short period of time, seven members had left to work in a new startup. In the course of this study, a number of developers left, being replaced by newcomers. Although there is a reflexive relation between {instructions (rules)} and «following instructions (rules)» it is easier to find the rules in the play—i.e., in observing «following rules»—than the play in the rules—i.e., by gazing at the {instructions} trying to figure out “what they mean.” The posting of the {instructions} allows especially new members to the software team in a continually changing workplace to access these glosses in addition to seeing «following instructions» while participating in the huddle. But it is in the huddle that the ordered and orderly properties of the parking lot-related part of the huddle in the hopelessly situated and contingent ways members do the huddle than in the {instructions} that are inscribed behind them on the whiteboard—as if these were the ground against which the drama of the meetings takes place. They find instructions concretely in their participation, that is, in the very work to which they contribute. They experience «following instructions» three times daily, each time in the concrete ways in which the instructions (rules) manifest themselves rather than in some decontextualized gloss. The posted instructions may seen to function as a sort of continuous subtext that remains the same in every “we are doing it again” in the ever different ways in which the phenomenon manifests itself from occurrence to occurrence.

5 {Instruction}, «instructed (situated) action», and semiotics

In this study, I exhibit the indeterminate nature of the relation between {instruction} and «instructed (situated) action». The analyses exhibit the two ways in which the {instructions} may be termed to be “incomplete”: (a) the existing set of instructions can always be enhanced by the addition of more detailed {instructions} and (b) the gap between what the instructions literally say and the actual work that makes a corresponding phenomenon visible. My study shows that in the actions of members, the phenomenal field comes to be ordered. It is in this witnessable order and the associated work of maintaining it and making it visible that «following instructions» is a visible social fact. Members do so by formulating part of the huddle context, by moving (orienting, walking, positioning) in observable ways, by orienting to their concerted actions, and by holding each other accountable to that visible and visibly produced order. I begin this study by raising the question whether this inherent completeness of {instructions} challenges the very foundations of semiotics.

Already embedded in the title, I raise the question whether the gap between {instruction} and «instructed action» constitutes a challenge to semiotics. The problem is but another version of the mind-body problem, where {instructions} belong to the realm of the mind and «instructed actions» to the realm of the body. The traditional solution to the problem is to introduce some form of mediator to bridge the gap. For Descartes the mediator had been the pineal gland (Il’enkov 1977), whereas in our times tools and signs have taken on that role (e.g. Cole et al. 2014). But any form of mediator not only reproduces the Cartesian dichotomy but also presupposes that very split (Mikhailov
Thus, saying that an instruction can be improved by adding more detailed instructions of actions only proliferates descriptions. Neither the sign-oriented production of interpretants nor the text-oriented production of interpretations get us any closer to the work of actually doing what the signs/texts describe. This is made the topic in the inversion of Ferdinand de Saussure’s original framing of the sign, now defined in the formula

\[ \frac{S}{s} \]

“which is to be read as signifier over signified, the ‘over’ corresponding to the bar that separates the two stages” (Lacan 1966: 497). This is also the topic in the separate treatment of the world of the text and the world of discourse (Ricœur 1986). Although there may be separate worlds, the signifiers, sign or text, are also integral part of the signified, this world of the discourse, where they may be inscribed and used. What matters more than the semantic content, established by the sequences of interpretants or interpretations to which they give rise, is their actual use (e.g. Lacan 1966; Wittgenstein 1997). In use, the semantic dimension may be completely irrelevant and, therefore, constitutes only a lower limit of signification (Vološinov 1930).

In my analyses, I show how the topic on the whiteboard constitutes a particular form of text. As such, it can be interpreted for its signification. For example, \{Front-end dev\} may be interrogated for the literal sense. Someone unfamiliar with the discourse of software development may consult the Internet and find a page stating, “When we discuss the ‘frontend’ of the web, what we’re really talking about is the part of the web that you can see and interact with” (Long 2012). My analyses exhibit how, before anything else, the topic functions as part of producing an order of service, a tool for selecting the next speaker. I also suggest that the topic is an instruction for seeking something to be found in the talk that follows; it is an index. That finding is itself work, which I describe to exist in the reflexive elaboration, a form of work, between \{topic\} and \{talking topic\}. This is the same kind of work required for reflexively elaborating the relation between a pointing finger and a thing pointed to (Goodwin 2003). To understand how signs function in mundane activity, we may consider a classical analysis thereof. Thus, the turn signal of a car—which in the early 20th century Germany was an adjustable red arrow—allows us to distinguish the difference between different modalities of the sign \{Zeichen\} (Heidegger 1977). The sign is directly associated with a form of behavior \{Verhalten\}, which, in the case of the turn signal, will be “standing still” or “yielding.” The sign precisely is not grasped when we stare at it and see it as something indicating something else, or in trying to find out what it is pointing to. The turn signal also is not grasped when considered as part of the car. The sign functions within and against a practical whole \{Zeugganzes\}; and its mode of being reveals itself precisely when it functions.

Throughout the study, we observe members contribute, in their movements, gestures, orientations, and positions to structure the praxis-related, phenomenal field as a whole. Leaning forward, oriented and gazing towards the area of the whiteboard labeled “parking lot” is treated as intention to find out who is speaking next, as shown in a hand/arm gesture that points to the member who is beginning to speak at that time. The member who points does not need to interpret the movement towards the parking lot because the intention is subject to “spontaneous comprehension of the first degree” (Ricœur 1986: 180). “It is in the doing that one knows that one is doing something, what
one is doing, and why one is doing it” (Ricœur 1990: 89); and others know all of these aspects as well. This most fundamental form of understanding [Verstehen] is not cognitive, interpretive, or explanatory; instead, it is a form of attunement [Befindlichkeit] (Heidegger 1977). Attunement affords hearing and seeing in the mode of for-the-sake-of-which [Worumwillen]. That primary attunement to the world always and already is understood together with everything else. This primary understanding comes with “pre-ontological” characteristics that “are not grasped theoretic-thematically” (1977: 312). Only when this form of comprehension is blocked, only when situations no longer are transparently read, that interpretation in the sense of Peirce comes to operate.

Attunement relates members and their world; and what people do changes the world and entrains attunement. Thus, for example, moving (about) produces kinesic and proxemic displays, which are constitutive parts of a situation; these displays are thus conditioned by and produce the context within which any talk occurs: space, distance, and movements are intertwined with forms of talk in complex ways (Birdwhistell 1970; Hall 1968; Roth et al. 1999). The kinesic and proxemic displays produce visibility arrangements and visible structures. But that does no mean that these function as signs when witnessed from within. This is so because from within, the world always offers itself as already there, whereas the visible as a creative accomplishment is apparent when examined from without (Pollner 1987). Instead, the situation surrounds and supports dialogue such that its order, “its bearings can all be shown by a gesture, by pointing a finger, or designated in an ostensive manner . . . through oblique reference of those other indicators that are the demonstratives, the adverbs of time and place, and the tense of the verb” (Ricœur 1986: 210)

Instructions exist here in the form of written text—but it could have just as well be articulated by one or more members. It has been suggested that the Peircean triad may be (cautiously) extended to the level of the text where it takes the form text (object) | depth semantic (sign) | chain of interpretations (interpretant) (Ricœur 1986). Such text—e.g. {instruction}—may be analyzed in terms of its articulation (inscription), its intent (illocutionary act), and its perlocutionary act. It is the last part “is the least inscribable aspect of discourse,” it “is the least discourse in discourse,” and it does not favor the recipient’s recognition of the intention (1986: 209). It is precisely here that a gap emerges between the description of an act inscribed in an {instruction} and its effect on the member «following the instruction».

An instruction is a description of an action, which, read normatively, constitutes a rule. What is the relationship between the description of an action and situated action? We may seek the response by asking how a situated action becomes inscribed in discourse. The sensible (intelligible) action [l’action sensée] becomes an object for the interpretive sciences through an objectification that removes it from transaction (Ricœur 1986). This objectification resembles that which occurs when speaking is fixed in writing, where a reduction occurs from situated dialogue (discourse) to language. In the process we gain: actions, now subject to the same interpretive regimes as signs and text, can be related to other signs and text. On the other hand, this reduction from transaction to action leads to the separation of the signification of an action and the action as an event, and a gap between situated action (event) and its description (plan, respective account) opens up.
What instructions qua texts do not describe are its moral dimensions that arise when texts enter the world (Lacan 1966). An instruction constitutes a symbolic rule that we may formulate when observing what members do. “It is in terms of, in function of . . . a given symbolic rule that we can interpret a given behavior as (signifying this or that)” (Ricœur 1986: 271), where the verb to interpret “has to be taken in the sense of Peirce: before having to be interpreted, the symbols are interpretants of conduct” (1986: 271). Specifically, even the topics that appear in the parking lot are part of a moral order: the person who has written a topic has to speak next. There is not merely an invitation but indeed an obligation to speak (which is not available in the topic to be interpreted).

Should she have walked away from the circle (e.g., to go back to her desk), her name is articulated with sufficient intensity so that she can hear, return to the circle, and talk to the topic. Consulting the parking lot for the next topic (the topic on the top of the list) is an occasion for identifying the presence of the person who has written that item on the whiteboard. Here, the turning bodies away from the circle marks the absence of the person, no invited by means of the articulation of the name and the bodies turned as forms of invitation to speak next. This invitation is another form of selecting the next speaker, which also manifests itself in the head turning left during the full round of «giving succinct updates», or the two-handed “passing on” the turn (also to the left). It is also part of the moral order in that the speaker is accountable for talking in ways that can be seen as standing in a reflexive relation with the topic. As I show, additional work is required to speak about something that would not be covered by the current topic.

References
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For Preview Only

Instructions—A Challenge to Semiotics?     20


Figure 1: Huddle configuration in front of the whiteboard. The insert shows the instructions/rules for the huddle and the placement of the parking lot. (Writing was enhanced to augment offprint quality.)

139x105mm (300 x 300 DPI)
Figure 2. The visibility of «adding a topic». a. Walking across the floor to get to the parking lot. b. Writing the [topic] and monitoring it.
152x100mm (300 x 300 DPI)
Figure 3. Visibility of orienting towards covering the [added topics] in the parking lot
152x81mm (300 x 300 DPI)
TIME (seconds)
0  1  2  3  4
|-----------|-----------|-----------|-----------|-----------|
[---------------------------------------------------------------]
Scott walks towards parking lot
Caleb turns left
Todd gazes towards parking lot
Caleb gazes towards parking lot
Newman turns towards and gazes at parking lot
Todd talks (turn 03)
Jackson turns to and gazes at parking lot
Charles turns to and gazes at parking lot
Caleb talks (turn 05)