

# What Is a Situation?

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## Abstract

Our everyday use of the term *situation* suggests that it is unproblematic to decide what constitutes a situation in which language happens. At the same time it seems to be important to account for what a situation is like since situational factors have been found to influence systematically the properties of the language which occurs in that situation. We are investigating a corpus of (simulated) human-computer interaction in which the simulated system's utterances are produced independent of what the speaker says according to a fixed schema with recurring phases. This way, what one communication partner utters is both intra- and interpersonally comparable. The corpus thus provides a unique opportunity to study linguistic behaviour in a completely fixed situation in which even the contributions of one of the speakers can be controlled. Although situational variables are kept constant in this corpus, the speakers' linguistic behaviour varies both intra- and interpersonally. Given the hypothesized strong connection between situation and linguistic behaviour, the variability of the linguistic properties observable constitutes a problem. With respect to intrapersonal variation, the variability can be attributed to a change in speaker attitude towards the system. In order to explain interpersonal variation, the corpus is checked for indicators of how speakers conceptualize the situation. What speakers believe about their communication partners can be shown to correlate with aspects of their linguistic behaviour. Instead of defining a situation by means of extra-linguistic variables, it is suggested to treat a situation as a speaker category, that is, as a complex concept to which the speakers themselves can be shown to attend.

## 1. Introduction<sup>1</sup>

Everyone can answer questions like 'what situation are you in,' 'in which situation do you record your corpora,' or 'what would be a situation in which this or that sequence would make sense.' The term *situation* therefore seems to be quite unproblematic. At the same time, discourse and text typologies, the number of different 'kinds' of dialogues, for instance, map task -, appointment scheduling -, or instruction - dialogues, as well as the obligatory section on the corpus data used in empirical studies of discourse suggest that the situation in which language happens has an impact on the language used in this situation. Furthermore, concepts like register and sublanguage assume an essential relationship between situational factors and the linguistic properties observable.

While situational factors seem to be of influence on the language observable, what can be found regarding dialogues which are recorded in absolutely identical circumstances with 36 speakers (19 women, 17 men) is that there is an enormous intra- and interpersonal variation as to their linguistic behaviour. The, old yet unanswered, question to be asked here is thus, if the situation influences the use of language made by the speakers, why does their linguistic behaviour differ so much, during time and between speakers?

The focus in this study will be on what the speakers' linguistic behaviour can tell us about what they think the situa-

tion is about themselves. The corpus investigated provides us with the unique opportunity to study the role of individual speakers' conceptualizations of what the situation is like because one of the speakers' linguistic behaviour is absolutely identical – both through time and between speakers. Thus in the current corpus not only the external variables, participants, task, domain, activity type, etc., are kept constant, but also what one of the participants contributes. In particular, an automatic speech processing system is simulated by a human 'wizard' (Fraser and Gilbert, 1991), and its linguistic output is created according to a fixed schema with fixed recursively recurring sequences (see section 3.). Thus, while dialogues in general are interactively achieved (Clark, 1996), the current corpus allows us to analyse controlledly the contribution of a single speaker's conceptualization of what the situation is like.

## 2. The Impact of Situational Variables on Linguistic Behaviour

On the basis of Firth's contextual theory of meaning (Firth, 1957), Halliday et al. (1964) develop the concept of register, the "systematic variation by use in relation to social context" (Lyons, 1977, p.584) to account for the fact that particularly for language teaching it is essential to consider that not all linguistic forms are equally well suited to be used in all situations: "It is only by reference to the various situations, and situation types, in which language is used that we can understand its functioning and its effectiveness" (Halliday et al., 1964, p.89). The relationship between situation and linguistic properties appropriate in it are taken to be conventional: "Linguistic features of registers can sometimes be seen to have language-external

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### 3. Corpus

causes, (...) but otherwise they must be accepted as being in the same arbitrary type of relation to the situational features they correlate with as, in general, linguistic items are to the situational items they 'mean'." (Ellis and Ure, 1969, p.251-259). Language variation 'according to use' can therefore be accounted for by creating a situation typology and by associating conventionally particular linguistic features to the different situation types.

With respect to the communication partner automatic speech processing system, Krause and Hitzenberger (1992) have proposed a register 'computer talk'. They describe 'computer talk' quantitatively as a variety in contrast to 'normal' language by means of the increase and decrease of particular linguistic features. That is, they propose that the situation is determined by the particular communication partner automatic speech processing system, and that knowing about this suffices to predict the linguistic properties that can be observed in the speakers' linguistic behaviour in the communication with such systems, at least in comparison with 'normal' speech.

In addition to the role of the communication partner, a number of criteria have been identified that determine the linguistic properties of speakers' utterances, which are of relevance to automatic speech processing. For this reason, to increase the reusability of corpora as resources for the development of such systems, dialogues were proposed to be classified according to these criteria. The dialogue typology suggested by the EAGLES group on *Integrated Spoken and Written Language Resources*, for instance, suggests the following criteria by means of which corpora can be classified (EAGLES, 1998):

- Number of Participants
- Task Orientation
- Applications Orientation
- Domain Restriction (also: which domain)
- Activity Types (cooperative negotiation, instruction, etc.)
- Human-Machine Participation
- Scenario
  - Speaker Characteristics (gender, age, geographical provenance, smoking habits, etc.)
  - Channel Characteristics (spoken vs. written)
  - Other Environment Conditions (special recording conditions, such as Wizard-of-Oz)

Besides these practical considerations, the influence of situational variables on language use are investigated, for instance, in sociolinguistics (Fasold, 1990) and in approaches to linguistic variation (Chambers and Trudgill, 1998), as well as in the ethnography of communication (Hymes, 1972). It can be concluded that there is a strong connection between situational variables and the properties of the language occurring in them. Dialogues that do not differ with respect to the situational factors can conversely be expected to be homogeneous regarding their linguistic properties.

The data are 36 dialogues of 18 to 33 minutes length that were transcribed and prosodically, conversationally and lexically annotated (Fischer, 1999a). Each dialogue consists of 248 turns on the average,<sup>2</sup> 124 of which are uttered by the human speaker.<sup>3</sup> Participants (19 women, 17 men) are between 17 and 61 years old and all native speakers of German.<sup>4</sup>

As a methodology for controlling inter- and intrapersonal variation, a fixed dialogue schema has been created which determines the utterances made by the system. Thus certain sequences of system output have been defined which are combined in a fixed order, all sequences occurring at least twice. These recursively recurring dialog phases make it possible to analyse the reactions to the same sequences of utterances at different stages of the dialogue. The system output is thereby completely independent of the users' utterances. For instance, the system may ask the user to make a proposal for a day when to meet. Irrespective of the user's reaction, the system will then utter that the first of January is a holiday, simulating a speech recognition error. After the next speaker utterance, the system will assert that it is impossible to meet at four o'clock in the morning. This sequence may occur four times in each dialogue. The impression the speakers have during the dialogue is that they are talking to an automatic speech processing system that repeatedly misinterprets their utterances, and that sometimes fails to understand completely. Furthermore, the system produces long pauses (30 secs.) and 'wrongly synthesized,' not understandable, utterances.

Speakers are instructed to schedule ten appointments with the system. Before speakers are confronted with the (simulated) malfunctioning system, they are involved in a 'test phase' (ca. 20 turns) of which they are told that it is necessary so that the system can adjust to the quality of their voices. In this phase the wizard is, contrary to the 'real' dialogues, cooperative. After this phase, the speakers are confronted with the fixed dialogue schema. Each of the recordings is ended by a sequence of system output 'I did not understand' and is then interrupted by the experimenter with the comment that the machine is obviously 'hung up'. The speakers are then asked to answer some questions about their satisfaction with the system, whether they believe to have been emotionally engaged and whether they have believed to be talking to a computer. None of the 36 speakers has reported that s/he has realized that the system output was created by a human 'wizard'. Afterwards

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<sup>2</sup>The variation, in spite of the fixed dialogue schema, is due to the fact that speakers sometimes wait until "the system has recovered", and thus the 'wizard' has to initiate a nonscheduled request to propose a date in order to continue the dialogue.

<sup>3</sup>The 124 turns were divided into six phases of approximately 20 turns each for the quantitative analyses presented in the following sections. Phase 0 refers to the cooperative phase.

<sup>4</sup>The transcription conventions are as follows: <B> = breathing, <P> = pause, +/ter=/+ = repaired and aborted utterance, <uh> = hesitation. Speakers are named e0xx. Each turn is furthermore labelled according to the subdialogue and phase in which it occurs. For instance, e0585302 is the second turn uttered by speaker e058 in subdialogue 5, phase 3.

they are informed about the real purpose of the recording (that is to elicit speech in the interaction with a malfunctioning system). To sum up, the ‘situation’ in which the corpus is recorded is the following:

- Number of Participants: 2
- Task Orientation: appointment scheduling
- Applications Orientation: non-applications-oriented
- Domain Restriction: appointment scheduling
- Activity Types: cooperative negotiation
- Human-Machine Participation: human-to-computer
- Scenario
  - Speaker Characteristics: 36 speakers; 19 women, 17 men; native speakers of German; mostly from Northern Germany.
  - Channel Characteristics: spoken
  - Other Environment Conditions: Wizard-of-Oz scenario; speakers are ‘alone with the system’ during the recording.

An excerpt from a dialogue that illustrates the lacking cooperativity of the simulated system, producing its utterances according to a fixed schema, and the speaker’s attempts to schedule an appointment in spite of the communication partner’s uncooperative behaviour can be found below:

- (1) e0582305: wie wär’s denn mit dem elften ersten, von acht bis vierzehn Uhr? [*how about the 11th of January, 8am to 2 pm?*]
- s0582306: Freitag, der achte erste paßt sehr gut. [*Friday the 8th of January suits me well.*]
- e0582306: elfter erster, du Rübe. [*11th of January, you turnip*]
- s0582307: die erste Märzwoche ist schon belegt. [*the first week of March is already occupied*]
- e0582307: <Noise> <P> du brauchst mal einen Systemadministrator. elfter Januar. [*you need a system administrator. 11th of January*]
- s0582308: ich habe den Termin für Sie notiert. [*I have noted down the appointment for you*]
- e0582308: welchen? <P> +/ob/+ welcher Termin ist +/ter=/+ <uh> notiert für den elften Januar? [*which one? <P> whether which time was uh noted down for the 11th of January?*]

The same sequence of system utterances causes the speaker to behave completely differently at a later stage in the dialogue:

- (2) e0585305: <B> fünfter Januar, zehn bis zwölf. [*5th of January, 10 to 12.*]

s0585306: Freitag, der achte erste paßt sehr gut. [*Friday the 8th of January suits me well.*]

e0585306: fünfter Januar, zehn bis zwölf. [*5th of January, 10 to 12.*]

s0585307: die erste Märzwoche ist schon belegt. [*the first week of March is already occupied*]

e0585307: fünfter Januar, zehn bis zwölf. [*5th of January, 10 to 12.*]

s0585308: ich habe den Termin für Sie notiert. [*I have noted down the appointment for you*]

e0585308: siehst du, man muß nur oft genug sagen. [*you see, one only has to repeat often enough*]

#### 4. Variation in Speakers’ Linguistic Behaviour

It can be assumed that, given the laboratory conditions of the recording and the predetermined behaviour of one of the communication partners, the situation is stable. The question to be answered now is whether speakers also behave similarly regarding the linguistic properties of their speech. If not, we have to determine what the variation is determined by. If language use is indeed determined by situational factors such as the ones listed in the discourse typology described in section 2., the linguistic properties observable may vary only with respect to the variables speakers’ age and gender.

The 36 lexically, conversationally, and prosodically annotated dialogues are now analysed for the speakers’ intra- and interpersonal variation.

##### 4.1. Intrapersonal Variation

For all of the properties annotated, systematic intrapersonal variation can be found. Regarding the lexical material used, there are items, such as *wunderbar* (‘wonderful’), which mostly occur in earlier dialogue phases. Other items, such as *interessant* (‘interesting’), mainly occur in the middle of the dialogues. Items involved in cursing, such as *Gott* (‘Lord’) or *Scheiß* (‘shit’), can only be found in later phases of the dialogues.

Regarding conversational strategies, especially in later phases of the dialogues, speakers may repeat their utterances irrespective of the speech act uttered by the system. Examples (1) and (2) illustrate how the speakers conversational strategies change from metalanguaging, reformulation and clarification questions to simple repetition, irrespective of what the system utters. A statistical analysis of all of the dialogues shows that while in the cooperative phase there are no repetitions at all, there are 137 occurrences of repetitions in phase two, that is, on the average, 3.81 of 20 turns in this phase are repetitions. Furthermore, when we consider the reactions to a particular utterance, for example, the system’s statement that holidays will be in June and July (when the task is to find a date for an appointment in January), the likeliness that a speaker reacts by means of a repetition increases from 14% when this utterance occurs for the first time to 43% when it is uttered a

third time towards the end of the dialogue. Likewise, if the system produces a sequence of incomprehensible utterances, the probability that the speakers will only repeat their utterances is five times higher when it occurs for the fifth time than when speakers are confronted with it for the first or even the second time (Fischer, 1999b). While in early phases of the dialogues speakers react directly to the system's output, that is, acknowledging what has been said and reacting relevantly, for instance, by means of reformulations and metacommunicational statements, they cease to try out different conversational strategies when they are more frustrated. Figure 1 displays the distribution of repetitions in the different phases for female and male speakers.

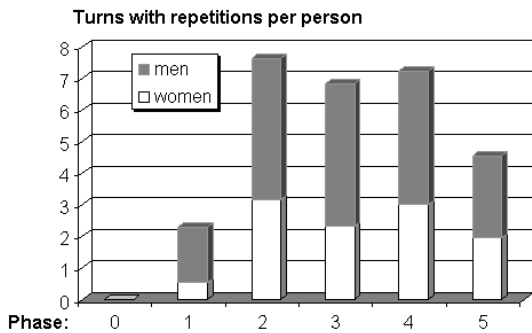


Figure 1: The Distribution of Repetitions throughout the Dialogues

Similarly, besides strictly repeating their utterances after having given up on more cooperative strategies, speakers often do not react to the system's output any more at all, producing conditionally irrelevant utterances themselves which do not relate to their partner's contributions. The distribution of these utterances is shown in Figure 2.

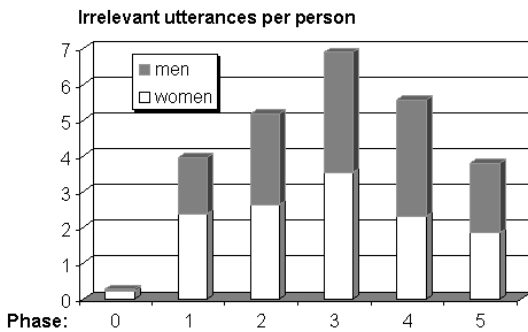


Figure 2: The Distribution of Irrelevant Utterances throughout the Dialogues

As a phonological property, hyperarticulation has been found to occur mainly in the later phases of the dialogues, such that 70% of all instances of hyperarticulation occur in the second half of the dialogues (Fischer, 1999b). Figure 3

shows the distribution of the prosodic peculiarities hyperarticulation and pausing inside words within the different phases of the dialogues.

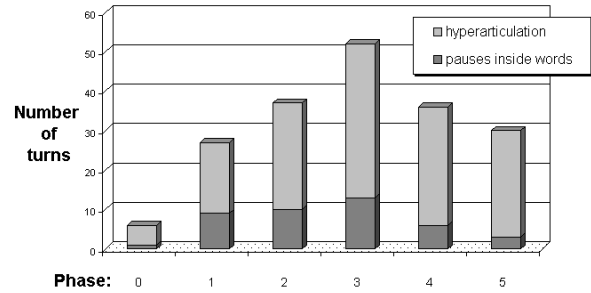


Figure 3: The Occurrence of Prosodic Peculiarities in Different Phases of the Dialogues

#### 4.2. Interpersonal Variation

In addition to the result that speakers change their linguistic behaviour systematically during time, there are furthermore interpersonal differences between speakers. For instance, speakers can be distinguished according to which communicative strategy they prefer: There are some who prefer to reformulate and to use metalanguage even in later phases of the dialogues, and there are others who begin to repeat their utterances much more readily. There is a negative correlation of  $-0.6$  between the use of reformulations and metalanguage on the one hand and repetitions on the other.

Regarding lexical material, only 36% of the speakers have been found to use swear words for the system, some of them however produced as many as 14 instances of such words.

Similarly, with respect to phonological and prosodic properties, while the speakers on the average have been found to produce 5.14 turns per dialogue which contain instances of hyperarticulation, there is one speaker for whom as many as 74 of such turns (of 124) can be found. This relationship is illustrated in Figure 4.

Regarding age, no significant influence could be determined. With respect to the variable speakers' gender, there are indeed systematic differences in their linguistic behaviour. The swear words discussed above, for instance, were produced by only three women but by ten men. Correspondingly, women use much fewer communicative acts in which they directly or indirectly evaluate the system's communicative behaviour. Thus, while in the speech of the 19 women investigated only eight instances of such evaluations could be found, 42 were identified for the 17 men. Prosodically, no significant gender-related differences could be found. To sum up, however, the interpersonal variation observed cannot be solely attributed to differences in gender or age.

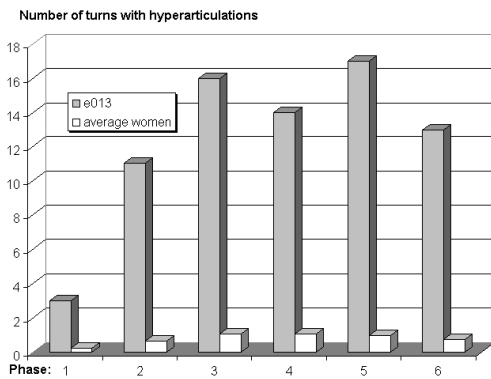


Figure 4: The Interpersonal Variation regarding Hyperarticulation for Female Speakers in Different Phases of the Dialogues

### 4.3. Consequences of Intra- and Interpersonal Variation for the Concept of Situation

Systematic intrapersonal variation could be found such that cooperative behaviour is slowly replaced by uncooperative linguistic behaviour. This is obvious for the conversational strategies employed which aim at increasing understandability for the computer in earlier phases, such as reformulation. However, also hyperarticulation, strong emphasis, syllable lengthening, inclusion of pauses etc. can be interpreted as partner-oriented, cooperative, strategies which aim at increasing the understandability of utterances (Oviatt et al., 1998). This is supported by the fact that speakers often cease to use these strategies after some time when they have found out that they are not helpful. Besides the varying attempts to increase understandability by means of particular strategies, the systematic intrapersonal variation can be attributed to a change in speaker attitude (Fischer, 1999c). This interpretation is supported by the fact that all subjects have reported afterwards that they were emotionally engaged.

While intrapersonal variation can be attributed to changing speaker attitude, regarding interpersonal variation an explanation for the differing linguistic behaviour is still missing. The claim made in this paper is that instead of explaining the speakers' use of linguistic properties on the basis of extralinguistic aspects of the situation, that what really determines their linguistic behaviour is how they UNDERSTAND the situation. The variable linguistic behaviour observable is thus proposed to result from different ways of conceptualizing the situation. This view is in accordance with Gumperz (1982) who writes that instead of relying "on a priori identification of social categories" (Gumperz, 1982, p.130), "linguistic diversity serves as a communicative resource in everyday life in that conversationalists rely on their knowledge and their stereotypes about variant ways of speaking to categorise events, infer intent and derive expectations about what to ensue. All this information is crucial to the maintenance of conversational involvement and to the success of persuasive strategies" (Gumperz, 1982,

p.130).

## 5. What Speakers Understand as the Situation

The methods used to determine how speakers understand the situation include first of all the analysis of the assertions speakers make in the questionnaire they fill out after the recording. Thus, some write in the questionnaire that they have found the interaction amusing, explaining that 'he couldn't annoy me, since it is a machine without a soul,' while most speakers find it enervating and annoying. This information can indeed be found to have consequences for the linguistic properties of the dialogues: While speakers who report to have been annoyed produce 47.68 turns on the average which include instances of hyperarticulation, syllable lengthening and pausing between syllables, those who report to have been amused produce no more than 13.25 turns on the average with such linguistic properties. This difference is significant ( $p < .05$ , two-sided). Figure 5 illustrates this:

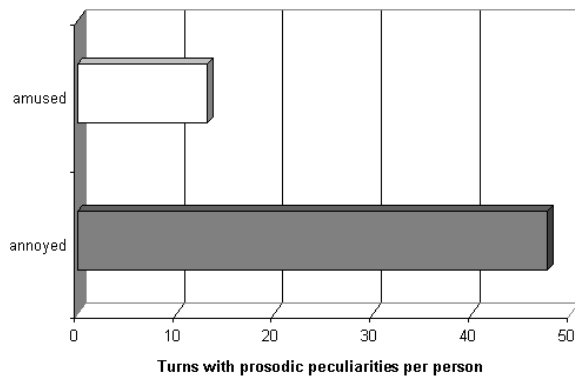


Figure 5: Number of Turns Containing Prosodic Peculiarities for Amused and Annoyed Speakers

Methodologically more importantly, however, speakers display their understanding of what the situation is like in their conversational behaviour (Sacks et al., 1974), by designing their utterances for the communication partner. For instance, the speaker in the following example displays in her repetition that she believes increased loudness, a change in her pattern of emphasis (indicated by capital letters), syllable lengthening (<L>) and pauses between the words (<P>) to increase the understandability of her speech:

- (3) e0118204: am Montag, dem VIERten ersten, von ZWÖLF Uhr bis vierzehn Uhr. (*on Monday, the 4th of January, from 12am to 2pm.*)

s0118205: Mittwoch, der sechste erste, von acht bis zehn Uhr ist schon belegt. (*Wednesday, the 6th of January, from 8 to 10 am is already occupied.*)

e0118205: <B> <:<very loud> AM Montag:>, dem VIERten ERSten, von ZWÖLF bis VIERzehn UHR. (*on Monday, the 4th of January, from 12am to 2pm.*)

s0118206: Donnerstag, von acht bis zehn Uhr ist schon belegt. (*Thursday, from 8 to 10am is already occupied.*)

e0118206: am Mo<L>nta<L>g, <P> dem VIERten ERSten, <P> von ZWÖLF bis VIERzehn UHR. (*on Monday, <P> the 4th of January, <P> from 12am to 2pm.*)

While this speaker even increases her strategy of syllable lengthening during the dialogue, the instance of increased loudness in this example remains the only one in the dialogue. Furthermore, the speaker ceases to hyper-articulate towards the end of the interaction. Thus, the linguistic properties observable can be seen as strategies speakers try out in the interaction with their communication partner, and they cease to employ them when they realize that they do not help. That is, by using particular strategies, speakers display how they design utterances for their recipients and thus they indicate their expectations about their communication partners to them (Hausendorf, 1993), as well as to the analyst (Sacks et al., 1974).

Besides this implicit information on what speakers' may believe about the capabilities of their communication partners, speakers may also comment on the system more directly. In example (2), for instance, the speaker displays his theory that repeating his utterance often enough will lead to successful understanding. Likewise, in the following example, the speaker explicitly announces his strategy to speak very slowly:

- (4) e0375303: ja, aber ich rede jetzt von abends. so noch mal, ganz langsam. Montag, der elfte erste, von <laugh> zwanzig bis zweiundzwanzig Uhr. [*yes, but I'm talking about the evening. so. once again, very slowly. Monday, the 11th of January, 8 to 10 pm*]

In example (5) the speaker shows that she expects the system to be consistent in its utterances:

- (5) e0067303: ja, eben sagten Sie aber, da wäre noch was frei. [*yes, but a minute ago you said that there is still something free*]

Besides expecting consistency, speakers assume the system also to remember what has been said before:

- (6) s0025304: Freitag, der fünfzehnte erste, von sechzehn bis achtzehn Uhr ist noch frei. [*Friday the 8th of January from 4 to 6 pm is still free*]  
e0025304: das sagt' ich bereits, +/da/+ zu diesem Termin kann ich nicht ... [*I've already told you that I have no time then*]

Some time later in the dialogue, the speaker, in reaction to the same proposal by the system, repeats that he has been rejecting the proposal throughout the dialogue and thus displays that he expects his communication partner to recall that he had already rejected that date:

- (7) s0025304: Freitag, der fünfzehnte erste, von sechzehn bis achtzehn Uhr ist noch frei. [*Friday the 8th of January from 4 to 6 pm is still free*]

e0025304: das geht schon die ganze Zeit bei mir nicht ... [*this has not been working for me the whole time*]

In contrast, in the following example, the speaker displays her understanding of the system's behaviour as helpful:

- (8) e0323204: Dienstag, vierzehnter erster neunzehnhundertneunundneunzig, von achtzehn bis zweiundzwanzig Uhr. (*Tuesday the 14th 1999 from eighteen to twenty-two hundred hours.*)

s0323205: Donnerstag von acht bis zehn Uhr ist schon belegt. (*Thursday from eight to ten is already occupied.*)

e0323205: (...) am Donnerstag, den vierzehnten ersten neunzehnhundertneunundneunzig, achtzehn bis zweiundzwanzig Uhr. (*on Thursday the 14th 1999, eighteen to twenty-two hundred hours.*)

s0323206: ich habe den Termin für Sie notiert. (*I have noted down the appointment for you.*)

e0323206: jetzt versteh' ich. ich muß deutlich sagen den Unterschied zwischen acht und achtzehn. danke für den Hinweis. (*now I understand. I have to say clearly the distinction between eight and eighteen. thank you for the tip.*)

In another instance, she suggests that the problems they may have with each other may result from the fact that they do not work with the same calendar. At the same time, she treats the system as if it was another, embodied, human being, having to have the calendar 'in front of him':

- (9) e0322203: <B> Montag, der achtzehnte erste neunzehnhundertneunundneunzig, von acht bis dreizehn Uhr. haben Sie da Zeit? (<B> *Monday the 18th of January 1999 from 8am to 1pm. do you have time then?*)

s0322301: der siebte Februar ist ein Sonntag. (*the 7th of February is a Sunday*)

e0322301: jetzt haben wir uh große Mißverständnisse. <B> uh sind Sie nicht auch haben Sie nicht den Plan von Januar vor sich liegen? <P> wir müssen Termine im Januar vergeben. (*now we have uh great misunderstandings. <B> uh aren't you don't you also have the calendar for February in front of you? <P> we have to schedule appointments in January.*)

Her understanding of her communication partner as a human being is mirrored in her linguistic behaviour which mainly consists in reformulating and explaining her intentions. Her understanding of her communication partner also becomes clear through the following utterance:

- (10) e0324304: so, so. Sie verwechseln jetzt den Wochentag mit der Uhrzeit. da haben wir ja beide Probleme. vielleicht sind Sie Ausländer. [*oh well. you are mixing up the day with the time. seems we both have problems with that. maybe you are a foreigner*]

As a last example, speaker e004 switches from the formal form of address in German to the informal one during the interaction:

- (11) e0043205: <B> ich würde dann gerne mit **Ihnen** diesen vier-stündigen Termin am Montag, den achtzehnten Januar, um acht Uhr morgens vereinbaren. [*I would like to make this four-hour meeting with you on Monday the 18th of January at 8am*]

s0044101: ich habe den Termin für Sie notiert. <P> bitte machen Sie einen Vorschlag. [*I have noted down the appointment for you <P> please make a suggestion*]

e0044101: könnten wir uns nicht am Sonntag, den zehnten Januar, +/a/+ gegen Abend, achtzehn Uhr treffen? [*couldn't we meet on Sunday the 10th of January in the evening, 6pm?*]

s0044102: dieser Termin ist schon belegt. [*this date is already occupied*]

e0044102: und eine Woche später, Sonntag, der siebzehnte Januar. [*and a week later, Sunday, the 17th of January*]

s0044103: ich habe Sie nicht verstanden. [*I did not understand*]

e0044103: am Sonntag, den siebzehnten Januar, hast **Du** denn da noch Zeit, um **Dich** mit mir zu treffen, sagen wir vierzehn Uhr. [*on Sunday, the 17th of January, would you have still time to meet me, say at 2pm*]

The speaker's linguistic behaviour is characterized by reformulations and, correspondingly, the lack of repetitions, assessments, and criticism. Thus, her conversational behaviour is cooperative till the end. Prosodically, there are no more than three instances of particularly strong emphasis on certain syllables, only two instances of syllable lengthening, and no instances of hyperarticulation or pauses inside words. Thus, her informal address of her communication partner (note also the *wir* 'we' in e0044101) corresponds to her treatment of the system as a familiar person. This is furthermore mirrored in her following suggestion:

- (12) e0045206: <B> können Sie denn Ihre Mittagspause auch erst um vierzehn Uhr machen, so daß wir uns dann treffen können? [*could you perhaps take your lunch as late as 2 pm so that we could meet then?*]

While she has switched to the formal form of address again at this later stage of the dialogue, she pretends her communication partner to eat lunch, that it has a particular time when to eat lunch, and that it would mean a concession for it to postpone it. Thus, she treats her communication partner as if it was an embodied person.<sup>5</sup> This conceptualization of her partner determines not only what the situation means to her, namely a cooperative negotiation of dates when to meet, it also influences the lexical, conversational, and prosodic properties of the language she uses.

## 6. Conclusions

In this paper it was shown that what a particular situation consists in is not entirely defined by external variables. Instead it depends also on how speakers conceptualize the situation. The corpus investigated thereby provides a unique opportunity to study the contribution of a single speaker's conceptualization of the situation. As a means of identifying what speakers believe about the situation, data from questionnaires were used as well as implicit and explicit information from the interactions with their communication partner. The different conceptualizations of the situation have been found to have correlates in the linguistic behaviour observable. However, the conclusion cannot be that if the conceptualization of the situation is taken into account, the speakers' linguistic behaviour could be completely predicted. Instead, the speakers have been found to constantly define and, if necessary, redefine what they understand the situation to consist in, depending on their current hypotheses about their communication partners and on their own emotional state.

Methodologically, the results from this study point to ways of how to determine what a situation consists in, at least for the speakers themselves: Since speakers constantly display their understanding of the situation to their communication partners, as well as to the analysts (Sacks et al., 1974), we just need to look at the speakers' linguistic behaviour in order to determine what the situation is all about. This would help us to construe the category *situation* not as an *a priori* descriptive category based on our intuitions, but as a speaker category, that is, as a complex concept to which the speakers themselves can be shown to attend.

## 7. References

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<sup>5</sup>Clark (1999) argues that human-computer interaction is a matter of 'joint pretense.' Speakers' e004 and e032 treatment of the supposed system, and these speakers, as much as all the others, answered in the questionnaire that they did not doubt the existence of such a system, as another human being may support Clark's hypothesis that human-computer interaction is actually carried out on two different layers: one in which the speakers create a layer of joint pretense, and a second one in which the speakers communicate.

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