

Chapter 14

Talk and Action as Discourse in UN Military Observer Course: Routines and Practices of Navigation

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Abstract

This chapter examines navigation and navigational routines as social and interactional activities in patrolling exercises in United Nations military observer (UNMO) training, showing how navigating is more than getting from point A to point B. The data come from two multinational MO courses where English is used as working language and lingua franca. By using navigation as an entry point to examine talk and interaction in patrol vehicles, this chapter illustrates how collaborative practices are created through performance of individual actions and their reiteration. Successful navigation provides anticipatory information for the team related to their route and position that can be used as a tool for making and reporting observations, and verbalises the location thereby creating shared situational awareness. Navigation is also important for safety. The study offers insights on social and interactional activity in teamwork and the impact that team members' actions have on collaborative work. The results can be utilised to further develop MO training, but they also benefit other simulated and practice-based training.

Keywords: collaborative work, crisis management training, institutional interaction, navigating, social interaction, vehicle patrolling

Introduction

Building routines is a part of adopting new working practices, and pivotal in becoming a competent member in a professional community (see Goodwin 2018). In collaborative work, the routines are often built together. This chapter analyses navigation and navigational routines as social and interactional activities inside patrol vehicles as part of United Nations military observer (UNMO) training. The analysis is based on empirical research on two multinational military observer (MO) courses. MOs are unarmed soldiers who work in crisis areas. Their tasks are, for example, to monitor and verify various agreements (e.g., ceasefires,

withdrawals), patrol demilitarised zones and other areas, and help resolve local difficulties. MO training aims to provide future UNMOs skills and capabilities needed in their upcoming missions. Navigating is, thus, one of the tasks in future UNMOs' work. It is a continuous activity in patrolling, which is why it often overlaps with other patrolling tasks and activities, such as driving, observing, radio communication, and writing logs and reports. Because of its continuous nature, navigating becomes intertwined with sequences of other actions, requiring inter- and intrapersonal coordination (Deppermann 2014) from the team members. Experience and routine in basic tasks make it easier to handle the overlap but dividing attention to several simultaneous activities can be challenging even for experienced officers. When confronted with sudden occurrences or incidents or the team is dysfunctional, overlapping actions can become overwhelming and even the most routinised activities start to fall apart. Teams can encounter navigational “hiccups”, struggle in keeping track of their whereabouts, and occasionally get lost during training.

In observer missions, navigation is in many respects the foundation for successful patrolling. First, to complete their task, the patrol team needs to have a shared understanding of their exact location and its relation to their destination. Second, navigation is a tool for making observations and reporting them. For example, the team must be constantly cognizant of their exact location in relation to specific features of the area they are working in (e.g., a demilitarised zone), to assess if what they see (e.g., actions, minefields, troops, military equipment, or armaments) relates to their verification or inspection task (e.g., a violation of a ceasefire agreement). They also need to report if they discover new minefields or improvised explosive devices (IEDs), for which exact locations are also crucial information. Third, keeping to timetables is important, and it can be accomplished by staying on the planned route. Finally, and strongly emphasised in the training, navigating is central for sustaining personal safety in missions. Safety encompasses many factors, but one of the most important

ways to ensure safety is maintaining shared and uninterrupted awareness of one's exact location, route, and destination. Knowing one's location is also crucial for avoiding any known minefields, planning a new route if needed, and – in an emergency situation where help is needed immediately – informing the exact location via radio to Net Control Station.

In this chapter, discourse is seen as communication entailing both talk and action (Schegloff 1982; Gee 2011). Navigating is taken as an entry point to examine talk and interaction inside the patrol vehicle. Examination of the teams during their navigation process illustrates how collaboration and team practices are created through performing individual actions and then reiterating those actions. Conversation analytic methods are used to examine the trainees' meaningful activity as a real-life and real-time phenomenon (Sidnell and Stivers 2013) and ethnographic observations and field notes are used to support the analysis. Based on video-recorded data collected in two MO courses, episodes of navigation are examined to see how navigating sequences are constructed in MO trainee teams, what purposes they serve, and what happens if the navigational routines collapse. The chapter is structured as follows. First, aspects of navigation are briefly introduced, including a concise overview of relevant previous research. Subsequently, data and methods are described. The analysis focuses on identifying the design of navigation as it is accomplished through talk. First, ways in which the navigator can initiate a navigational sequence to instruct the driver are outlined, and second, driver-initiated navigational sequences that request for information or seek confirmation on the route or location are examined. Finally, excerpts demonstrating a collapse of navigational routines are analysed. The chapter finishes with some concluding remarks.

Background: Aspects of Navigation

MO trainees work in teams of two or three in the patrolling exercise. To guarantee impartiality, all observations must be confirmed by at least two observers from different nations, therefore the teams are formed accordingly. Central tasks, such as, driving, navigating, radio communication, reporting, and keeping a patrol log, are rotated throughout the day, and team members take turns as the team leader. Additionally, everyone is responsible for observation during patrolling. Task division does not mean performing tasks individually. The team works together, but each person has responsibilities within the team's operation. The working language and lingua franca in the course is English, but none of the trainees speak English as their native language. Moreover, the trainees have to learn to "talk the mission talk", that is, adapt to the military talk used in the specific mission they are in (here the training mission).

The navigator's primary resource is the map. Map-reading can be supported with a satellite navigation device (Global Positioning System, GPS) on which the team has marked their planned route prior departure. In addition to the map and the GPS, communication is a crucial resource: successful navigation requires constant interaction and information sharing. The navigator has more information regarding the terrain and the team's progression, because they have the map with marked waypoints, many of which are not visible in the terrain. The lack of clear landmarks can make it very difficult to tell roads and paths apart. Information about the team's location is very important for the whole team and all tasks, as well as for maintaining team cohesion, shared awareness, and safety.

Previous Research: Teamwork, Social Navigation, and Instructions

The MO trainee teams are intercultural, short-termed, and created ad-hoc. Previous research on intercultural collaboration (Hinds et al. 2011) has shown that cultural differences and different behavioural patterns influence teamwork. In addition, research on coordination and complex working environments in fast-response organisations (Faraj and Xiao 2006; Schakel et al. 2016) emphasise the importance of dialogic coordination and knowledge sharing in complex high-stress working environments. It has also been disclosed that in ad hoc or short-term team settings, working strategies are developed in situ (Stone et al. 2010) and proactivity and interpersonal skills are of great importance for the overall team performance (Druskat and Kayes 2000).

This study draws on recent research in interactional mobility studies examining talk and interaction in cars in everyday contexts, focusing specifically on the interactional details of wayfinding and navigation (Haddington 2010, 2012, 2013; Laurier et al. 2012), and on how talk and interaction inside the car is tied to what happens outside (Haddington and Rauniomaa 2014; De Stefani and Gazin 2019; De Stefani et al. 2019). These studies have shown how participants coordinate ongoing activity inside the car (e.g., conversation, a ringing mobile phone) with respect to driving demands (Haddington 2013, 2019; Mondada 2012; Nevile 2012). In further studies on social navigation, the use of directives has been examined as a resource for participants when negotiating routes (Laurier et al. 2012; Haddington 2013). Moreover, research on the institutional context of driving lessons focusing on instructions (Deppermann 2015; De Stefani and Gazin 2014) and noticings (Rauniomaa et al. 2018) resonate with the study at hand. Finally, studies on map reading and the accountability of the map reader (Laurier 2001; Brown and Laurier 2005; Weilenmann 2003) are relevant for this study.

Research on instructions has a long history in ethnomethodology (see e.g., Garfinkel 2002; Macbeth 2014). Garfinkel (2002) describes instructions as a sequence of two actions, *instruction* and *instructed action* (or following instruction). Several studies have analysed instructional sequences in educational environments, or instructional settings (Lerner 1995; Macbeth 2011; Lynch and Jordan 1995; Zemel and Koschmann 2011; De Stefani and Gazin 2014, 2019). Directives are common actions in everyday interaction and can be described as attempting to get someone else to do something or preventing them from doing something (Goodwin and Cekaite 2013; Mondada 2011). The present study has benefitted from the considerable body of research on the use (Ervin-Tripp 1976; Goodwin 2006; Mondada 2013; Sorjonen 2001), formulation (Cekaite 2015; Goodwin 2006; Sorjonen 2001), and entitlement (Craven and Potter 2010) of directives in everyday settings. In institutional contexts, the use of directives have been studied in relation to timeliness of actions (Nevile 2007). The current study examines navigating and map reading in an understudied institutional setting, in situations where participants have specific assigned roles and tasks, one of which being navigating.

Data and Methods

The data have been collected in two MO courses in 2019 and consist of video recordings totalling approximately 170 hours, various course materials, ethnographic observations and field notes, and selected background information about the participants and the course. The participants were informed about the research at the beginning of the course and they have signed a consent form allowing the recordings to be used for research. For this chapter,

approximately 50 hours of video data from five different teams were examined and a collection of navigation sequences was composed. The data excerpts were transcribed and analysed focusing on the turn-by-turn unfolding of the spoken interaction. Building on the principles of ethnomethodologically informed conversation analysis (EMCA) (Goffman 1964; Garfinkel 1984), video-recordings of the patrolling exercises were analysed to see how navigating sequences are constructed in MO trainee teams, what purposes the navigational sequences have, and what happens when navigational routines collapse.

Jeffersonian transcription conventions were used for talk (Jefferson 2004) and Mondadian conventions for embodied actions (Mondada 2019). Ethnographic field notes and background information of the participants were used to support the analysis. In the transcripts, the trainees are referred according to their roles, that is, the navigator (NAV) and the driver (DRV), and for additional team members, their seating order in the vehicle, that is, the back seat passenger (BSP) or the front-seat passenger (FSP). Details containing personal information have been removed. Whenever necessary, I use the 'singular they' as an epicene singular pronoun to fade out the gender of the participants to preserve their anonymity. The call signs in the transcripts refer to vehicles, and each vehicle is used by multiple teams. Call signs have been anonymised in the transcripts.

Video-recordings and transcripts of the patrolling exercises were analysed using conversation analytic methods, supported with ethnographic field notes and observations. Conversation analysis is a qualitative and video-based approach that studies talk and social interaction (Sidnell and Stivers 2013). The recordings are made in naturally occurring interaction situations (i.e., interactions that would occur even without the researcher's presence). The use of video recordings allows the examination of not only talk but also the embodied and material nature of the situation (Heath et al. 2010; Streeck et al. 2011). The trainees' meaningful activity and orientation to a mutual accomplishment of interaction

(Schegloff and Sacks 1973) inside the patrol vehicles is examined as a real-life and real-time phenomenon. The combination of video-recordings and ethnography results in a video-recorded study of lived and experienced real-world training and working practices (see Watson 1999) also considering the organisation of social action in a material world (Jordan and Henderson 1995).

Analysis: Navigational Routines as Source for Information

In this section I will first outline the basic composition of navigation as it is accomplished through talk and interaction in the examined situations and show that navigational turns initiated by the navigator are the basic foundation for and make possible smooth navigation. I will then focus on navigational sequences initiated by the driver and examine how they display that some important information is missing. Driver-initiated navigational sequences can therefore “recover” the navigation interaction by requesting missing information needed to continue patrolling. Subsequently, in the second analytic section I will examine a team that struggles with navigation and analyse how problems in navigation impact the team's overall performance. I will go through problematic turns of talk and discuss their consequence for the team and its operation.

Navigator's Turns Indicating Distance, Direction, or Location

The basic way in which navigation progresses, is through a navigator-initiated sequence projecting a response: the accomplishment of a complying action by the driver (Mondada 2011: 26). The sequence is similar to everyday settings, where passengers participate in driving and give directives (see, e.g., Haddington 2013). In vehicle patrolling, the navigator's

role entitles them to give directives to the driver (Craven and Potter 2010). Directives take diverse linguistic forms varying from statements to imperatives (Ervin-Tripp 1976). Excerpts 1 and 2 exemplify situations where it is clear what the provided information – team's distance to the next action point – refers to, what needs to be done, and by whom.

(1) MO_03_290819_01 00:19:00

```
01 RAD: Lima, this is Hotel, roger,
02      (1.3)
03 NAV: near to [three hundred meters,    ]
04 RAD:      [warning, warning, warning,]
```

(2) MO_04_040919_01 01:55:03

```
01 NAV: straight ahead, straight ahead for about seven
02      hundred meters, so we need to go a long way.
03      (14.0)
```

In Excerpt 2, NAV's turn (lines 1-2) also indicates that DRV does not need to prepare for action. In both excerpts NAV's turns are formulated as statements, communicating details about the estimated distance to the next point, and helping DRV to anticipate subsequent steps. Simultaneously, NAV informs the whole team about the near future, the team's progress, and that the route is being tracked. NAV's turns are situationally relevant and expected and the lack of response reflects the institutional context and the participants' roles.

Excerpts 3 and 4 exemplify giving directions related to immediate action. In both excerpts the team is approaching an intersection and NAV directs DRV to turn.

(3) MO_04_040919_01 04:53:12

```
^ nav's embodied actions
01 NAV: a:nd go^ lef:- right, sorry >right right right<,^
      ...^points right w/ hand-----^
02      (8.0) ((drv turns right))
```

In Excerpt 3, NAV makes a mistake (line 1), and self-repairs, apologising and repeating the correct direction. The direction NAV shows with their hand is correct. The triplicated repair delivered quickly indicates urgency to halt an in-progress course of action (Stivers 2004), caused by the approaching intersection. The directive refers to immediate action, the approaching intersection. The turn is produced (and repaired) in time for DRV to respond by turning the vehicle.

(4) MO_03_020919_01 05:51:56

```
01 NAV: and we take lef:t from tha- (.) °here°.
02      (1.2)
03 DRV: left.
04 NAV: yeah.
```

In Excerpt 4, NAV adjusts their turn as the intersection approaches (line 1). DRV repeats the direction as they arrive to the turn (line 3) and gets a confirmation (line 4). DRV complies by turning the vehicle. NAV's turns in Excerpts 3 and 4 begin with an and-preface, common in task-initiating talk (Nevile 2007: 263) in institutional settings where the participants have specific tasks and roles (Heritage and Sorjonen 1994: 1), marking the talk as routine and making sequentiality salient (Heritage and Sorjonen 1994: 5; Nevile 2007).

In Excerpt 5, NAV announces the approaching waypoint and the distance to it (line 1).

(5) MO_04_040919_01 03:42:14

```
01 NAV: coming up to Z::ulu one in about two hundred meters.
02      (23.0)
```

Again, the anticipated action when the waypoint is reached is not verbalised, indicating that it is known to the recipients. NAV communicates well in advance that they are approaching the waypoint, leaving time for possible anticipatory actions, such as preparing to report or write

the patrol log. Additionally, communicating the arrival in advance allows NAV some time to plan for their own actions after the point has been reached.

Moments prior Excerpt 6, the team has been informed about a car accident involving UN personnel. They are instructed to go to the site and provide first aid.

(6) MO_04_040919_01 04:32:22

```
^ nav's embodied actions
01 NAV: and ^then we're^ g^onna take a ri^ght,
      ...^points fwd^..^points right--^,,,,
02      ah^ (0.6) at the: junction.
      ..^points forward
03      (1.8)
04 NAV: this is Victor one one. so it's four hundred meters
05      down this road, there's the casualty.
06      (1.2)
```

Unlike the previous examples, where NAV's turn communicated only immediate action or the subsequent point, in this excerpt NAV communicates the route further ahead. NAV gives immediate directions (lines 1-2), announces the reached waypoint (line 4) and recounts the distance from the waypoint to their destination. Using the word "casualty" (line 5) to refer to their destination, NAV reflects what they are about to encounter. The action embedded in the directions alerts the team to prepare for first aid. NAV communicates the route to DRV but informs simultaneously the progress towards their new destination and the expected actions there.

Sometimes information needs to be provided rather frequently. Appropriately timed turns are an economical way to provide directions, leaving room for other necessary talk and activity in the vehicle. In Excerpt 7, NAV informs DRV about an approaching waypoint (line 1), gives directions at the approach (lines 3-4), and confirms when the waypoint has been reached (line 6).

(7) MO_04_040919_02 03:36:49

```
^ nav's embodied actions
01 NAV: coming up to: the checkpoint,
02      (5.0)
03 NAV: "and then", down ^here, ( ) check,
           ^points fwd
04      and then we're going to ^the right.
           ...^points right
05      (2.0)
06 NAV: and this is uh: Victor two three.
```

When many courses of action are going on simultaneously or there is other disturbance in the vehicle, the navigator-initiated sequence can take a more complex structure. Excerpt 8 shows a simultaneous course of action affecting the interaction. NAV sits in the back seat and FSP takes actively part in navigating.

(8) MO_03_290819_01 00:19:52)

```
01 NAV: okay,
02 FSP: and you can change the gear als[o.]
03 NAV:                                     [no]:w,
04      (1.6)
05 NAV: ah straight.
06 FSP: and take the gears up [when you change it. ]
07 NAV:                                     [O:N this road, strai]ght.
08 FSP: straight?
09 NAV: yeah. ↑o::n this road. almost one kilometer,
10 FSP: ye[ah,]
11 NAV: [and] a little more.
12 DRV: the clinic,
13 FSP: to X-ray twenty-seven.
14 NAV: yeah.
15 FSP: yes:,
16 NAV: yeah.
17 FSP: thank you,
18      (1.0)
19 NAV: you're welcome,
```

FSP is advising DRV on changing gear (lines 2, 6). DRV and FSP use the same resources required to receive directions, which turns their attention away from NAV as the instructional sequence begins (line 3). Noticing the overlap, NAV first pauses (line 4), gives the directions in line 5, and then repeats the directions overlapping again with FSP (line 7), NAV raises

their voice at the beginning of the overlap, indicating importance or urgency. FSP turns their attention to NAV and initiates repair (line 8). NAV confirms the direction, produces a partial repeat, and expands the turn with information about distance (line 9). FSP's repair (line 8) and response (line 10) indicate that they consider themselves equally the recipient of NAV's directions. FSP complements NAV's directions by providing the waypoint (line 13), leading to a series of confirmations between NAV and FSP (lines 14, 15, 16). Finally, in line 17, FSP thanks NAV, which is atypical for navigation sequences and even more atypical for military talk. NAV's response is a polite return, but comes after a 1.0-second gap, indicating the unexpectedness of FSP's turn (line 19). In this sequence, a simultaneous course of action occupies DRV and interferes with NAV's directives. FSP's active participation first in driving and subsequently in navigating also causes some distraction. Since FSP sits in the front, they have a better view of the surroundings and a better visual, aural, and embodied access to DRV. This episode illustrates how a simple navigational sequence can become a lengthy exchange overrunning other talk, such as DRV's noticing in line 12. Although the team works together, exceeding the boundaries of one's designated task may sometimes cause confusion in the vehicle.

This section introduced a simple layout of navigator's turns: they form the basis for communicating the route, directions, destination, and the team's progress to the driver and the team. In cases where the navigator does not take initiative or for some other reason does not produce these turns to provide information, the driver can then take initiative in requesting for directions or information. The following section will look into such sequences.

Driver-Initiated Navigational Sequences Requesting Information

If the navigator does not provide information timely, the driver can request for it. Taking an active role can be used to return the navigator to the present situation and resume giving

directives, or in situations where the driver can anticipate some kind of action, such as approaching an intersection. This practice can also be functional, but it may be taxing for the driver, who also has to focus on driving and possibly additional tasks.

A driver-initiated sequence can follow NAV's stand-alone turn providing anticipatory directions if NAV does not follow up at the point when action needs to be taken, as in Excerpt 9.

(9) MO_04_040919_02 02:05:44

```
01 NAV: when we get uh: down to the: road, take a right,  
02      (15.0)  
03 DRV: right?  
04 NAV: yes: right,
```

NAV provides anticipatory directions (line 1) but does not give any further directions or a reminder as they approach the intersection 15 seconds later. DRV asks for confirmation before turning by repeating the direction with a rising intonation (line 3), implicating that in that position, directions would be relevant. Similarly, in Excerpt 10, DRV has received information about the direction prior to the excerpt. As they reach the intersection, DRV requests for confirmation of both the direction and the intersection from NAV (line 2), complementing the question with a pointing gesture. The radio is quite loud, and both turns overlap with the radio message, making the complementing gestures relevant in ensuring correct hearing.

(10) MO_03_020919_01 06:03:39)

```
* drv's embodied actions  
^ nav's embodied actions  
  
01 RAD: [Lima this is ] [Hotel]- Hotel this is Lima over,  
02 DRV: [*we go lef^t?]  
        *points left  
        nav          ^points left, nods  
03 NAV:                [yeah.]
```

In Excerpt 11, the team is approaching a Y-crossing and NAV has not given any directions. The left-hand road is marked with mine tape. DRV asks for the direction as they approach the intersection (line 1), which prompts a response (line 2) complemented with a hand gesture.

(11) MO_04_040919_02 02:19:05

```
^ nav's embodied actions
01 DRV: so what dire- direction to go?
02 NAV: this, ^this way, [that would be] correct.
      ...^shows left w/ hand-->
03 DRV:                                [okay I see. ]
04 NAV: because we can't go ^this way because this is a
      ^shows right w/ hand-->
05     minefield.^
      -->^
06 DRV: okay.
```

NAV continues to elaborate the directions (lines 4-5), indicating why they did not provide the directions: the mine tape is a clear indication that they cannot drive left.

In the examined driver-initiated episodes, embodied actions are often used to complement verbal directions. This can be partly caused by their unplanned nature: driver-initiated turns can come unexpectedly to NAV, who then needs to respond spontaneously. Directions may not always be easy to recall on short notice, especially in a foreign language. In Excerpt 10, DRV uses a pointing gesture, possibly ensuring the delivery of the question, and NAV mirrors the gesture in their response. In Excerpt 11, NAV responds using a deictic expression complementing it with a pointing gesture, making the gesture the primary semiotic modality conveying the directions (see Goodwin 2000: 1498). This is potentially problematic for DRV, because the expression requires visual access to NAV's hand.

In Excerpt 12, the team is approaching a complicated intersection with multiple intersecting roads. DRV vocalises a proposed direction, accompanied by a hand gesture (line 1).

(12) MO_03_290819_01 00:30:00

```
* drv's embodied actions
^ nav's embodied actions
+ fsp's embodied actions

01 DRV: so now we are [going *this way.] *
                                *points left*
02 NAV:                        [>no no ^no no.< ]
                                ^points forward-->
03 FSP: no.
04 NAV: for that one.+
      fsp                        +points forward-->
05 DRV: ok+ay.^
      fsp -->+
      nav      -->^
06 NAV: ye:s that one.
```

NAV disagrees in overlap with a quickly produced multiple sayings, (line 2), indicating urgency to halt the progress of the action (Stivers 2004). FSP participates by also disagreeing (line 3). NAV uses a deictic expression to communicate the correct direction accompanied with a hand gesture pointing forward (line 4). FSP mirrors this with a similar gesture. DRV glances at the pointing hands and confirms that they have understood (line 5) which road to take. In a complicated intersection, left and right may not be sufficiently informative directions when there are several possibilities in either direction, making it reasonable to use all possible semiotic ways to communicate directions and orientations.

In Excerpt 13, the team is getting ready to continue patrolling after having stopped at a position. DRV initiates the navigating sequence because NAV has not provided any directions.

(13) MO_04_040919_01 01:51:20

```
^ nav's embodied actions
* drv's embodied actions

01 DRV: now where?
02 NAV: ^now we need to ah look, heh at the map,
      ^reaches to use the GPS-->
03      (5.0)
04 NAV: and we need to go: find some satellites, ^
      -->^
05      (8.0)
06 NAV: ^°so° that way.
      ^points left
07 DRV: that?*
      *points left
08 NAV: yes.
09      (3.0)
10 NAV: exactly.
11      (2.0)
12 NAV: then we're coming up to Victor three.
```

NAV's response in lines 2 and 4 indicate that they were not yet oriented to moving forward and had not yet checked the route ahead. After a few seconds, NAV gives the directions by using a deictic expression and pointing (line 6). Use of deictic expressions and gestures indicate that NAV relies on having DRV's attention. DRV responds by mirroring both NAV's spoken turn and gesture (line 7). In Excerpt 14, the team has similarly continued patrolling after closing down to a position. NAV and DRV have been discussing about the UN flag on the roof of their vehicle. There was only one direction to drive from the position and DRV did not require directions when taking off, but the team is currently approaching an intersection.

(14) MO_04_040919_01 03:32:13

```
01 DRV: now?
02 NAV: just straight ahead,
03 DRV: °okay, °
04 NAV: we're going all the way down, and ah (0.4) when we
05      come back, eh: down at (.) you know the vehicle,
06      we're turning (.) right. °so° just straight ahead.
```

DRV signals that they need directions (line 1). NAV quickly picks up the cue and is ready with the directions, indicating preparedness and being up to date. NAV gives first the immediate information regarding direction (line 2), and then adds anticipatory information about the near future (lines 4-6), helping DRV prepare for what is about to follow. NAV ends the sequence by repeating the immediate direction DRV should take. Excerpts 13 and 14 illustrate situations where DRV can initiate a navigating sequence if navigation is temporarily halted. For DRV, initiating a navigating sequence has two functions: indicating readiness to take directions and orientation to continuing forward.

Another team member can also initiate a navigation sequence. The basic structure is the same as in driver-initiated navigational sequences. The reason to initiate a navigational sequence can stem, for instance, from preparing for radio communication or looking at the map and requiring information regarding the team's location. In Excerpt 15, FSP initiates a turn requesting for directions (lines 1-2).

(15) MO_03_280919_01 00:24:04

```
01 FSP: and where is the X-ray twenty-seven,  
02     somewhere here.  
03 NAV: yeah continue o::ne (0.8) hundred or less,  
04 DRV: ninety meters?  
05 NAV: fif:ty meters um:  
06 FSP: wait,  
07 NAV: °something like that.°
```

NAV responds with an approximate distance, formulating their response as a directive targeted to DRV (line 3). DRV's response is interesting: in addition to complying and continuing forward, they also provide a candidate estimate on the distance (line 4). As they move forward, NAV re-calculates the distance and provides an updated estimate (line 5). FSP's intervening turn causes NAV to mitigate their response (line 7), indicating a possible

orientation to disagreement. FSP, however, is looking at a map, trying to figure out where the next waypoint is in relation to the team's location.

The examples in this subsection illustrate that the basic function of driver-initiated sequences is to request for information that has not been provided by the navigator, or repetition of information that has been provided at an earlier time, but at the time of the anticipated action is not repeated. Drivers' turns requesting for information most frequently address immediate directions and their timeliness. Gestures are often used to complement either the driver-initiated turn or its response, or both. This analytic section has exemplified practices for providing and requesting for navigational information. The examples illustrate how navigational interaction is constructed during the patrolling exercise. The following section will illustrate what can happen when the navigational routines have not been formed or they fail, leading to breakdowns in interaction.

Analysis: When Navigational Routines Collapse

The excerpts in this section come from a single team. The team is on a patrolling route, where inspecting a position called M1 is their first task. Within ten minutes of their departure, the team is already struggling with navigation, and while "seeing" M1 and verbalising it three times, they do not recognise it and end up driving past, never inspecting the position.

Arguably, one reason for missing the position is the trouble with navigation, which takes the team's focus away from other relevant activities, such as observing, reporting, and safety.

During the first fifteen minutes of the route they also end up driving through a road that is marked with mine tape, realising only afterwards that in the simulated scenario they have already been killed; their observations of the surroundings are haphazard and coincidental, with no focus on what they actually observe and how it affects their task.

Already when leaving the camp, the team deviates from basic navigation routines. They have gone through the route together before taking off, but it is difficult to remember more than a few turns if the route is not familiar. NAV and DRV talk about the route and the first two or three intersections as they leave the camp, but they do not reach a consensus on DRV's familiarity with the route. They also go through other practices, such as using the odometer to support navigating, but, as it turns out, they do not share an understanding about the implementation. DRV has an approximate idea of the direction, distances and the first turns of their route, and therefore does not ask for directions when they are not provided. However, by commencing the route without starting their navigational interaction routines, the team begins patrolling without really engaging into constructing their navigating practices. This leads to potential difficulties because NAV and DRV do not have previously shared working practices, nor do they share their practices now, instead both continue working the way they have been accustomed to or the way they see befitting, not realising that they may not be making sense to one other. According to Mustajoki (2012), one of the main reasons for misunderstandings is that speakers fall into the "common ground fallacy" in expecting the recipient(s) to know or understand more than they actually do based on shared knowledge. Planning a route together can leave the impression that everyone knows and remembers it. Presumptions can also be made based on previous experience and training, leading to think other team members have skills or capabilities they do not actually have.

Despite the difficulties NAV has in keeping track of their location, DRV and NAV engage in conversation about the vehicle's lights. Suddenly they reach an intersection. In Excerpt 16, NAV is not sure which way they should continue.

(16) MO_03_270319_01 00:28:23

01 DRV: okay,
02 (3.0)
03 NAV: [then,]
04 DRV: [ri- r]ight, straight?
05 NAV: [norm]ally left,
06 (1.0)
07 NAV: I'm not sure, how many meters do we have?
08 DRV: one kilometer.
09 NAV: n- no. we have from point to point it's important.
10 (1.0)
11 NAV: so f- we have to: reset it,
12 BSP: are there track there?
13 DRV: yeah, we are going to Victor one.
14 NAV: no, two.
15 DRV: ah sorry Victor two.
16 NAV: Victor two, is this, and then this one.
17 DRV: mm,
18 (2.0)
19 NAV: but that must be a- not a main road. this is not
20 a main road. so we have to go straight and-
21 DRV: hmm, carry on.
22 NAV: yeah.

After DRV's request for directions (line 4), NAV's response is rather ambiguous (line 5), after which they ask for the distance from the previous intersection (line 7). Vague directives are a possible interactional warning sign (Nevile, 2013), anticipating that something could be wrong or underway to going wrong and thereby – if recognised – could and should be intervened immediately. DRV's response (line 8) indicates that they have not built a shared understanding about how to use the odometer, and NAV gives a vague opinion on its use (line 9). The topic is dropped when BSP vocalises a noticing (line 12), and the odometer is never discussed again. BSP's noticing is also disregarded, indicating that both NAV's and DRV's attention is consumed by navigation. The way the team acts whenever they encounter a disagreement, and the way they give feedback to one another, starts to emerge already at this time. They do not work as a team but focus on their individual tasks. From very early on they fall into a habit of raising their voices or speaking brusquely whenever they disagree. They also bark orders at one another. After any disagreeable or unfriendly exchange, they

take the habit of changing the topic or being silent. They do not resolve their frictions and they act unprofessionally. They start to build a negative interaction model, that they continue to feed every time they are in a similar situation.

It becomes apparent that NAV and DRV have a different perception of the designated roles, especially that of NAV. DRV expects to receive clear and simple directions, indicating direction and distance. NAV has a tendency to initiate a general discussion about the route and location instead of providing directions, indicating that they would rather share the navigating task and make decisions together. NAV needs help in map reading and following the route but fails repeatedly to vocalise the need clearly. DRV occasionally also dismisses NAV's attempts to ask for help, at times even directly refusing help with the excuse of not having reading glasses on them. NAV continuously gives vague and contradictory directions that often lead the team back to where they came from. Returning to a known location serves a purpose for NAV, but since they do not (or cannot) communicate this to DRV, the directions only confuse DRV, as illustrated in Excerpt 17. NAV has some time prior directed DRV to turn left. The team is in a complicated intersection: there are several roads and paths and there are two intersections very close to one another. Furthermore, not all of the paths are marked on the map.

(17) MO_03_270319_01 00:31:02

```
^ nav's embodied actions
* drv's embodied actions

01 NAV: it's not (.) not (.) far away to Victor two (.)
02     eh Victor three,
03     (2.0)
04 NAV: but not this way, >NO NO NO NO.<
05 DRV: mm, you said to take left.
06 NAV: yeah but (.) at ^this junction (.) left.^
        ^points backwards-----^
07     (2.6)
08 NAV: yeah, I said this (.) so we came down,
09     (2.0)
10 NAV: ^from there. ^
        ^points right^
11     (10.0) (( drv turns the car and backs up))
12 DRV: where?
13     (1.0)
14 NAV: no. ^we came- we had to drive from this way.
        ^points right-->
15 DRV: ah okay.^
        nav      -->^
16     (2.6)
17 DRV: *you should show with the hands *because they are not,
        *points right-->          *points left-->
18     (1.0)
19 DRV: these roads as as you can see it's very,
20     (2.0)
21 DRV: ah: hard to see *where is the road.*
        *points fwd-----*
22 NAV: yeah, but ^we came from there.
        ^points right-->
23 DRV: yeah, and now we [drive the same,]
24 NAV: [so. from this p]oint we had
25     to ^drive, ah to turn left.
        -->^circular motion
26     (2.0)
27 NAV: no, ^made. we have u-turn.
        ^circular gesture
28 DRV: we are h: on the same road again h:..
29 NAV: yeah I know but-
30 DRV: °ah, (.) there,°
31     (2.0)
32 DRV: mine,
```

DRV and NAV continue to talk about the nearest waypoints, when suddenly NAV looks around and notices that they are not turning to the correct way (line 4), indicating urgency to halt the action with multiple sayings delivered quickly with a raised voice (Stivers 2004). The multiple saying of "No" is designed not only to halt the driver from turning to a wrong

direction, but also to halt the whole action of driving until mutual understanding has been achieved. DRV blames NAV for providing incorrect directions (line 5) eliciting reciprocally a rebuttal from NAV (line 6). After a 2.6-second gap NAV starts to go through the route before the current intersection (line 8), which DRV disregards and requests for further directions (line 12). NAV's response in line 14 is unexpected: the response does not provide an answer to the question and does not follow the projected question-response sequence. The response could function as a warning sign (Nevile 2013) for DRV to stop and ask for clarification. Instead of repeating that the direction is the same (lines 23 and 28), DRV could ask why NAV wants to return there. Instead of working together, NAV and DRV fall into a dispute where they both hold on to their own ways of working. They have different understanding of what is going on and why they are returning on their tracks. They do not share practices of map use (e.g., looking for landmarks) and have a different conception of what to do when encountering problems. NAV is in charge of the map by default, but due to uncertainty pursues to share the responsibility with DRV (Brown and Laurier 2005). For NAV, map-reading is a distributed responsibility (Hutchins 1993; Watson 1999), whereas DRV sees their tasks as individual responsibilities. DRV's interrogative (line 12) and remarks on going back on their tracks indicate that DRV wants clear directions. NAV's account for the route (Laurier 2001; Brown and Laurier 2005; Weilenmann 2003) and backtracking are attempts to go through the route and make it clearer. This does not follow the expected QA sequence (Schegloff 1972) for DRV, who becomes annoyed for not getting a direct answer. Neither of them explains their reasonings, consequently leaving them in opposing positions instead of working together. NAV and DRV fall into an operating model that does not support the team working towards a shared goal, but instead separates them and pushes them apart.

Excerpt 18 begins where Excerpt 17 ends. DRV notices markings for mines and establishes this (line 1), but does not get a confirmation.

(18) MO_03_270319_01 00:32:09

```
* drv's embodied actions
^ nav's embodied actions

01 DRV: *mine,
      *points left
02      (5.0)
03 DRV: and where.
04 NAV: so. (0.8) here what- here, should be (0.5) Victor two.
05      will- we called here [this is Victor-]
06 BSP:                                [just wait,      ]just saw a (0.6)
07      strap. a yellow one on the, on the tree?
08 NAV: yeah, we report it. make a report, (0.8) on
09      Victor two:, ^right side, mine field,
      ^points right
10 NAV: ^WRITE IT DOWN.^ YOU HAVE TO REPORT IT.
      ^turns twd bsp ^
11 DRV: *both sides, this is a* mine road, *actually.  *
      *points left and right*          *points l & r*
12 NAV: okay, then ^this is closed.^
      ^points l & r---^
13 DRV: I think so.
14 NAV: they said,
15 DRV: *mm,      *
      *points left*
16 NAV: then we-
17 DRV: just we through the passed^ and
      nav                                -->^
18      (1.0)
19 DRV: maybe we are killed.
20 NAV: yeah.
```

DRV returns to navigation (line 3), requesting for directions. NAV treats DRV's question as another opening to initiate a discussion on how to get where they want to go and describes their current location. BSP, who has been paying attention to their surroundings, notices further mine markings. Overlapping with NAV, they vocalise the noticing (lines 6-7). NAV responds with disdain, even irritation, directing BSP to take notes (lines 8-9), without considering what the sightings mean in general, or for the team's safety. When BSP does not react, NAV turns around to face BSP and with a raised voice directs them to take notes (line 10). DRV does not intervene in the exchange but has instead turned their focus to the

surroundings. DRV also verbalises mine markings, this time on both sides of the road (line 11), indicating that the road is mined and cannot be used. NAV's attention turns to the mines, perhaps because of the cumulating talk about the markings, or because the information this time comes from DRV. In addition to speaking in an unfriendly and unprofessional manner, both NAV and DRV distinctly leave BSP outside their interaction, almost omitting them from the team. DRV makes the conclusion that the team already drove through the mined road, and that they have most likely been killed (lines 17, 19). The crucial reason for driving into a mined road and subjecting them to danger is the team's immersion in navigating and its problems, causing inability to perceive or focus on anything else.

The pressing issue with this team is that instead of helping each other, they take out their feelings of pressure out on one another. Raising one's voice and barking orders are signs of unprofessionalism but also of inability to recognise or reflect on the impact one's own behaviour has on others. Not intervening and allowing others to behave unprofessionally is also a way of sustaining such conduct. These excerpts only show the first 15 minutes of the team's patrolling task. It suffices to say, that the team's navigating continues in the same manner, and they continue to struggle throughout the day. NAV continues to give vague and contradictory directions, and DRV's requests for information are terse and do not invite discussion. Thus, their communicative practices stay the same, even deteriorate, as DRV and NAV reinforce their practice of using a raised voice, a brusque tone, and giving orders. This leads to heated arguments between the two, but also to both of them raising their voice and being unfriendly to BSP. All in all, the team uses most of its time and energy in conflicting arguments and random attempts to find their way. For BSP, there are very little opportunities to participate or take initiative, which leads to BSP's withdrawal from the arguments but also from the joined activities.

Conclusion

The teams examined in this chapter have been joined together for a short term and thus do not share a common history or a common future. The teams build their own routiness and interactional practices as they work together. At best this means using the variety of different resources that the team members have, working together for a mutual goal, and sharing the knowledge team members have and acquire during their work. This chapter has illustrated how such practices can be achieved through talk and interaction and how repeated occurrences of an action create a pattern that becomes a practice. Repetition is a way to build practices befitting the team, providing the possibility to steer individual actions to fit specific situations. However, the same mechanism works for building poor practices as illustrated by the example of a team whose navigational routines collapse. The focus of the team turns towards their internal disputes and away from the patrolling task.

Successful navigation is accomplished through interaction. It is clear and concise, leaving room for other talk, such as communicating noticings and confirming sightings. Navigator's turns communicate details about the overall route, distance to an intersection, or approaching landmarks and waypoints. They also offer information or remind team members about required actions when a waypoint or a destination is being approached or has been reached. As navigating is a predominant activity in patrolling and devours a lot of time, it also plays a part in forming the team's mutual way of operating. Most patrolling activities require using the same resources that are used in navigating. Therefore, one person can fully concentrate on only one of these activities at a time.

This chapter has examined the basic composition of navigation in vehicle patrols. Navigation was taken as an entry point into the team's discourse within the vehicle. Discourse is here understood as entailing both talk and action. Navigating sequences build on the active

role of the navigator who follows the team's location on the map, while simultaneously monitoring the GPS and the surroundings to see if the information aligns. The navigator then gives directions to the driver, and in doing so keeps the whole team aware of their location and progress. Based on the preceding analytic sections, the pivotal functions of successful navigation are (1) offering anticipatory directions for the driver and the whole team and keeping them aware of what is about to happen in relation to the route in the near future, (2) verbalising the location and thereby creating shared situational awareness, and (3) commencing a practice of communicating and requesting information that can further be used to form the foundation for information sharing in the team. At best, this communication is systematic, organised and lucid, leaving little room for misunderstanding. Successful navigation is not necessarily flawless: if the navigator interprets the map incorrectly, the distance is estimated incorrectly, or the driver takes a wrong turn, the team can momentarily deviate from the planned route. However, when the map and the surroundings are monitored attentively, the navigator or someone else in the vehicle notices quickly if the course is wrong and can correct the situation.

Allowing for the highly specific working environment of MO training, the results of this study contribute to the general discussion of interactional practices in collaborative and teamwork situations. Further research on especially on-the-job and practice-based training situations is called for. The study offers insights on positive and negative interaction patterns in collaborative situations and is scalable to other collaborative learning and working life settings.

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