



# Dialogue Acts in VERBMOBIL-2 Second Edition

Jan Alexandersson, Bianka  
Buschbeck-Wolf, Tsutomu  
Fujinami, Michael Kipp, Stephan  
Koch, Elisabeth Maier, Norbert  
Reithinger, Birte Schmitz, Melanie  
Siegel

DFKI Saarbrücken  
Universität Stuttgart  
TU Berlin  
Universität des Saarlandes

July 1998

Jan Alexandersson, Bianka Buschbeck-Wolf, Tsutomu Fujinami, Michael Kipp,  
Stephan Koch, Elisabeth Maier, Norbert Reithinger, Birte Schmitz, Melanie  
Siegel

DFKI GmbH  
Stuhlsatzenhausweg 3  
D-66123 Saarbrücken, Germany

Tel.: (0681) 302 - 5347/5346  
Fax: (0681) 302 - 5341

Die vorliegende Arbeit wurde im Rahmen des Verbundvorhabens Verbmobil vom  
Bundesministerium für Bildung, Wissenschaft, Forschung und Technologie (BMBF)  
unter dem Förderkennzeichen 01IV101K/1 gefördert. Die Verantwortung für den  
Inhalt dieser Arbeit liegt bei den AutorInnen.

# Contents

<b>1</b>	<b>Introduction to the Second Edition</b>	<b>2</b>
<b>2</b>	<b>Requirements</b>	<b>6</b>
2.1	Relevance for Transfer . . . . .	6
2.2	Automatic Classification Perspective . . . . .	8
<b>3</b>	<b>Dialogue Phases and Content</b>	<b>10</b>
3.1	Dialogue Phases . . . . .	10
3.2	Propositional Content . . . . .	15
<b>4</b>	<b>Dialogue Acts</b>	<b>16</b>
4.1	Segmentation . . . . .	17
4.2	The Dialogue Act Hierarchy as Decision Tree . . . . .	19
4.3	Dialogue Act Definitions . . . . .	27
<b>5</b>	<b>Further Investigations</b>	<b>80</b>
5.1	Reliability of Coding . . . . .	80
5.2	Dialogue Acts Specific to Japanese . . . . .	81
<b>A</b>	<b>Some Fully Annotated Dialogues</b>	<b>82</b>
A.1	German Dialogues . . . . .	83
A.1.1	Example 1 . . . . .	83
A.1.2	Example 2 . . . . .	85
A.1.3	Example 3 . . . . .	88
A.1.4	Example 4 . . . . .	89
A.2	English Dialogues . . . . .	92
A.2.1	Example 1 . . . . .	92
A.2.2	Example 2 . . . . .	93
A.2.3	Example 3 . . . . .	94
A.3	A Japanese Dialogue . . . . .	96

# Chapter 1

## Introduction to the Second Edition

This report describes the dialogue phases and the second edition of dialogue acts which are used in the VERBMOBIL 2 project<sup>1</sup> (see [1] for the first edition). While in the first project phase the scenario was restricted to appointment scheduling dialogues, it has been extended to travel planning in the second phase with appointment scheduling being only a part of the new scenario [7].

As a consequence, the range of tasks to be solved during the dialogue has grown: formerly, we only had to cope with the task of negotiation – two dialogue participants try to agree on a date to meet at a certain location. Now, in the extended scenario, our model also has to cope with information-seeking and -giving dialogues. The participants of the dialogue exchange information, agree on a travel plan and possibly arrange further spare time/entertainment activities.

Technically, the scenario has changed as well: in the original scenario two dialogue participants interacted with each other, pressing the so-called VERBMOBIL-button to indicate, which parts of the dialogue had to be processed, i.e. translated, from German into English. In VERBMOBIL 2 the button has been abolished, i.e. the system continuously monitors and processes the input of the dialogue participants. Hence, we now have to deal with a multi-party scenario where more than two dialogue partners communicate. The dialogue partners will be able to interact in German, English and Japanese.

All these extensions of our scenario made it necessary to update and improve the set of dialogue acts used to describe the VERBMOBIL dialogues. This document presents a *revised* set of dialogue acts, a work that was triggered by the first releases of actual dialogues (of the new scenario) that could be annotated and

---

<sup>1</sup>we would like to thank Susanne Jekat, Uwe Küssner und Manfred Stede for valuable comments and discussion

examined. The set differs from the first edition mainly in its overall structure and in some additions. Most of the actual dialogue acts are exactly as defined in [1].

We just briefly list the actual changes of dialogue act labels, from first [1] to second edition. Note that we removed the label DISCOURSE\_PARTICLE because discourse particles are processed in parallel with dialogue act information and handled by a different interface (to the *transfer* module). Therefore, they need not be considered in our context. The following dialogue acts were introduced since we were confronted with utterances of such type for the first time in the new travel planning dialogues:

- COMMIT
- OFFER
- REQUEST\_COMMIT
- DEFER

The introduction of DEFER led to a re-structuring of our dialogue hierarchy, devising the categories CONTROL\_DIALOGUE, MANAGE\_TASK and PROMOTE\_TASK which serve solely structuring matters and are *not* to be annotated. The dialogue act CLOSE was added as an extension of the resulting MANAGE\_TASK group. The following renaming took place (for reasons of simplicity):

- GREETING\_BEGIN → GREET
- GREETING\_END → BYE
- FEEDBACK\_BACKCHANNELING → BACKCHANNEL

Finally, we got rid of the following dialogue acts since they proved to be subsumable under other dialogue acts or simply never occurred under the new scheme:

- CONVENTION
- GREETING
- CLARIFY\_ANSWER
- DISCOURSE\_PARTICLE

In VERBMOBIL, dialogue acts are used to express the *primary communicative intention* which stands behind a dialogue segment or an utterance. In the VERBMOBIL system, dialogue act information is used for a number of purposes:

- **transfer** The main task of the VERBMOBIL system is the translation of spontaneous speech. Dialogue acts have an important role in that system since they help to identify the best translation where more than one possibility exists: they contribute to the disambiguation of translational equivalents.
- **shallow processing** In VERBMOBIL various processing streams are executed in parallel - they can be characterized as *deep processing* and *shallow processing* streams. While during deep processing the emphasis is on the use of knowledge-based methods shallow processing mostly exploits surface-oriented and statistical algorithms. In the latter case, dialogue acts contribute to the selection of templates which are used to generate target language expressions.
- **dialogue memory** The dialogue memory [3] stores contextual information for different other modules. This information consists for the moment mainly of temporal expressions. Associated processes enrich the memory's contents by inference. Such inferences include whether a date has been accepted, rejected or refined, and adjusting the *focus* of the dialogue. Dialogue acts are of fundamental importance to these inferences.
- **prosody** In spontaneous speech fragmentary or faulty input occurs very often. It is therefore unrealisitic to rely on full sentences as processing units. What we use as basic processing units, instead, are segments which can be annotated with a dialogue act. In our system the automatic segmentation of turns into individual utterances is determined by the prosody component. This component relies on a statistcal model that has been trained on transliterated data that have been annotated with dialogue acts and prosodic information.
- **summary generation** A new functionality that has been introduced in VERBMOBIL-2 concerns the automatic generation of protocols that summarize the dialogue. For summarization the system relies heavily on dialogue acts attributed to the individual dialogue segments. By doing so, the system can determine dialogue steps that contain the core of the dialogue.

Since we constantly try to adapt and improve our dialogue act scheme, remarks, corrections or possible extensions are highly welcome. Please contact:

Michael Kipp  
DFKI GmbH  
Stuhlsatzenhausweg 3  
66123 Saarbrücken  
[kipp@dfki.de](mailto:kipp@dfki.de)

# Chapter 2

# Requirements

## 2.1 Relevance for Transfer

The need of particular resolution procedures can be best recognized by the contrastive situation, i.e. in the transfer component. In case of alternative translation correspondences, we have to fix the contexts in which the one or the other target language TL expression is used. For the resolution of many translational ambiguities the local context is sufficient. It allows to formulate restrictions on the sort or the semantic type of a predicate, on its scopal embedding, mood, number, ak-tionsart, etc. (see [5]). However, there are cases in which the transfer needs more global information to choose a particular TL correspondence. This is, e.g., information about the actual discourse stage or speech act as well as domain-specific world knowledge.

Illocutional information is encoded in dialog acts. It is important for the translation of discourse particles<sup>1</sup> as well as for generation purposes. Here, we demonstrate the influence of the dialog act on the translation of the modal particle *vielleicht*.

---

<sup>1</sup>One example is the translation of the exclamative *bitte*. If it occurs in an utterance with the dialog act **thank** it is translated into *you are welcome*, if not - *please* it the appropriate correspondence. Another case that calls for dialog act information is the transfer of the particle *ja*. It is mapped to *yes* only if it appears in an **accept** or **confirm** utterance. It corresponds to *well* if being used as an uptake particle. In other cases it is omitted in English or expressed by a question tag (see [2]).

- (2.1a) Können Sie **vielleicht** einen Vorschlag machen?  
(2.1b) Could you make a suggestion?

- (2.2a) Paßt Ihnen **vielleicht** Dienstag oder Mittwoch vormittag?  
(2.2b) Do Tuesday or Wednesday morning suit you?

- (2.3a) Ich würde **vielleicht** vorschlagen, Karfreitag oder Karsamstag.  
(2.3b) I would suggest Good Friday or Good Saturday.

In most cases, *vielleicht* is used to express the possibility of a state or event. Then it is translated into *possibly*. However, in spoken German, it is also uttered for being polite (2.1a)–(2.3a). Then, it should not be translated (2.1b)–(2.3b). The transfer problem consists in the identification of *vielleicht* as a politeness marker. According to our investigations, this happens when it is uttered in requests or suggestions. This information can be obtained from the dialog act recognition.<sup>2</sup>

---

<sup>2</sup>Dialog act information might also help to disambiguate ambiguous verbs. In case, the German verb *annehmen* occurs with an arg3 realized by an event-type pronoun as in “Ich nehme es an.” *accept* and *assume* are feasable translations. Since the antecedent of *es* might be a proposition in both cases, anaphora resolution does not solve the problem. But, the dialog act information does: appearing in an *accept* utterance, the translation into *assume* is out.

## 2.2 Automatic Classification Perspective

It is important when defining dialogue acts for a computational system to take care that the classes are not only motivated by linguistics or the domain, but that they also can be recognized with a high accuracy.

For the statistical based dialogue act recognition, we have conducted various experiments to see whether

- the annotated data can be used to train reliable dialogue act classifiers;
- there are dialogue acts that do not “cluster” properly, i.e. that are frequently confused with one or more other dialogue acts.

One method used is described in [10] where a more thorough analysis can be found. The experiments described here were made with material annotated with the dialogue acts of VERBMOBIL phase I as defined in [8]. However, we mapped them to their equivalents as described in this report.

Overall, the dialogue act recognition rate for both English and German dialogues varies between 65% and 75%, depending on the training and test material. The  $\kappa$  value between the human coder of the test dialogues and the classifier is in the range of 0.61 to 0.65. Although the annotation accuracy is still a bit below 0.67 the results are encouraging.

The dialogue acts that describe “regular” dialogue steps like GREET, BYE or SUGGEST are recognized with recall and precision of 60% to 100%. More irregular ones like DIGRESS or DEVIATE\_SCENARIO that possibly occur everywhere in the dialogues and are by definition not within the domain are recognized with a recall as low as 14%.

The analysis of confusion matrices between a human coder and the dialogue act classifier also showed some interesting results. It can clearly be seen that the acts that are crucial for the further development of the dialogue are pretty well separated. While highly conventionalized acts like GREET and BYE are rarely confused with other acts – as is to be expected, false classifications for acts like DIGRESS are usually distributed across all other acts.

Problematic are acts like CONFIRM where in one test run 50% are classified correctly, and the acts ACCEPT and SUGGEST both get approximately 25% of the wrong classifications. Here either the definition is unclear or the surface realization of the acts is similar to those three acts.

Another problematic case is the distinction between general FEEDBACK\_POSITIVE acts and the more special ACCEPT. Since FEEDBACK\_POSITIVE is a superclass to ACCEPT, the criteria for when to annotate one of the two classes must be defined very carefully.

For the dialogue act `GIVE_REASON` about one third of the possible classifications is attributed to `SUGGEST` and `REJECT`. Here, too, one must find good criteria to separate the classes. Our solution was the introduction of the dialogue act `EXPLAINED_REJECT` which covers those utterances that reject a proposal by stating a mere reason (e.g. “How about Monday”, answered by “I got a conference that day”).

To sum up, the findings from statistic dialogue act recognition show that the “regular” and for the cases of task-oriented dialogues most important dialogue acts can be defined, annotated and recognized with a satisfying accuracy. We could identify some problems that need further attention to obtain even higher recognition rates. The problematic, “irregular” classes should be mappable on a class that simply states that information is communicated that does not contribute to the negotiation.

# Chapter 3

## Dialogue Phases and Content

### 3.1 Dialogue Phases

For translating words (particular certain verbs), it is important to recognize in which stage of the dialogue they were uttered. Without this information, it is impossible to choose their appropriate translation correspondences. Moreover, the information about the actual dialogue phase can be used for generating protocols.

In negotiation dialogues we distinguish between the following five phases:

**Hello** The dialogue participants greet each other. They introduce themselves, unveil their affiliation, or the institution or location they are from.

**Opening** The topic to be negotiated is introduced.

**Negotiation** The actual negotiation – between opening and closing.

**Closing** The negotiation is finished (all participants have agreed), and the agreed-upon topic is (sometimes) recapitulated.

**Good\_Bye** The dialogue participants say good bye to each other.

It is worth pointing out that the dialogue phase is not monotonously changing wrt. the whole dialogue. This is due to the fact that one dialogue participant may in one turn jump over more than two dialogue phases, and the other participant has to “catch up”, as shown in the following example. The :PHASE <TAG> is used to annotate the phase of each utterance.

**Example () 1** *Fictive:*

A001:: Guten Tag @**(GREET :PHASE HELLO)** , mein Name ist Müller  
@**(INTRODUCE :PHASE HELLO)** , Wir müssen einen Termin vereinbaren  
@**(INIT :PHASE OPENING)** . Wie sieht es aus im April ? @**(SUGGEST**  
**:PHASE NEGOTIATION)**

B002: Guten Tag @**(GREET :PHASE HELLO)** , hier ist Schmitt @**(INTRODUCE**  
**:PHASE HELLO)** , im April sieht es bei mir recht schlecht aus  
@**(REJECT :PHASE NEGOTIATION)**

Let us regard some examples where the dialogue phase plays a central role in the choice of the correct translation correspondence.

## Wiederholen

Regard the examples (3.1) and (3.2). The verbs *repeat* and *recapitulate* are both possible translations of *wiederholen*. *Recapitulate* is normally used to give a summary of a discussion or a part of it. *Repeat* means to do something again. For being able to disambiguate *wiederholen*, we could utilize its place of occurrence in the dialogue. While *recapitulate* is usually uttered at the end of a successive appointment scheduling circle, i.e. in the closing part, *repeat* can be used at every point in the talk, see Figure 3.1.

- (3.1a) Ja, gut, dann **wiederhole** ich jetzt nochmal.
- (3.1b) All right, I **recapulate**.
  
- (3.2a) Könnten Sie das bitte **wiederholen**, ich hab's nicht verstanden.
- (3.2b) Could you **repeat** that, please, I didn't get it.

opening/negotiation	→	repeat
closing	→	recapitulate

Figure 3.1: Translation matrix for *wiederholen*

In the following, we show a couple of annotated turns from the VERBMOBIL corpora that contain the verb *wiederholen*. They demonstrate its different interpretations depending on the dialogue phase.

**Example (Wiederholen) 2 CDROM5, m183d:**

AAY019:: Entschuldigung , können Sie bitte noch mal WIEDERHOLEN @REQUEST\_CLARIFY :PHASE NEGOTIATION , ich habe es jetzt eben nicht verstanden @GIVE\_REASON :PHASE NEGOTIATION .

**Example (Wiederholen) 3 CDROM5, m050n:**

KES018:: könnten Sie das bitte nochmal WIEDERHOLEN , vom ersten bis zum vierzehnten haben Sie gesagt @REQUEST\_CLARIFY :PHASE NEGOTIATION)

**Example (Wiederholen) 4 CDROM7, m236d:**

ADB006:: ja , gut @FEEDBACK\_POSITIVE :PHASE NEGOTIATION) , dann bleiben wir dabei @CLOSE :PHASE CLOSING) . also ich WIEDERHOLE es noch mal , Montag , neunundzwanzigster November , bis "ahm Freitag , dritter Dezember @CONFIRM :PHASE CLOSING) .

**Example (Wiederholen) 5 CDROM3, m022n:**

VEG023:: ja , ich glaube , da haben Sie recht @INFORM :PHASE NEGOTIATION) . also , dann sind die Leute noch stark motiviert @DIGRESS :PHASE NEGOTIATION) . ja , machen wir es so @CLOSE :PHASE CLOSING). ähm soll ich die äh Termine nochmal WIEDERHOLEN @REQUEST :PHASE CLOSING)

**Termin ausmachen/vereinbaren/abmachen**

Another example is the translation of the expression *einen Termin ausmachen/vereinbaren/abmachen*. It displays a collocation-like behavior in the VERBMOBIL domain, since the translation of these verbs and that of *Termin* are strongly interdependent. When used to open a dialogue the whole expression is translated into *make an appointment* (3.3). Uttered in the negotiation or closing phase, *fix a time* or *agree on a time* is the appropriate translation (3.4).

- (3.3a) Wir wollten **einen Termin vereinbaren/ ausmachen/abmachen**.
  - (3.3b) We have to **make an appointment**.
- 
- (3.4a) Dann müßten wir noch **einen Termin vereinbaren/ausmachen abmachen**.
  - (3.4b) Then we still have to **fix/agree on a time**.

opening	→ make an appointment
negotiation/closing	→ fix/agree on a time

Figure 3.2: Translation matrix for *Termin ausmachen/vereinbaren/abmachen*

We exemplify this with a fragment of dialogue N022K from CD1.0.3, where the expression *einen Termin ausmachen* occurs twice: one time in the opening, and the other time in the negotiation phase.

**Example (Ausmachen) 6 CDROM1.0.3, N022K:**

```
TS2001:: <A> ah , hallo . <:<#> gut:> , daß ich Sie noch  
treffe . wir müssen noch EINEN TERMIN AUSMACHEN . <A> haben  
<!1 ham> Sie einen Kalender da ? <#Klicken>
```

**Example (Ausmachen) 7 ?, ?:**

```
WL1002:: ja , warten Sie einen Augenblick . <P> ja <A>  
. <A>
```

```
WL1003: <#Klicken> so<Z> . <#Mikrowind> <%> w"urd' es Ihnen  
im August passen ? <#> <P> Ende August ?
```

```
TS2004: <Schmatzen> <A> August ist ein wenig fr"uh , denke  
ich . vielleicht sind wir da noch nicht ganz fertig <A> .  
Mitte September w"are mir eigentlich lieber . <#Klicken>
```

```
WL1005: <A> in der ersten Wochen h"att' ich h"ochstens den  
Montag abend frei , oder Mittwoch . <#> <P> <Schmatzen> wir  
k"onnten auch in die zweite Woche gehen und <A> <P> von Dienstag  
bis Donnerstag<Z> <P> um die Mittagszeit EINEN TERMIN AUSMACHEN  
. <#Klicken>
```

**fix machen**

The expression *fix machen* is ambiguous already in the source language. This is reflected in its English translation, see (3.5a) and (3.5b).

- (3.5a) Könnten wir das **fix machen**?
- (3.5a) Could we **just/quickly do** it?
- (3.5b) Could we **fix** that?

For the resolution of this ambiguity the dialogue stage helps to some extent. While in the opening phase the *do quickly* interpretation is the fitting one, the *fix* reading is more appropriate in the closing stage. However, in the negotiation part of the dialogue both translations are feasible, although the translation into *fix* is more likely, see Figure 3.3.

opening	→	do quickly
negotiation	→	fix/do quickly
closing	→	fix

Figure 3.3: Translation matrix for *fix machen*

In the following we show some occurrences of *fix machen* in the negotiation and closing part.

**Example (Fix Machen) 8 CDROM5, m186d:**

```
ABC004:: ja , ist gut @ACCEPT :PHASE NEGOTIATION) . dann
schreibe ich mir das gleich auf @CLOSE :PHASE CLOSING) , und
dann MACHEN wir das jetzt FIX @CLOSE :PHASE CLOSING) . auf
"ah vielen Dank @THANK :PHASE GOOD_BYE) . Wiederh"oren @BYE
:PHASE GOOD_BYE) .
```

**Example (Fix Machen) 9 CDROM5, n075k:**

```
BK1007:: gut @FEEDBACK_POSITIVE :PHASE NEGOTIATION) , da k"onnten
wir am einundzwanzigsten , nachmittags , den Termin FIX MACHEN
@INFORM :PHASE NEGOTIATION) .
```

**Example (Fix Machen) 10 CDROM7.0.1, m244d:**

```
ADJ008:: richtig @FEEDBACK_POSITIVE :PHASE NEGOTIATION) .
dann machen wir das so @ACCEPT :PHASE NEGOTIATION) , dann tragen
wir das gleich ein und MACHEN das FIX , würde ich sagen @CLOSE
:PHASE CLOSING) .
```

## 3.2 Propositional Content

In our approach, the meaning of an utterance consists of the dialogue act and its propositional content. This is in accordance with Levinson, who claims in [9] that

[...] the illocutionary force and the propositional content of utterances are detachable elements of meaning. Thus the following sentences, when uttered felicitously, would all share the same propositional content, namely the proposition that the addressee will go home:

- a. I predict that you will go home
- b. Go home!
- c. Are you going to go home?
- d. I advise you to go home

but they would normally be used with different illocutionary forces, i.e. perform different speech acts.

On the other hand, not every pair of speech act and propositional content corresponds to a meaningful utterance. Thus, to each dialogue act we assign a set of possible propositions, as specified in section 4.3 (Dialogue Act Definitions). The new functionality of generating a protocol from a dialogue relies on this distinction: It should be possible to represent the propositions and produce a summarization which depends on the dialogue acts.

The propositional content can also support annotation, because the dialogue acts constrain the number of propositions that co-occur with the dialogue act. For example, an utterance without any proposition can never be a SUGGEST. The dialogue acts CONFIRM and CLOSE can be distinguished, on the grounds that a CLOSE must not contain propositional content while a CONFIRM does.

# Chapter 4

## Dialogue Acts

This chapter is dedicated to the guidance of annotators when working on the VERBMOBIL corpora. We provide the following three sets of information for potential annotators:

- segmentation guidelines
- a decision tree procedure for finding dialogue acts
- definitions and examples for all dialogue acts

### Multiple annotation

An utterance can be assigned two or even more dialogue acts if more than one definition applies and one definition alone does not cover an essential part of the utterance illocution.

Frequent occurrence of the same multiple dialogue act should eventually lead to the conception of a new tag for that phenomenon.

### Lookahead

In our original scenario with a human translator we consider a *consecutive* translation where the translator knows a whole turn before translating. One should therefore think it justified to let annotators look at future information *within the current turn*.

However, we still have to investigate where and why lookahead is really necessary. We indicate with each dialogue act, what kind of lookahead is legal or necessary.

## 4.1 Segmentation

In this section we focus on the question how a turn can be segmented into individual units, so-called *utterances*, that correspond to a *dialogue act*. In other words: What is the size of an expression performing a dialogue act?

We try to guide the annotator by giving a definition for an *utterance*. Keeping this definition in mind we advise the annotator to:

- try to find an utterance according to the definition below
- if a piece of the turn does not make sense, being abandoned or otherwise unintelligible, it forms an own segment with label NOT\_CLASSIFIABLE
- if otherwise in doubt about segmentation, follow the general maxim to only assume a separate utterance if the presented material expresses a separate dialogue act

We now give a linguistic definition of an utterance.

**Definition:** *utterance*

1. An utterance corresponds to a clause;  
*it must contain a finite verb.*
2. For complex sentences with two finite verbs the following rule applies:
  - If one of the verbs is a *complement verb*, taking the other clause as a propositional argument, then the complex sentence is regarded as one single utterance;
  - otherwise each of the subclauses is regarded as an utterance.<sup>1</sup>

---

<sup>1</sup>In the Verbmobil Semantic Database these complement verbs are classified as *propositional\_complement\_verbs*. Usually one of the clauses fills either subject or object position in the complex sentence (subject position: ‘The problem is that I’m out of town’, object position: ‘I think we should meet next week’). Here we also regard verbs like ‘anrufen’ in certain constructions such as the following one as *complement verbs*: “... hier ist Köpp , \$K \$Ö doppel \$P . (INTRODUCE) Schmatzen ich rufe an , da wir uns ja in dieser Woche noch treffen wollten , um eine kurze Besprechung zu haben , (INIT)” (dialogue m220d).

3. There are certain cases in which an utterance does not correspond to a clause as defined in above.

(a) *Whole turns*

Every turn consists of at least one utterance. Therefore, if the material presented as a complete turn does not correspond to a clause as defined above, it nevertheless is regarded as an utterance.

(b) *Fixed lexemes or phrases*

Certain dialogue acts can be expressed by more or less fixed lexemes or phrases. These expression are – if they perform one of the following dialogue acts – regarded as utterances, e.g.<sup>2</sup>

FEEDBACK\_POSITIVE: ‘ja’, ‘gut’, ‘okay’, ‘schön’, ‘hervorragend’, ‘alles klar’, ‘prima’, ‘wunderbar’, ‘einverstanden’, ‘genau’ etc.

FEEDBACK\_NEGATIVE: ‘nein’, ‘nee’, ‘tut mir leid’, ‘schwierig’ etc.

BACKCHANNEL: ‘mhm’, ‘aha’, ‘ja’ etc.

THANK: ‘Danke’, ‘Vielen Dank’

GREET: ‘Guten Tag’, ‘Hallo’ etc.

(c) *Nominal phrases*

The dialogue acts SUGGEST, CLARIFY and DELIBERATE can be linguistically expressed by a *Nominal Phrase*, as the following examples<sup>3</sup> demonstrate. In such a case the NP is regarded as an utterance.

KAP005: ja , also , im November . (DELIBERATE)  
<hm> also dienstags pa"st es Ihnen ja  
eventuell , ne ? ja (REQUEST\_CLARIFY)

OLV006: <;T>a , eventuell , ja , am Dienstag . (CLARIFY)  
vielleicht Montag und Dienstag , der achte ,  
neunte November ? (SUGGEST)

BLA001: ja , das w"urde bei mir sehr gut passen . (ACCEPT)  
Samstag , zw"olfster und dreizehnter . (CLARIFY)

---

<sup>2</sup>note that the examples are not unique in the sense that e.g. ‘ja’ does *not* automatically make the utterance a FEEDBACK\_POSITIVE (it could be an ACCEPT, too). These are just examples, not exhaustive or unique lists.

<sup>3</sup>taken from dialogues *g121a* and *g205a*

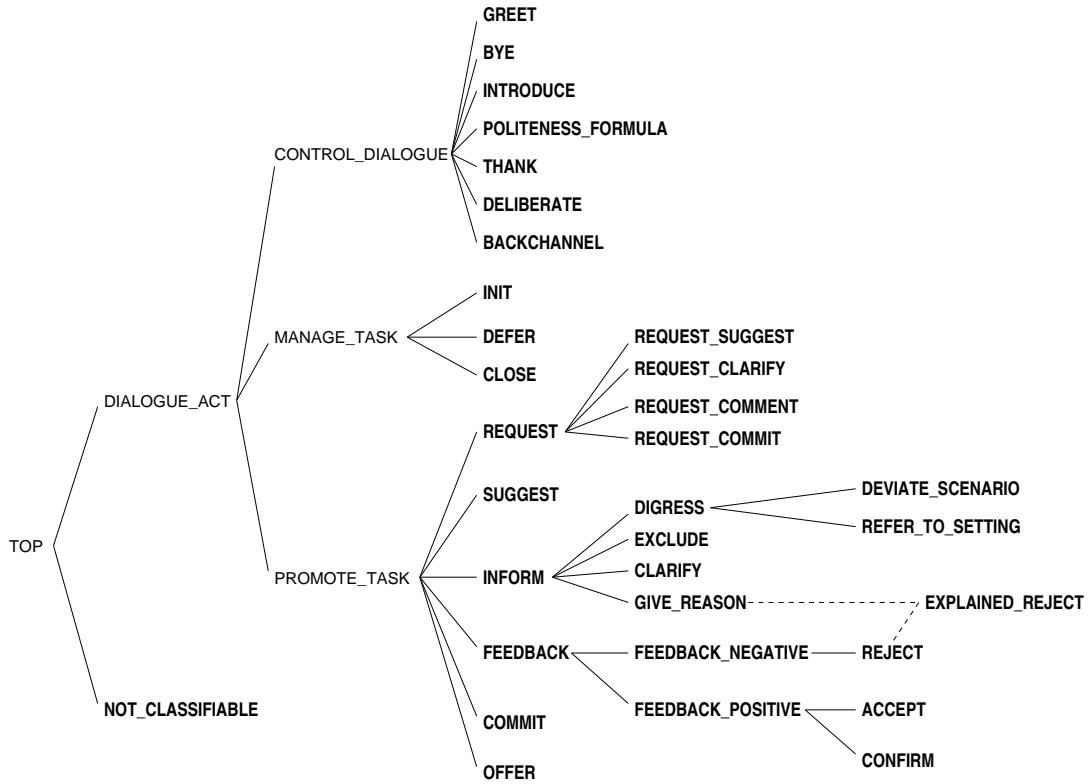


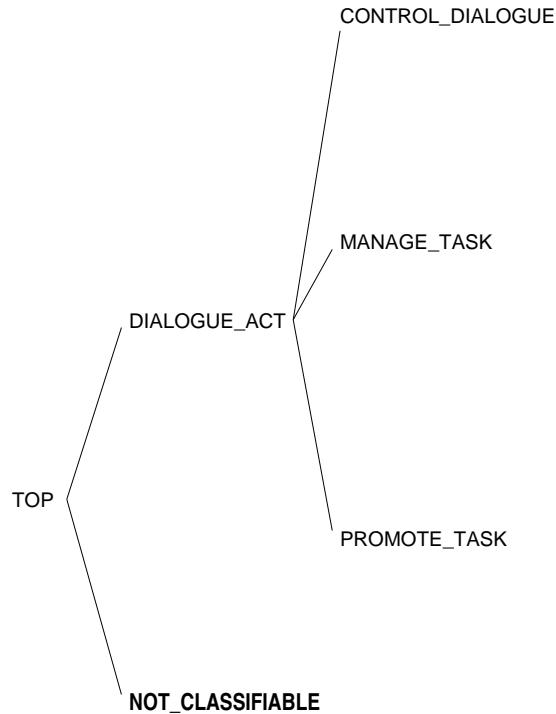
Figure 4.1: The dialogue act hierarchy as decision tree.

## 4.2 The Dialogue Act Hierarchy as Decision Tree

We organized our dialogue act scheme in the shape of a decision tree in order to ease annotation and clarify dependencies and relationships of the different acts (see figure 4.1).

When labeling a dialogue segment with a dialogue act we follow the tree from the top towards the leaves. At every branching node we answer a question, the answer of which decides which branch to follow. If an answer cannot be given, the traversal process stops. This means, that dialogue segments can also be labeled with acts that are not leaves of the hierarchy, i.e. that are more abstract dialogue acts.

In figure 4.1 we show the dialogue act hierarchy as will be defined in detail in section 4.3. Each non-terminal node corresponds to a decision which we are going to describe each in the following section. Every label printed in boldface is a legal tag for annotation (note that not every label is a legal tag).

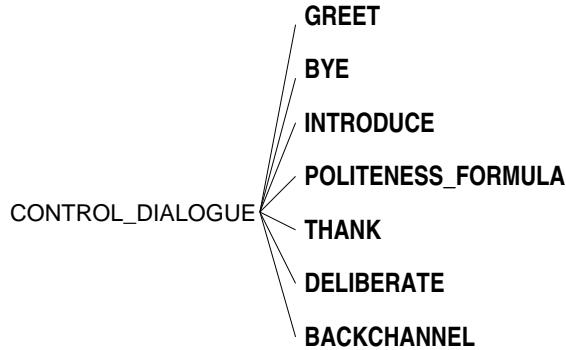


#### **Decision TOP:**

**if** the segment is too fragmentary or incomprehensible to make any sense  
**then** label with NOT\_CLASSIFIABLE.  
**else** branch to DIALOGUE\_ACT.

#### **Decision DIALOGUE\_ACT:**

**if** the segment is solely concerned with social interaction or relates to the dialogue itself (e.g. opening or closing the conversation) or smoothens communication  
**then** branch to CONTROL\_DIALOGUE.  
*Exception: in case of a plain positive or negative feedback that would not fit in any CONTROL\_DIALOGUE category, jump to the FEEDBACK node (e.g. answers to "how are you today?" like "well, fine." are FEEDBACK\_POSITIVE)*  
**else if** the segment is concerned with managing the task (i.e. initializing, deferring, closing the task)  
**then** branch to MANAGE\_TASK.  
**else** branch to PROMOTE\_TASK (in case of doubt everything is relevant to conducting the task).



### Decision CONTROL\_DIALOGUE:

**if** the segment is used to open a dialogue by greeting a dialogue partner  
**then** label with GREET

**else if** the segment is used to close a dialogue by saying good-bye to a dialogue partner then label with BYE.

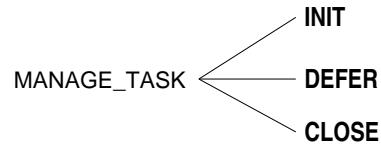
**else if** the segment contains the introduction of the speaker, i.e. name, title, associated company etc. label with INTRODUCE

**else if** the segment is used to perform an action of politeness like asking about the partner's good health or formulating compliments label with POLITENESS\_FORMULA

**else if** the segment is used to express gratitude towards the dialogue partner label with THANK

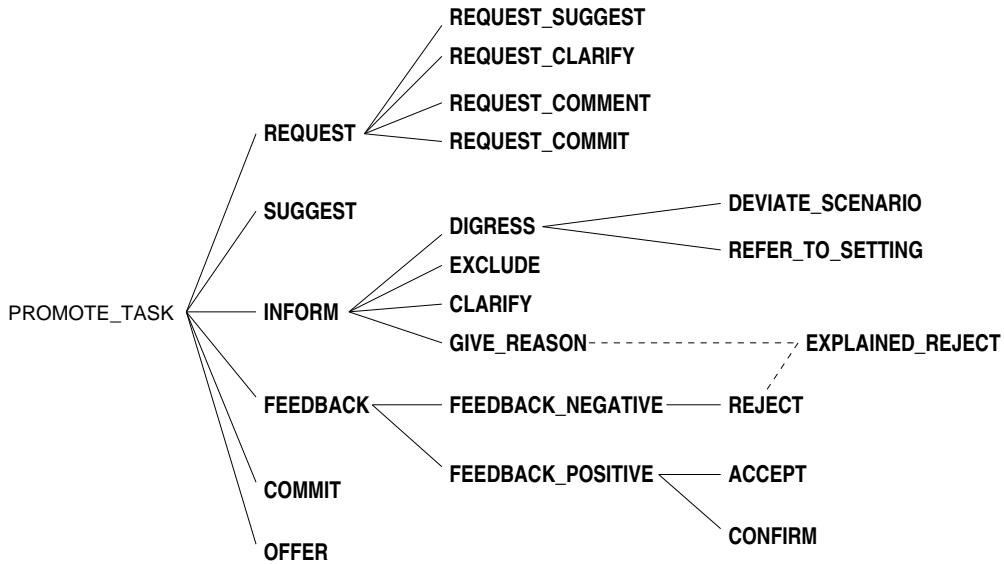
**else if** the segment is used to gain dialogue time by thinking aloud or using certain formulas label with DELIBERATE

**else if** the segment is used to signal understanding (i.e. acknowledging intact communication) label with BACKCHANNEL



**Decision MANAGE\_TASK:**

**if** the segment is used to initialize the task by motivating, explaining or mentioning the task for the first time  
    **then** label with INIT  
    **else if** the segment proposes or states the deferring of the task label with DEFER  
    **else if** the segment indicates that the speaker considers the task done label with CLOSE



### Decision PROMOTE\_TASK:

**if** the segment under consideration contains a request for information, where the content refers to an instance that has been already explicitly introduced in the previous discourse (i.e. which is not mentioned explicitly)

**then** branch to REQUEST.

**else if** the segment by the speaker to offer an action or concession on his/her part label with OFFER

**else if** the speaker explicitly commits him-/herself to executing a specified action label with COMMIT

**else if** the segment contains a suggestion which is given by means of an explicitly mentioned instance or an aspect of such an instance label with SUGGEST.

**else if** the segment contains a reaction to a previous part of the discourse  
**then** branch to FEEDBACK.

**else** branch to INFORM.

### **Decision REQUEST:**

**if** the segment is used by the speaker to request some kind of commitment of the dialogue partner  
**then** label with REQUEST\_COMMIT  
**else if** the segment contains a request for a dialogue participant to provide information label with REQUEST\_SUGGEST  
**else if** the segment contains a request to comment on a statement or a suggestion made in the course of a dialogue, where the request refers to an instance that has been already explicitly introduced, label with REQUEST\_COMMENT  
**else if** the segment contains a request for a a clarification of information, i.e. by requesting additional unknown detail, or by repeating something that has been forgotten in the course of the interaction label with REQUEST\_CLARIFY  
**else if** the segment is used by the speaker to request some kind of commitment of the dialogue partner label with REQUEST\_COMMIT  
**else** label with REQUEST

### **Decision FEEDBACK:**

**if** in the segment the speaker reacts to a contribution of the dialogue partner in a positive way, i.e. if the segment signals acceptance of its contents or illocution or if it expresses an answer to a yes/no-question  
**then** branch to FEEDBACK\_POSITIVE  
**else if** in the segment the speaker reacts to a contribution of the dialogue partner in a negative way, i.e. if the segment signals a rejection of its contents or of the illocution, or if it expresses an answer to a yes/no-question branch to FEEDBACK\_NEGATIVE.  
**else** label with FEEDBACK.

### **Decision FEEDBACK\_POSITIVE:**

**if** the segment contains a positive reaction to one or more objects which have been mentioned previously in the dialogue - these objects must be referred to either explicitly or implicitly, i.e. anaphorically – and if this positive reaction also serves to wrap up the result of the whole conversation  
**then** label with CONFIRM

**else if** the segment contains a positive reaction to one or more objects that were part of proposals (i.e. offers, suggestions of any kind) previously stated in the dialogue – these objects can be either realized explicitly or implicitly, i.e. anaphorically – and if this positive reaction does not fulfill the function to summarize previous partial agreements then branch to ACCEPT.

**else** label with FEEDBACK\_POSITIVE

#### **Decision FEEDBACK\_NEGATIVE:**

**if** the segment is used to explicitly reject a proposal or parts thereof (i.e. offers, suggestions or any kind)

**then** label with REJECT

note: *also check EXPLAINED\_REJECT*

**else** label with FEEDBACK\_NEGATIVE

#### **Decision EXPLAINED\_REJECT:**

**if** the segment obviously rejects a proposal formerly introduced in the dialogue by stating a reason label with EXPLAINED\_REJECT

#### **Decision INFORM:**

**if** the segment contains an obvious digression from the common task (e.g. jokes, private details of no relevance) or comments on the technical surroundings of the recording studio

**then** branch to DIGRESS

**else if** the segment is used to rule out an object of the negotiation, label with EXCLUDE

**else if** the segment contains the specification of an object already introduced into the dialogue (and if this specification or elaboration does not contain a suggestion in itself) label with CLARIFY

**else if** the segment serves to explain the contents of another segment (usually either the one directly before or after this one) label with GIVE\_REASON  
note: *also check EXPLAINED\_REJECT*

**else** label with INFORM

#### **Decision DIGRESS:**

**if** the segment refers to the technical surroundings of the recording studio or to anything on this level of reality

**then** label with REFER\_TO\_SETTING

**else if** the segment does not address topics relevant for the task or belonging to the scenario label with DEVIATE\_SCENARIO

**else** label with DIGRESS

## 4.3 Dialogue Act Definitions

As in the first phase of VERBMOBIL the set of dialogue acts is structured as a hierarchy with growing specificity towards the leaves of the tree (see figure 4.1). The first edition of VERBMOBIL 2 acts added more structure to the scheme and this revised edition of our dialogue act set adds yet another, high-level layer to the hierarchy. We use the first part of this section to elaborate on this new level and give the detailed definitions of all the dialogue acts in a second part.

The level defined by the branches of the node DIALOGUE\_ACT divides all dialogue acts according to what level of the communication they refer to. The distinction is done early, ie. very much at the root, because each category contains its own idiosyncratic communicative functions.

An utterance can relate to the whole dialogue (or more general: the communication) or it can relate to the question of how to conduct the solving of the task at hand. These are meta-level categories since the respective communicative functions do not deal with the task itself. Dealing with the task forms the major category PROMOTE\_TASK. We give a brief description of these categories here.

*Please note that these categories are not used for annotation since they are too abstract to be of use!*

**CONTROL\_DIALOGUE** The functions of this category deal with the communication itself (cf. [6, 4]). A task-oriented dialogue could be stripped of all contributions of this type and is still likely to be successful (though not very “smooth”).

The functions begin and end a dialogue, they handle social obligations as well as the “mood” of the conversation. Signalling understanding is yet another task of these acts as well as stalling the dialogue (“playing for time”) by conventionalized phrases without much contribution to the task.

**MANAGE\_TASK** The functions of this category deal with opening, interrupting/deferring and closing the part of the dialogue where a certain task is dealt with. This can be done explicitly or implicitly. Topic of these acts is the handling of the task, i.e. how to do it, in which order, the fact that task handling now begins or ends or is deferred.

**PROMOTE\_TASK** Everything concerned with solving/getting on with the task, without fitting in the other categories. The topic is something *within* the domain of the task, not the task itself. This category should be chosen, if no other category covers the dialogue act at hand.

The rest of the chapter is dedicated to describing each of the dialogue acts<sup>4</sup> occurring in this hierarchy in turn. In order to do so we use a uniform scheme. For every dialogue act we give the following information:

**Upper level dialogue act:** Name of the preceding node in the dialogue act hierarchy.

**Dialogue Phase:** Phases in which the given dialogue act may occur.

**Related Propositional Content:** Some of the dialogue acts are closely linked to a specific type of propositional content with which they co-occur. Some dialogue acts do not carry task-relevant propositional content, as e.g. the acts sub-classified under CONTROL\_DIALOGUE, which only transport pragmatic information (see also section 3.2).

**Definition:** For every dialogue act we give a definition which (hopefully) allows to uniquely attribute a dialogue act to a given dialogue act. Sometimes it may be the case that more than one definition applies to a dialogue segment. For such cases we foresee the possibility to attach multiple labels (so-called *multiple dialogue acts*) to this segment. Nevertheless, the labelers should try to keep the number of multiple annotations to a minimum.

**Note:** This paragraph contains important aspects to be considered when trying to identify the act. The most important remarks concern:

- unusual/counterintuitive manifestations  
(should occur in the examples, too)
- possible confusions with other dialogue acts
- whether *lookahead* is necessary to identify the dialogue act

**German/English/Japanese Example:** For every language treated in phase two of VERBMOBIL we give examples for the use of the dialogue act under consideration. The use of the dialogue acts will be shown in context since the preceding utterances usually have a significant influence on the determination of the dialogue act — which without context might otherwise be ambiguous. For every example we specify the source, i.e. the CDROM from which it was taken and the dialogue identifier as used on the CDROM.

---

<sup>4</sup>we will only describe those acts that are actually intended to be used for annotation, i.e. labels like NOT\_CLASSIFIABLE, CONTROL\_DIALOGUE, MANAGE\_TASK, etc. will not be listed

## ACCEPT

**Upper level dialogue act:** FEEDBACK\_POSITIVE

**Dialogue phase:** NEGOTIATION

**Related propositional content:**

can contain anaphoric or explicit reference to the accepted proposition, e.g. a date or duration, a location, a selection of transportation or accommodation, an action (especially a commitment)

**Definition:**

With an utterance expressing an ACCEPT the speaker explicitly accepts a proposal. ACCEPT is special case of FEEDBACK\_POSITIVE. Note that only proposals can be accepted, like brought forward in the dialogue acts SUGGEST, DEFER, OFFER, COMMIT, REQUEST\_COMMIT.

**Note:**

An ACCEPT can be a partial accept like in the first example.

**German Example:** cdrom15 ,g014ac

*partial accepts  
should be annotated as accepts*

ABE007: (...) wie sieht 's denn Ende Juli aus ? (SUGGEST) vielleicht  
die Woche ein-und-zwanzigster bis f"unf-und-zwanzigster ?  
(SUGGEST)

AB0008: ja , also ab Dienstag <"ah> w"ar' das gut m"oglich . (ACCEPT)

**German Example:** cdrom14 ,m115n

MEM006: also , <:<#Klicken> ich:> h"atte im April , vom  
zweiundzwanzigsten bis zum sechsundzwanzigsten Zeit<Z> , <A>  
und<Z> im<Z> <Schmatzen> Juni<Z> <A> vom<Z> zehnten bis zum  
vierzehnten , (SUGGEST) das sind also die einzigen beiden  
Wochen , <A> wo ich<Z> Zeit habe <:<#Klicken> <A>:>  
. (INFORM)

ULR007: ja , das trifft sich gut , (ACCEPT) denn<Z> in der zweiten  
Juniwoche<Z> hab' ich auch noch keine Termine . (GIVE\_REASON)  
<A> dann halt'ich das fest , (CLOSE) und dann k"onnen wir<Z>  
<A> <"ah> die zweite Juniwoche f"ur die Fahrt nach Potsdam  
einplanen <#Klicken> (CONFIRM)

**English Example:** *cdrom13 ,r423c*

ANV001: <Schmatzen> <#Klicken> <A> <#Klicken> how 'bout <;comma><#Klicken> <#Klicken> at <;comma> three on <;comma> <A> February third <;quest> <A> <;seos> (SUGGEST)<#Rascheln> would that be okay <;quest> <#> <#Klicken> <#> <#> <;seos> (REQUEST\_COMMENT)

RMW002: <:<#> <#Klicken> that would be perfect <;period> <A> <;seos> (ACCEPT) <#> let us <!2 let's> meet in the cafeteria again <;period> <:<Lachen> <#Klicken> <#>:> <;seos> (SUGGEST)

## BACKCHANNEL

**Upper level dialogue act:** CONTROL\_DIALOGUE

**Dialogue phase:** OPENING, NEGOTIATION, CLOSING

**Related propositional content:** none

### Definition:

With a BACKCHANNEL a dialogue participant solely signals that he is still following the conversation, without really taking the turn himself.

#### German Example: *cdromS ,l011n*

MIG030: <uh> <uh> <uh> das geht bei mir wieder nicht <A> , (REJECT)  
weil ich von vierzehn Uhr <P> wieder 'ne feste Sache hab' ,  
wo ich hin mu"s . (GIVE\_REASON)  
<A> das hei"st , ich w"ar' auf der Messe eh nur bis eins  
gewesen . (CLARIFY)  
<A> geht 's bei Ihnen nich' vielleicht ein bi"schen  
fr"uher ? (SUGGEST)

MAB031: geht nicht . (REJECT)

MIG032: <hm> (BACKCHANNEL)

MAB033: <A> auf keinen (Fall@) . (REJECT)

#### German Example: *cdromS ,k015d*

PTR016: (@dann)<Z> im Mai sieht es bei mir <P> <#Papierrascheln> (sehr  
gut aus <P>@) (SUGGEST)

WOG017: (@mhm) . (BACKCHANNEL)

PTR018: schlecht sind <A> die<Z> ersten vier und die letzten (Tage@) .  
(SUGGEST)

WOG019: (@mhm ,mhm) (BACKCHANNEL)

PTR020: <A> und<Z> vielleicht , sagen Sie dazwischen einen Tag , ob das  
<!des> geht bei mir . (REQUEST\_SUGGEST)

## BYE

**Upper level dialogue act:** CONTROL\_DIALOGUE

**Dialogue phase:** BYE

**Related propositional content:**

can contain information about the addressed person, e.g. his/her name, title, position

**Definition:**

With an BYE the speaker says good bye to the dialogue partner(s), thereby closing the dialogue.

**German Example:** *cdrom7,z005d*

FLR023: okay , (FEEDBACK\_POSITIVE) klar . (FEEDBACK\_POSITIVE)  
bis dann , (BYE) tschau . (BYE)

**English Example:** *cdrom13,r310c*

SVG008: <:<#> <#Klicken> <Schmatzen> <A> yes <;period>  
(FEEDBACK\_POSITIVE) <;seos> one thirty sounds good for me  
<;comma> <;seos> (ACCEPT) see you then <;comma> <#Klicken>  
<Schmatzen:> <;seos> (BYE)

## CLARIFY

**Upper level dialogue act:** INFORM

**Dialogue phase:** ALL PHASES

**Related propositional content:**

can contain anaphoric or explicit reference to the proposition for which clarification is given, e.g. a date or duration, a location, a selection of transportation or accommodation, an action that was proposed

**Definition:**

With an utterance expressing a CLARIFY the speaker presents more information about something that has already been either explicitly or implicitly introduced into the discourse. Repetitions are also subsumed under CLARIFY.

**German Example:** *cdrom1 ,n002k*

MW1006: wie war das noch mal ? (REQUEST\_CLARIFY)

PS1007: ja , ich sagte , da"s ich am <"ah> Donnerstag , den f"unfzehnten April von zehn bis vierzehn Uhr drei"sig ein Doktorandentreffen habe . (CLARIFY)

**German Example:** *cdrom7 ,g426a*

GEP005: <A> gut . (FEEDBACK\_POSITIVE) <"ah> <#> im<Z> Februar <#> habe ich nur Zeit zwischen dem dritten und dem elften , <:<#> und:> dann wieder<Z> +/am/+ , <P> ja , ab f"unfundzwanzigsten . (SUGGEST) <A> <"ah> am besten w"are f"ur diesen Zweck ja wahrscheinlich der siebenundzwanzigste . (SUGGEST) da ist Rosenmontag . (CLARIFY) und das Ganze ist ja nun ziemlich l"acherlich <#Klicken> . (INFORM)

**English Example:** *cdrom8 ,r276c*

TEH000: <:<#> <#Klicken> <#Rascheln> <A> <Schmatzen> <A> okay <;comma> (FEEDBACK\_POSITIVE) hey <;comma> we got to <!2 gotta> hook up again and <;comma> talk about this for a couple more hours (INIT) <;period> <#Klicken> <;seos> <"ahm> <A> <#Klicken> today is the fifth (CLARIFY) <;comma> <;seos> it is <!2 it's> a Monday (CLARIFY) <;comma> <;seos> and <;comma> <"ahm> I am <!2 I'm> out of <!2 outta> town for two days (SUGGEST)

## Japanese Example:

NAF14: (Yes, ok. Therefore, at 1 o'clock Mr Nemoto will come to meet you at the Kimura Institute. That's ok, isn't it? Good bye.)

NAF14: <ls> hai <P> wakari mashi ta . {seos} jaa ichi  
\*NAF14: [Int hai] [V wakari] [VF mashi] [VF ta] [Int jaa] [Kard ichi]  
>NAF14: [yes] [understand] [(polite)] [(past tense)] [therefore] [1]

NAF14: ji ni <P> /ee/ nemoto ga sochira  
\*NAF14: [N ji] [Part ni] [Int ee] [PN nemoto] [Part ga] [Pron sochira]  
>NAF14: [o'clock] [at] [aeh] [Nemoto] [(subj)] [you]

NAF14: no kimura kyooju no keNkyuushitsu  
\*NAF14: [Part no] [PN kimura] [N kyooju] [Part no] [N keNkyuushitsu]  
>NAF14: [(Genitiv)] [Kimura] [Professor] [(Genitiv)] [Institute]

NAF14: o (ni) ukagai masu node <P> {seos} <h> /ee/  
\*NAF14: [Part ni] [V ukagai] [VF masu] [Konj node] [Int ee]  
>NAF14: [(obj)] [visit] [(polite)] [because] [aeh]

NAF14: sooyuu koto de yoroshii  
\*NAF14: [Adv soo] [V yuu] [NOM koto] [Part de] [Adj yoroshii]  
>NAF14: [so] [say] [(nominalization)] [in] [good]

NAF14: desu ne . {seos} /eeto/ jaa <P> shitsuree  
\*NAF14: [V desu] [Part ne] [Int eeto] [Int jaa] [N shitsuree]  
>NAF14: [be] [tag] [therefore] [therefore] [unpolite]

NAF14: shi masu . {seos}  
\*NAF14: [V shi] [VF masu]  
>NAF14: [make] [(polite)]

## CLOSE

**Upper level dialogue act:** MANAGE\_TASK

**Dialogue phase:** CLOSING

**Related propositional content:** none

### Definition:

The speaker signifies that in his/her eyes the relevant task has been treated to an acceptable extent and does not (or should not) be dealt with any further. This is typically done by certain phrases indicating the closure of a negotiation topic, such as ‘machen wir’s so’, ‘dann halten wir das fest’, ‘dann trage ich mir das jetzt ein’.

### Note:

A CLOSE phrase *must not contain any explicitly mentioned negotiation item* (e.g. a date), for then it would have to be labeled CONFIRM.

### German Example: cdrom7 ,g401a

WAR004: <Schmatzen>das ist bei mir durchaus m"oglich . (ACCEPT)  
erster und zweiter Dezember ist frei . (ACCEPT) ich vermerk'  
das also verbindlich als die erste zweit"agige Arbeitssitzung  
. <P> (CLOSE) jetzt m"ussen wir<P> noch eine weitere  
zweit"agige Arbeitssitzung festlegen . (INIT)

### English Example: cdrom15 ,g046a

AFI046: <@14<"ah> (BACKCHANNEL) <:<#Rascheln> @14gut:> , <"ah>  
<#Rascheln> (FEEDBACK\_POSITIVE) <:<#Rascheln> ich%:>  
<:<#Rascheln> glaube:> , dann <:<#> h"atten:> wir das <!1 des>  
<:<#Rascheln> wichtigste:> <:<Ger"ausch> besprochen:> ,  
(CLOSE) dann15@ m"ocht'15@ ich15@ mich +/<:<#Quietschen>  
Ihn<Z>en:>/+ <!1 Ihn'> <h"as> von Ihnen <!1 Ihn'>  
verabschieden , <Schmatzen> <A>16@ (BYE) und wir sehen uns  
dann wie besprochen . (CLOSE)

## COMMIT

**Upper level dialogue act:** PROMOTE\_TASK

**Dialogue phase:** NEGOTIATION

**Upper level dialogue act:** PROMOTE\_TASK

**Related propositional content:**

contains anaphoric or explicit reference to the commitment, e.g. a reservation, possibly implicit, e.g. by a vehicle or accommodation

**Definition:**

The speaker explicitly commits him-/herself to do one or more specified action(s). This action can be referred to anaphorically (if formerly introduced by e.g. a SUGGEST or REQUEST\_COMMIT).

**German Example:** *cdrom15 ,g001ac*

AAJ071: das werden wir dann sehen . (DEFER) <"ahm> ja , soll ich mich um den Flug k"ummern ? (SUGGEST) da"s <"ahm> wir da zwei Reservierungen kriegen f"ur die Neun-Uhr-f"unf-Maschine ? (GIVE\_REASON)

AAK072: das w"ar' sehr nett , ja . (ACCEPT) dann mach' ich das Hotel . (COMMIT)

**German Example:** *cdrom15 ,g009ac*

ABD023: ja . (ACCEPT) wollen Sie sich da gleich drum k"ummern und <!1 'n'> das <!1 des> festmachen ? (REQUEST\_COMMIT)

ABA024: genau , (ACCEPT) das <!1 des> buch' ich dann . (COMMIT) das <!1 des> mach' ich mit der Reisestelle aus , da"s die das <!1 des> dann buchen . (COMMIT)

ABD025: sehr sch"on . (FEEDBACK\_POSITIVE) dann w"urd' ich anbieten , k"ummer' ich mich um die Unterkunft . (OFFER)

ABA026: gerne , (ACCEPT) ja . (ACCEPT)

# CONFIRM

**Upper level dialogue act:** FEEDBACK\_POSITIVE

**Dialogue phase:** NEGOTIATION, TOPIC\_CLOSING

**Related propositional content:**

contains anaphoric or explicit reference to the negotiated proposition to be confirmed, e.g. a date or duration, a location, a selection of transportation or accommodation, an action (especially a commitment)

**Definition:**

With an utterance expressing a CONFIRM the speaker wraps up the result of the negotiation (or a part thereof). This is done by repeating parts of the completed task, i.e. for appointment scheduling a recapitulation (complete or partial) of the agreed date/place.

**Note:**

This dialogue act often also signals the closure of the task. If no information from the task domain is given in the utterance, though, it is likely to be a CLOSE. CONFIRM can also be abused as an ACCEPT if the set of confirmed items include a piece that has not been accepted yet.

**German Example:** *cdrom7,z005d*

FLR015: gut<Z> . (FEEDBACK\_POSITIVE) ja , dann halten wir das <!1  
des> doch mal <!1 ma'> fest , zw"olfter , dreizehnter  
. (CONFIRM) gut , (FEEDBACK\_POSITIVE) das <!1 des>  
schreib' ich gleich ein . (CLOSE)

*note the difference between CONFIRM and CLOSE*

**English Example:** *cdrom13,r004k*

RG3006: <Schmatzen> <A> okay <;comma> (ACCEPT) I think so too  
<;comma> <;seos> (FEEDBACK\_POSITIVE) let us <!2 let's>  
<;comma> <"ahm> schedule it for nine <;period> <#Klopfen>  
<;seos> (ACCEPT)

NG1007: okay <;comma> <;seos> (FEEDBACK\_ POSITIVE) so <;comma> we  
will <!2 we'll> meet on <;comma> Monday fifteen <;comma>  
<Schmatzen> <Schmatzen> nine o'clock in the morning <;comma>  
<A> <#Mikrobe> <;seos> <"ah> (CONFIRM) fine <;period>  
(FEEDBACK\_ POSITIVE)<;seos> <Schmatzen> bye bye <;period> <A>  
(BYE) <Lachen> <;seos>

## DEFER

**Upper level dialogue act:** MANAGE\_TASK

**Dialogue phase:** OPENING, NEGOTIATION, CLOSING

**Related propositional content:**

Possibly an expression referring to the part of the task to defer and an expression referring to a future occasion to continue this subject.

**Definition:**

The speaker explicitly suggests or announces the interruption of the negotiation topic (or a part thereof) currently dealt with in the dialogue.

**German Example:** *cdrom7 ,m058n*

PEB013: das pa"st wunderbar . (ACCEPT) das +/i=/+ sind genau die Tage , an denen ich auch frei habe oder Zeit dazu h"atte . (INFORM) dann k"onnen wir das schon mal festhalten . (CLOSE) "uber die Einzelheiten<:#Rascheln> k"onnen wir:> dann ja noch sprechen . (DEFER)

**German Example:** *cdrom15 ,g204ac*

AHJ039: machen <!1 mach'> wir <!1 ma> noch <:#> ein:> <Ger"ausch> <A> Abendessen dann am <A> <P>15@> <Schmatzen> Montag . ja16@ ? (SUGGEST)

AHI040: @15mhm . (BACKCHANNEL)

AHI041: @16das @16k"onnen <!1 k"onn'> wir ja% dann dort <:#> bestimmen:> <!1 bestimm'> , (DEFER) <:#> was:> wir <A> <T>t (NOT\_CLASSIFIABLE)

## DELIBERATE

**Upper level dialogue act:** CONTROL\_DIALOGUE

**Dialogue phase:** OPENING, NEGOTIATION, CLOSING

**Related propositional content:** none

### Definition:

DELIBERATE is used to characterize dialogue segments that serve time management in a dialogue. Thinking aloud is typically labeled as DELIBERATE.

#### German Example: *cdrom7 ,m226d*

ACR004: <"ah> ging' es <:<#> bei:> Ihnen <!1 Ihn'> Anfang April ?  
<#> (SUGGEST)

BCV005: schau' grad' mal . (DELIBERATE) <A> <"ahm> <Schmatzen>  
Anfang April <Ger"ausch> ist <!1 is'> nicht <!1 nich'> so  
g"unstig . (REJECT)

#### German Example: *cdromx ,xxx*

GEP004: (...) welches Wochenende ist bei Ihnen noch frei <A> Ende  
September oder Mitte <:<#> Oktober:> <#Klicken> ?  
(REQUEST\_COMMENT))

MAW005: ja , ich schau' mal<Z> <Ger"ausch> schnell nach im Kalender .  
(DELIBERATE)

#### German Example: *cdrom7 ,g402a*

WAR002: gut , dann lege ich los (INIT) und da schlage ich vor , den  
zweiten Mai , unmittelbar nach dem Maifeiertag . (SUGGEST) wir  
hatten ja gestern schon "ubern Maifeiertag gesprochen  
. (INFORM) Sie erinnern sich . (DELIBERATE) zweiter Mai . und  
dann kurz vor Christi Himmelfahrt . (INFORM) also Mittwoch ,  
den vierundzwanzigsten Mai . (CLARIFY) kucken Sie mal , ob Sie  
sich mit diesen Vorschl"agen anfreunden k"onnen .  
(REQUEST\_COMMENT)

**German Example:** *cdrom15 ,g001ac*

AAJ015: (...) ich mu"s am Donnerstag sowieso nach Berlin ,  
(GIVE\_REASON) dann k"onnte ich eigentlich fast das mu"s ich  
dann "uberlegen , wie ich das mache , (DELIBERATE) ob ich  
wom"oglich am Mittwoch dann direkt nach Berlin weiterreise  
. <"ahm> (INFORM)

**English Example:** *cdrom8 ,r245c*

MAS000: <:<#> <A> <Schmatzen> <"ah> looking at my  
schedule <;comma> I am <!2 I'm> free <;comma> <"ah> both  
Tuesday the twentieth <;comma> and Wednesday the twenty first  
(SUGGEST) <;period> <;seos> <A> <"ah> anytime before then  
<;comma> I will <!2 I'll> have to <;comma> <"ah> check my  
schedule (DELIBERATE) <;period> <;seos> are you free on  
those days (REQUEST\_COMMENT) <;quest> <#Klicken>:> <;seos>

**Japanese Example:**

NAZ10: (The fourth of September is a bit late, but would that  
suit you?)

NAZ10: ku gatsu <P> yokka wa  
\*NAZ10: [Kard ku] [N gatsu] [Date yokka] [Part wa]  
>NAZ10: [9] [month] [4th] [(theme)]

NAZ10: chotto osoi desu kedo yoroshii  
\*NAZ10: [Adv chotto] [Adj osoi] [V desu] [Konj kedo] [Adj yoroshii]  
>NAZ10: [a bit] [late] [bel] [but] [good]

NAZ10: deshoo ka . {seos}  
\*NAZ10: [V deshoo] [Part ka]  
>NAZ10: [be (cond)] [(question)]

AAG11: (One moment, please. If this is September 4, I would have time.  
Only in the afternoon from one to three I don't have time.)

AAG11: chotto mat te kudasai ne . {seos} ku  
\*AAG11: [Adv chotto] [V mat] [VF te] [V kudasai] [Part ne] [Kard ku]  
>AAG11: [a bit] [wait] [te-form] [please] [tag] [9]

AAG11: gatsu no yokka desu to <P> /ee/  
\*AAG11: [N gatsu] [Part no] [Date yokka] [V desu] [Konj to] [Int ee]  
>AAG11: [month] [(Genitiv)] [4th] [be] [if] [aeH]

AAG11: ai te ru <P> jikaN ga <P> gogo

\*AAG11: [V ai] [VF te] [V ru] [N jikaN] [Part ga] [N gogo]

>AAG11: [be free] [te-form] [(present tense)] [time] [(subj)] [afternoon]

AAG11: no ichi ji kara saN ji made

\*AAG11: [Part no] [Kard ichi] [N ji] [PP kara] [Kard saN] [N ji] [PP made]

>AAG11: [(Genitiv)] [1] [o'clock] [from] [3] [o'clock] [until]

AAG11: shika nai N desu . {seos}

\*AAG11: [Part shika] [Adj nai] [NOM N] [V desu]

>AAG11: [until] [not give] [(nominalization)] [be]

## DEVIATE\_SCENARIO

**Upper level dialogue act:** DIGRESS

**Dialogue phase:** OPENING, NEGOTIATION, CLOSING

**Related propositional content:**

not specifiable

### Definition:

This dialogue act is used for segments which are unrelated to the domain or scenario under consideration.

### German Example: *cdrom7,g406a*

HAZ009: <Ger"ausch> ich habe den achtundzwanzigsten Januar<Z> <P>  
notiert . (ACCEPT) <A> aber bitte vergessen Sie auch nicht  
, <A> ein sch"ones<Z> , frisch gezapftes Radeberger Bier  
mitzub<;T> (DEVIATE\_SCENARIO)

WAR010: <A> gut<Z> . (FEEDBACK\_POSITIVE) das werde ich <"ah>  
<Ger"ausch> gerne machen<Z> . (DEVIATE\_SCENARIO) <A> es gibt  
sonst das<Z> B"ohmsche Brauhaus noch . (DEVIATE\_SCENARIO) <A>  
<"ah> das wird in Kamenz gebraut . (DEVIATE\_SCENARIO) das ist  
eigentlich besser . (DEVIATE\_SCENARIO) Radeberger Bier <P>  
<"ah> <A> ist , glaub' ich , jetzt auch +/in<Z>/+ von einem  
westdeutschen Konzern "ubernommen worden. (DEVIATE\_SCENARIO)  
ich wei"s es aber nicht genau . (DEVIATE\_SCENARIO) 's<Z> gab  
lange Auseinandersetzungen . (DEVIATE\_SCENARIO) <A> %also ,  
das <!1 s> Radeberger ist gar nicht mehr das ganz alte , echte  
Radeberger . (DEVIATE\_SCENARIO) <A> aber wie dem auch sei ,  
<A> ich werde eine Flasche Radeberger <A> und eine Flasche  
B"ohmsches Brauhaus mitbringen . (DEVIATE\_SCENARIO)

### English Example: *cdrom8,r271c*

TEH006: <:<#> <Schmatzen> <A> <#Rascheln> alright <;comma> well  
<;comma> that apart (DELIBERATE) <;comma> hey <;comma>  
<Ger"ausch> that is <!2 that's> pretty exciting  
(DEVIATE\_SCENARIO) <;period> <;seos> you are <!2 you're> going  
to Hawaii this weekend (DEVIATE\_SCENARIO) <;comma> huh  
<;quest> <;seos> +/two/+ <;comma> <;seos> what did you say two

weeks (DEVIATE\_SCENARIO) <;quest> <;seos> you ever been there before (DEVIATE\_SCENARIO) <;quest> <Schmatzen> <A> <#Klicken> <A>:> <;seos>

JEM007: <A> <A> yeah <;comma> I have a house right on the beach (DEVIATE\_SCENARIO) <;period> <A> <;seos> and I go there every year (DEVIATE\_SCENARIO) <;period> <Ger"ausch> <;seos> <Schmatzen> I like it a lot (DEVIATE\_SCENARIO) <;period> <hm> <A> <#Klicken> <A> <;seos>

TEH008: <:<#> <A> you are <!2 you're> milking me (DEVIATE\_SCENARIO) <;comma> <;seos> how can you afford a house on the beach in Hawaii (DEVIATE\_SCENARIO) <;comma> while you are <!2 you're> a full time student (DEVIATE\_SCENARIO) <;period> <A> <;seos> any rate <;comma> <A> <#Rascheln> I am <!2 I'm> <;comma> <"ah> green with envy (DEVIATE\_SCENARIO) <;comma> <A> <;seos> and <;comma> <"ah> <A> <#Rascheln> which island is it on <;period> <A> <#Rascheln> <A> <Ger"ausch> <#Klicken> <A>:> <;seos> (DEVIATE\_SCENARIO)

## **EXPLAINED\_REJECT**

**Upper level dialogue act:** REJECT, GIVE\_REASON

**Dialogue phase:** NEGOTIATION

**Related propositional content:**

contains the reason, why the speaker is rejecting, e.g. because he or she is busy at some time etc. (full proposition like GIVE\_REASON) and further can contain anaphoric or explicit reference to the rejected proposition, e.g. a date or duration, a location, a selection of transportation or accommodation, an action that was proposed or requested, especially a commitment

**Definition:**

The speaker states a fact (reason) that implicitly rejects a former proposal.

**Note:**

This dialogue act should only be used if an utterance can *not* be segmented into a REJECT part and a GIVE\_REASON part.

**German Example:** cdrom15 ,g012a

ABA003: ... <:<#Klopfen> dann:> in der <!2 inner> <:<#>  
darauffolgenden:> <!1 d'rauffolg'n'en> Woche h"att' ich  
Donnerstag , <:<#> Freitag:> Zeit , (SUGGEST) <:<#> also:>  
<:<#Klopfen> #zw"olfter:> <!1 zw"o'fter> und <:<#>  
#drei-zehnter:> . <#Rascheln> (CLARIFY)

ABD004: da bekomm' <:<#Klopfen> ich:> leider <:<#Rascheln> Freitag:>  
Besuch<Z> , (EXPLAINED\_REJECT) da <:<#Rascheln> kann:> ich  
<:<#> auch:> <:<#> nicht:> , (REJECT) <:<#> und:> die  
<:<#Rascheln> #zwei:> <:<#Rascheln> darauffolgenden:> <!1  
darauffolg'n'n> <:<#Rascheln> Wochen:> <A> <#Klopfen>  
<#Rascheln> bin ich <:<#> schon:> <:<#Rascheln> wieder:> mal  
<:<#Klopfen> im:> <:<#Klopfen> Urlaub:> . <#Rascheln> <A>  
<Schmatzen> <A> (EXCLUDE) ...

**English Example:** cdrom8 ,r140c

SNJ000: <#Klicken> <Schmatzen> <A> Ian <;comma> it is <!2 it's> urgent  
<;comma> <;seos> (INFORM) I have to <;comma> meet up with you  
<;period> <;seos> (INIT) what about <;comma> today <;comma>  
(SUGGEST) say from one to three \$P \$M <;quest> <;seos>

<Schmatzen> <A> (SUGGEST) how does <!2 how's> that sound  
<;period> <#Klicken> <;seos> (REQUEST\_COMMENT)

ISN001: <A>I have <!2 I've> got a class <;comma> from <;comma> two to  
three thirty <;period> (EXPLAINED\_REJECT) <"ah> <;seos> I am  
<!2 I'm> free all day tomorrow and Wednesday though <;period>  
<A> <;seos> (SUGGEST) <"ah> are you free at all any of those  
days <;quest> <Schmatzen> <Schmatzen> <;seos>  
(REQUEST\_COMMENT)

## **DIGRESS**

**Upper level dialogue act:** INFORM

**Dialogue phase:** OPENING, NEGOTIATION, CLOSING

**Related propositional content:**

not specifiable

### **Definition:**

DIGRESS covers various cases of deviation from expected course of the dialogue: it is further subclassified into (1) DEVIATE\_SCENARIO to describe utterances which deal with topics that do not belong to the scenario and (2) REFER\_TO\_SETTING to characterize dialogue segments which are concerned e.g. with the technical surrounding in which the interaction takes place.

## EXCLUDE

**Upper level dialogue act:** INFORM

**Dialogue phase:** NEGOTIATION

**Related propositional content:**

contains a proposition to be excluded, e.g. a date, a location, a selection of specific transportation or accommodation, an action

**Definition:**

The speaker informs the dialogue partner of the impossibility or unsuitability of a certain component in a possible plan or way of action within the task domain.

**German Example:** *cdrom7 ,g406a*

WAR006: da mu"s ich mit gro"ser Freude sagen , da"s ich <"ah> in Dresden <!1 Dr"asden> bin . (EXPLAINED\_REJECT) also , Sie wissen ja , da"s ich aus Pulsnitz bei Dresden komme . (INFORM) und da hab' ich also die <"ah> sch"one Gelegenheit , an einem Kongre"s in Dresden teilzunehmen und kann also das <!1 s> Angenehme mit dem N"utzlichen verbinden . (INFORM) also , ich bin vom zweiundzwanzigsten bis zum siebenundzwanzigsten auf diesem Kongre"s in Dresden <!1 Dr"asden> . (EXCLUDE) das geht also da nicht . (EXCLUDE)

*Lookahead!  
The first exclude cannot be annotated without knowledge of the following utterance*

**English Example:** *cdrom8 ,r202c*

EPP004: ... how 'bout <;comma> Thursday the twentieth of May <;period> <;seos> (SUGGEST)

YAW005: well I only have a meeting for two hours from nine \$A \$M to eleven \$A \$M then <;comma> <;seos> (EXCLUDE) are you free anytime after that <;quest> <;seos> (SUGGEST)

**English Example:** *cdrom8 ,r220c*

JDH002: are you available at all in the afternoon on the eighteenth <;quest> <;seos> (SUGGEST) <"ah> I get out of <!2 outta> class at twelve <;comma> <;seos> (INFORM) I could eat lunch <;comma> and <;comma> maybe <;comma> be together by one o'clock or so <;comma> <;seos> (SUGGEST)

SMA003: well <;comma> I have a class starting at two <;period> <;seos> (EXCLUDE) so <;comma> if you wanted to do it <;comma> over lunch <;comma> then that would be possible for me <;comma> <;seos> (SUGGEST)

JDH004: sure <;period> (ACCEPT) sounds like a plan <;period> <;seos> (FEEDBACK\_POSITIVE)

**English Example:** *cdrom8 ,r221c*

SMA003: well <;comma> my seminar goes until twelve <;period> <;seos> and it would be nice to have some time for lunch <;period> <;seos> (EXCLUDE) what about two <;comma> \$P \$M <;period> <;seos> (SUGGEST) would that be alright <;quest> <;seos> (REQUEST\_COMMENT)

## FEEDBACK

**Upper level dialogue act:** PROMOTE\_TASK

**Dialogue phase:** OPENING, NEGOTIATION, CLOSING

**Related propositional content:**

can contain anaphoric or explicit reference to the proposition the feedback is referring to, e.g. a date, a location, a selection of transportation or accommodation, an action

**Definition:**

FEEDBACK covers various cases of reactions to contributions made by another dialogue participant. The reactions are differentiated according to their attitude towards that previous contribution FEEDBACK\_POSITIVE, FEEDBACK\_NEGATIVE. One subtype is used for cases where a dialogue participant indicates that he still follows the discourse, namely BACKCHANNEL.

**German Example:** *cdrom12 ,j463a*

THW000: ... mir w"urd' es besonders gut passen in der zweiten  
Augusth"alfte . sagen wir von<P> Montag , dem neunzehnten ,  
bis<Z><P> Freitag , dem dreiundzwanzigsten . (SUGGEST) w"are  
Ihnen das da auch recht<#Klicken> ? (REQUEST\_COMMENT)

CLK001: <Schmatzen>unglaublich , Herr<:<Lachen> Wesener:> .<P>  
(FEEDBACK) Sie haben<Z> die einzige gro"se L"ucke in meinem  
Kalender gefunden . (ACCEPT) ich w"urde sagen , das halten  
wir sofort fest<#Klicken> . (CLOSE)

**German Example:** *cdromx ,m067ar*

QXQ029: <\*tENG> <A> I believe that the planes fly from around #one  
#thirty to #eight and I think there is <!2 there's> +/a/+ a  
number of flights , (INFORM) so <A> if you have a suggestion  
<P> we can discuss that . (REQUEST\_SUGGEST)

FRE030: <\*tGER> <A> <"ahm> ich glaube , da"s die Fl"uge zwischen halb  
#zwei und #acht Uhr abends <#Klopfen> <"ah> fliegen und da"s  
<%> es einige Fl"uge gibt , (INFORM) <Ger"ausch> <#Klopfen>  
insofern , wenn Sie einen Vorschlag haben <#Klopfen> um  
welche Zeit Sie fahren m"ochten , dann mir 's sagen Sie 's  
. (REQUEST\_SUGGEST)

LAU031: <\*tGER> mir ist es generell egal , (FEEDBACK) ich w"urde mich  
auch da nach Ihnen richten . (INFORM)

FRE032: <\*tENG> <A> <"ah> I do not <!2 don't> really care ,  
(FEEDBACK) I could take whatever you like . (INFORM)

## FEEDBACK\_NEGATIVE

**Upper level dialogue act:** FEEDBACK

**Dialogue phase:** ALL PHASES

**Related propositional content:**

can contain anaphoric or explicit reference to the proposition the feedback is referring to, e.g. a date, a location, a selection of transportation or accommodation, an action

**Definition:**

With an utterance expressing FEEDBACK\_NEGATIVE the speaker reacts to a contribution of the dialogue partner in a negative way. A FEEDBACK\_NEGATIVE can signal rejection of the contents or illocution of a previous contribution or it can express an answer to a yes/no-question. In German FEEDBACK\_NEGATIVE is often expressed by lexemes or phrases such as 'nein', 'nee', 'tut mir leid', 'schwierig'.

**Note:**

If the segment expresses feedback to a proposal (see ACCEPT) consider REJECT

**German Example:** *cdrom7,m245d*

BD0015: (...) <Schmatzen> am Montag , den f"unften<Z> Juli , haben <!1  
ham> Sie da Zeit "uber Mittag ? (SUGGEST)

ADK016: <:<#> nein:> , (FEEDBACK\_NEGATIVE) das tut mir leid ,  
(FEEDBACK\_NEGATIVE) am Montag <:<#Mikrowind> bin ich  
verhindert:> , (REJECT) aber sonst w"urde mir eigentlich  
<!1 einglich> jeder andre <:<#Mikrowind> Tag passen:>  
. (SUGGEST)

**English Example:** *cdrom13,r374c*

AKK003: (...) <A> <"ahm> <A> <Schmatzen> how 'bout like <;comma> two  
o'clock <;quest> <A> <#Klicken> <Ger"ausch>:> <;seos>  
(SUGGEST)

JMP004: <:<#> I am <!2 I'm> sorry <;comma> (FEEDBACK\_NEGATIVE) did I  
say <:<#Rascheln> Wednesday <;comma> (REQUEST\_CLARIFY) I  
meant <#Klicken> Thursday <;period> <;seos> (CLARIFY)<"ah>  
what about then:> <;period> (REQUEST\_COMMENT) any time you  
have open then <;quest> <A> <:<#Rascheln> the:> afternoon

<;quest> <#Rascheln:> <;seos> (SUGGEST)

**Japanese Example:**

NAZ22: (If this is from twelve thirty, oh, okay, until two, that would be two hours, right?)

NAZ22: juu ni ji haN kara <P> <h> soo desu

\*NAZ22: [Kard juu] [Kard ni] [N ji] [N haN] [PP kara] [Adv soo] [V desu]  
>NAZ22: [10] [2] [Uhro'clock] [half] [from] [therefore] [be]

NAZ22: ne <P> ni ji deshi <P> tara <P> ichi jikaN <P>

\*NAZ22: [Part ne] [Kard ni] [N ji] [V deshi] [VF tara] [Kard ichi] [N jikan]  
>NAZ22: [tag] [2] [o'clock] [be] [(cond)] [1] [hour]

NAZ22: haN to yuu koto desu

\*NAZ22: [N haN] [Part to] [V yuu] [NOM koto] [V desu]  
>NAZ22: [half] [that] [say] [(nominalization)] [be]

NAZ22: yo ne . {seos}

\*NAZ22: [Part yo] [Part ne]  
>NAZ22: [(enhancement)] [tag]

AAG23: (No, even from 12 to 2 would suit very well.)

AAG23: ie <P> juu ni ji kara ni ji

\*AAG23: [Int ie] [Kard juu] [Kard ni] [N ji] [PP kara] [Kard ni] [N ji]  
>AAG23: [no] [10] [2] [o'clock] [from] [2] [o'clock]

AAG23: made demo kekkoo desu yo . {seos}

\*AAG23: [PP made] [Part demo] [Adj kekkoo] [V desu] [Part yo]  
>AAG23: [until] [even] [very well] [be] [(enhancement)]

## FEEDBACK\_POSITIVE

**Upper level dialogue act:** FEEDBACK

**Dialogue phase:** ALL PHASES

**Related propositional content:**

can contain anaphoric or explicit reference to the proposition the feedback is referring to, e.g. a date, a location, a selection of transportation or accommodation, an action

**Definition:**

With an utterance expressing FEEDBACK\_POSITIVE the speaker reacts to a contribution of the dialogue partner in a positive way. A FEEDBACK\_POSITIVE can signal understanding of a previous contribution, acceptance of its contents or illocution, or it can express an answer to a yes/no-question. In German the following list of lexems or phrases is often used to express FEEDBACK\_POSITIVE: 'ja', 'gut', 'okay', 'schön', 'hervorragend', 'alles klar', 'prima', 'wunderbar', 'einverstanden', 'genau'. Note that FEEDBACK\_POSITIVE and FEEDBACK\_NEGATIVE are not meant as a dichotomy, but rather as two poles of a graded spectrum. Both FEEDBACK\_POSITIVE and FEEDBACK\_NEGATIVE are not necessarily reactions to a contribution made by a dialogue partner, but can also relate to an utterance the current speaker herself made.

**German Example:** *cdrom7,g403a*

HAZ020: <#> dieser Vorschlag w"urde mir auch sehr gut in meinen <:<#>  
Zeitplan:> <#> <:<#> passen:> . (ACCEPT)

WAR021: <Schmatzen> <P> gut , (FEEDBACK\_POSITIVE)  
dann lassen Sie uns das so vereinbaren  
<#Rascheln> . (CLOSE)

**English Example:** *cdrom8,r506c*

JYK005: ... Berlin <;period> <#> (CLARIFY) and that is <!2 that's>  
spelled <;comma> <#> \$B \$E \$R <;comma> \$L \$I \$N <;comma> <#>  
<A> <#Klicken> <;crosstalk> <#> <;seos> (CLARIFY)

EJR006: <#>alright <;comma> <;seos> <#> (FEEDBACK\_POSITIVE) I have all  
that <;period> <;seos> <:<#> (FEEDBACK\_POSITIVE) I am <!2 I'm>  
looking forward to:> meeting <#> you on Thursday <;comma> the  
<#> eighteenth <;comma> at nine thirty in the morning at Mr

Slowig's office <;period> <#> <;seos> (CONFIRM) thanks  
again <;period> <#> <#Klicken> <;seos> (THANK)

## GIVE\_REASON

**Upper level dialogue act:** INFORM

**Dialogue phase:** OPENING, NEGOTIATION, CLOSING

**Related propositional content:**

full proposition in the reading of a reason, e.g. some time is occupied by some event, something has some property, some person is at some time at a distinct location etc.

**Definition:**

A dialogue segment is labeled with GIVE\_REASON if it contains the reason / justification / motivation for a statement, made in the immediately preceding and / or following context.

**Note:**

Lookahead is necessary since a reason can *precede* its referent.

**German Example:** *cdrom7,z005d*

FLR015: ... <A> <"ahm> ansonsten k"onnt' man <!1 ma'>  
nat"urlich <;verschliffen> auch wieder +/mit dem/+  
mit dem Jet fliegen , (SUGGEST)  
das <!1 's> geht nat"urlich schneller , weil <A> man  
wei"s ja nie , mit dem Stau auf der Autobahn .  
(GIVE\_REASON) ich mu"s halt  
<;verschliffen> abends wieder da sein . (GIVE\_REASON)

**German Example:** *cdrom7,z007d*

BET028: ja, wunderbar . (FEEDBACK\_POSITIVE)  
dann kommen wir <!2 komm' wa> dieses Mal <!2  
diese' Ma'> recht schnell klar .  
(FEEDBACK\_POSITIVE) <A> die beiden Tage  
passen bei mir wunderbar , Mittwoch , zw"olfter ,  
Donnerstag , dreizehnter . (ACCEPT)  
dann gehen wir <!1 wa> am Mittwoch recht fr"uh los ,  
(SUGGEST)  
da"s wir am Donnerstag rechtzeitig zur"uck sind .  
(GIVE\_REASON)

**English Example:** *cdrom8 ,r507c*

JJP006: ... <#> +/would/+ would/+ would be great <;period> <;seos> (ACCEPT) +/and/+ <!1 an> and <#> +/we can/+ <#> <A> you know <;comma> it would <;comma> we could/+ <!1 c> that <#> gives +/enough time/+ <!1 t> <#> enough time <#> to have lunch <;comma> <#> +/and/+ <!1 an> <A> and/+ <!1 an> and rap every thing up <;period> <;seos> <#> (GIVE\_REASON) and +/I will/+ <!2 I'll> <;comma> <A> I will <!2 I'll> be able <#> +/to/+ to/+ <"ah> <;comma> <A> to get going by one <;period> <;seos> (GIVE\_REASON) ...

## GREET

**Upper level dialogue act:** CONTROL\_DIALOGUE

**Dialogue phase:** HELLO

**Related propositional content:**

can contain information about the addressed person, e.g. his/her name, title, position

**Definition:**

GREET is used for all kinds of initial greetings.

**German Example:** *cdrom7,z005d*

FLR011: ja , hallo , Frau <:<#Mikrobe> Inglefinger:> . (GREET)

**English Example:** *cdrom13,r310c*

SVG000: <#Klicken> <#> <#> hi <;comma> (GREET)  
<:<#Rascheln> I would <!2 I'd> like to make an appointment  
with you <;comma> <A> on either <;comma> the week:> of the  
twenty ninth <;comma> <A> or <;comma> <:<#Rascheln> the week  
of the sixth <;comma> <A> <#Klicken:>> <#Mikrobe> <;seos>  
(INIT SUGGEST)

**Japanese Example:**

AAF02: (Oh, is this Professor Nouichi? Hello. This is Hiroishi.)

AAF02: /att/ <P> nouchi seNsee de irasshai masu  
\*AAF02: [Int att] [PN nouchi] [N seNsee] [V de] [V irasshai] [VF masu]  
>AAF02: [oh] [Nouchi] [Professor] [-] [be (polite)] [(polite)]

AAF02: ka . {seos} koNnichiwa <P> hiroishi desu . {seos}  
\*AAF02: [Part ka] [MWLex koNnichiwa] [PN hiroishi] [V desu]  
>AAF02: [(Question)] [hello] [Hiroishi] [be]

## INFORM

**Upper level dialogue act:** PROMOTE\_DIALOGUE

**Dialogue phase:** OPENING, NEGOTIATION, CLOSING

**Related propositional content:**

full proposition, e.g. some time is occupied by some event, something has some property, some person is at some time at a distinct location etc.

**Definition:**

The label INFORM is reserved for cases where none of the categories REQUEST, SUGGEST, COMMIT or FEEDBACK apply. If not enough information is available in the context to label the given dialogue segment as any of those it can be labeled as INFORM.

**German Example:** *cdrom7 ,m220d*

BCP001: ja , guten Tag<Z> , <"ahm> Frau G"urtner , (GREET) mein Name ist <!1 is'> J"ansch , \$J \$"A \$N \$S \$C \$H . (INTRODUCE)  
<:<#Mikrobe> <A>:ja , das f"unft"agige Arbeitstreffen . (DELIBERATE) <:<Schmatzen> <A>:ja , das ist <!1 is'> so 'n bi"schen schwierig bei mir , (FEEDBACK\_NEGATIVE) weil eigentlich sollte das ja m"oglichst bald stattfinden . (GIVE\_REASON) ich seh' aber die +/eigen=/+ einzige M"oglichkeit im November <A> , (SUGGEST) und zwar h<Z>"att' ich da ein Fenster von zw"olften bis siebzehnten , (SUGGEST) wobei der siebzehnte ja der Bu"s- und Betttag ist <!1 is'> . (CLARIFY) <A> meinerseits <"ah> w"ar' das jetzt <!2 des 'etz'> kein Problem , (INFORM) <h"as> nachdem sich der Sonntag bei mir so oder so nicht vermeiden lie"se . (INFORM) das <!1 des> ist <!1 is'> <Ger"ausch> eigentlich <!1 einglich> so die einzige M"oglichkeit . (INFORM) +/w=/+ was sagen Sie denn dazu ? (REQUEST\_COMMENT)

**German Example:** *cdrom7 ,m065n*

CAD038: <Lachen> <:<#Klicken> ja:> , da hatten wir +/g=/+ %wirklich <:<#> Gl"uck:> mit unseren Terminen<Z> , (FEEDBACK\_POSITIVE) <A> ja , falls sich nochwas ver\_ <P> \_"andert , <:<#Mikrobe> w"urd' ich Sie<Z>:anrufen<Z> . (INFORM) <A> <hm> <Schmatzen> ich selbst %werde in n"achster Zeit erreichbar sein<Z> und<Z> ich w"urde sagen , wir schlie"sen uns kurz , <:<#Klicken> ja:>

? (DEFER)

**English Example:** *cdrom8 ,r134c*

RJK005: <Schmatzen> <A> that works for me <;comma> <;seos> <"ahm> (ACCEPT) <Ger"ausch> I will <!2 I'll> <#Klicken> be in my office <;comma> (INFORM) <;seos> so you can just meet me there <;period> <#Klicken> <#Rascheln> <;seos> (SUGGEST)

NBS006: <:<#> <#Klicken> <A> okay <;period>:>(ACCEPT) <;seos> and I will <!2 I'll> bring all this stuff with me <;period> <#Klicken> <Lachen> <;seos> (INFORM)

## INIT

**Upper level dialogue act:** MANAGE\_TASK

**Dialogue phase:** OPENING, NEGOTIATION, CLOSING

**Related propositional content:**

contains a topic or action to be negotiated, possibly including a date or period indicating the time for the arrangement, a location or place indicating its location

**Definition:**

The dialogue act INIT is used to describe utterance where the topic of the interaction to follow is introduced. INIT can be circumscribed as *in the following we talk about x*.

**Note:**

This dialogue act often contains a realization as SUGGEST or request\_suggest. This underlying communicative function should be annotated in a multiple dialogue act.

**German Example:** *cdrom7,z007d*

BET001: gr"u"se Sie , Frau Britschow . (GREET)  
wir wollen ja <:<#> zusammen:> <!1 zusamm'> eine <:<#>  
Gesch"aftsreise:> planen , (INIT) und ich denk' , wir  
sollten mal die \*Termonierung festlegen . (INIT)

**German Example:** *cdrom7,z008d*

ANA028: <:<#> ja:> , gr"u"s Gott , Frau Diviak  
, (GREET) sch"on Sie zu sehen . (POLITENESS\_FORMULA) <A>  
k"onnen <!1 k"onn'> wir gleich besprechen , wann wir diese  
Dienstreise nach Mailand machen wollen . (INIT)

**English Example:** *cdrom8,r198c*

DTL000: <:<#Mikrobe> <A> <A> <A> hello:> (GREET) I would <!2 I'd>  
like to make an appointment for Dewitt Latimer <;quest> <A>  
<#Klicken> <:<#> <#Mikrobe:>> <;seos> (INIT)

## INTRODUCE

**Upper level dialogue act:** CONTROL\_DIALOGUE

**Dialogue phase:** OPENING

**Related propositional content:**

contains information about the speaker, e.g. his/her name, title, position or profession

**Definition:**

When dialogue partners have not met each other before the beginning of an interaction typically includes an introduction. They may introduce the name of a person, his/her profession or position and - depending on the scenario - other person-related information that may be relevant for the dialogue.

**German Example:** *cdrom7 ,m232d2*

ACX013: <:<#> ja:> guten Morgen , (GREET) mein Name ist <!1 is'>  
<:<#Mikrobe> Walberg:> wie Wal und Berg , \$W \$A \$L \$B \$E \$R  
<:<#> \$G:> . (INTRODUCE)

**English Example:** *cdrom8 ,r259c*

NAA000: <#Rascheln> <Schmatzen> <A> hi Ian (GREET) this is Nick  
(INTRODUCE)

## NOT\_CLASSIFIABLE

**Upper level dialogue act:** TOP

**Dialogue phase:** OPENING, NEGOTIATION, CLOSING

**Related propositional content:**

not specifiable

### Definition:

Dialogue segments are labeled NOT\_CLASSIFIABLE if they are either too fragmentary or too uncomprehensible to reliably characterize them by any other dialogue act.

The NOT\_CLASSIFIABLE cases also include utterance segments consisting solely of a *discourse particle* that might in fact fulfil some function in the exchange, even though it does not warrant assignment of a dialogue act. For such particles, a taxonomy of *discourse functions* has been developed, and the context evaluation module assigns these functions to such particles in the VIT, independent from the dialogue act (see [11]).

### German Example: cdrom7 ,m243d

BDM009: <:<Schmatzen> <A>:> das ist <!1 is'> auch <!1 au'> schlecht ,  
(REJECT) weil ich da am Samstag , den sechsundzwanzigsten  
einen <!1 'n> Termin hab' . (GIVE\_REASON) <A> also scheint  
<#> der Juni/- (NOT\_CLASSIFIABLE) also <!1 a'so>  
<:<#Mikrobe> ich:> kann Ihnen ja noch mal <!1 ma'> sagen ,  
(DELIBERATE) ...

### German Example: cdrom7 ,m232d

BDB023: ... <Schlucken> <R"auspern> wie sieht 's da bei Ihnen <!1  
Ihn'> aus +/am/+ <"ah> <A> +/am<Z>/+ , (NOT\_CLASSIFIABLE)  
<P> wo bin ich denn <leise , zu sich selbst gesprochen> , <A>  
am Montag , den zw"olften ? (DELIBERATE)

### English Example: cdrom8 ,r168c

BGL002: <#> <Schmatzen> <A> <"ah> Friday is pretty bad for me  
<;period> <;seos> (REJECT) +/I/+ <"ah> I have <!2 I've>  
got/+ <;seos> (NOT\_CLASSIFIABLE) I am <!2 I'm> busy from  
two to five (SUGGEST) ...

**English Example:** *cdrom8 ,r209c*

SKH001: <Schmatzen> <A> nope <;period> <A> I am <!2 I'm> on vacation  
then (EXPLAINED\_REJECT) <;period> <;seos> +/why  
do not <!2 don't> we/+ (NOT\_CLASSIFIABLE) <;seos> <"ah>  
<;comma> <Schmatzen> <A> let me see (DELIBERATE) ...

## OFFER

**Upper level dialogue act:** PROMOTE\_TASK

**Dialogue phase:** NEGOTIATION

**Related propositional content:**

contains anaphoric or explicit reference to a commitment the speaker is offering (the commitment may be implicitly expressed by mentioning a vehicle or accommodation)

**Definition:**

The speaker explicitly offers to perform one or more specified actions (e.g. booking a flight, making a reservation, looking for information).

**Note:**

This dialogue act bears similarity to SUGGEST but can not be subsumed under SUGGEST because of its relation to the COMMIT dialogue act. It therefore opens a category of its own.

**German Example:** *cdrom15 ,g001ac*

AAJ071: das werden wir dann sehen . (DELIBERATE) <"ahm> ja , soll ich mich um den Flug k"ummern ? (OFFER) da"s <"ahm> wir da zwei Reservierungen kriegen f"ur die Neun-Uhr-f"unf-Maschine ? (GIVE\_REASON)

AAK072: das w"ar' sehr nett , ja . (ACCEPT) dann mach' ich das Hotel . (COMMIT)

## POLITENESS\_FORMULA

**Upper level dialogue act:** CONTROL\_DIALOGUE

**Dialogue phase:** ALL PHASES

**Related propositional content:** none

### **Definition:**

POLITENESS\_FORMULAE are linguistic patterns which are tied to certain recurrent social situations. They hardly provide anything to the handling of the task, but they are relevant for a smooth interaction. Speakers use them in the dialogue in order to stabilize their relationship and to fulfil certain conventions.

### **German Example:** *cdrom7,z008d*

TAT027: ja , hallo , Frau Michaelis . (GREET) wie geht's Ihnen  
<!1 Ihn'> denn ? (POLITENESS\_FORMULA) <P> lange nicht <!1  
nich'> gesehen . (POLITENESS\_FORMULA)

ANA028: <:<#> ja:> ,gr"u"s Gott , Frau Diviak , (GREET)  
sch"on Sie zu sehen . (POLITENESS\_FORMULA) <A> k"onnen  
<!1 k"onn'> wir gleich besprechen , wann wir diese Dienstreise  
nach Mailand machen wollen . (INIT)

### **English Example:** *cdrom13,r429c*

SXL000: <#Klicken> <:<#> <Schmatzen> <A> hi Rob <;comma> (GREET)  
good to see you again <#Klicken> (POLITENESS\_FORMULA)

## REFER\_TO\_SETTING

**Upper level dialogue act:** DIGRESS

**Dialogue phase:** OPENING, NEGOTIATION, CLOSING

**Related propositional content:**

not specifiable

### Definition:

A dialogue segment is classified as REFER\_TO\_SETTING when it addresses the setting of the interaction, as e.g. the noise in the room, the output quality of a computer used during the interaction, etc.

#### German Example: cdrom1 ,n016k

MS4021: <P> <A> gut da kann ich nur viel Gl"uck w"unschen <A>  
(DEVIATE\_SCENARIO) und <Z> Du kannst wieder r"uberkommen .  
(REFER\_TO\_SETTING)

#### German Example: cdrom3 ,m023n

SID034: <Schmatzen> <A> <#> ja , genau das , <:<Lachen> soll ich das  
nochmal wiederholen , oder/-:> ? (DEVIATE\_SCENARIO)

JUB035: <#Klicken> <:<Lachen> ja , das w"ar' ja vielleicht f"ur die  
Bandaufnahme auch ganz toll:> , wenn das dann noch mal drauf  
w"are . (REFER\_TO\_SETTING)

#### German Example: cdrom2 ,g113a

JAK000: <A> n'Tag . (GREET) hier ist<Z> Herr M"uller-L"udenscheidt  
. (INTRODUCE) <P> h"oren Sie mich <#Klicken> ?  
(REFER\_TO\_SETTING)

REK001: <A> Tag , Herr M"uller-L"udenscheidt . (GREET) Doktor Kl"ubner  
. (INTRODUCE) h"ore Sie wunderbar . (REFER\_TO\_SETTING)

#### English Example: cdrom8 ,r261c

ND0004: (...) <"ahm> <;comma> <A> <Schmatzen> <A> on the twenty  
seventh <;comma> <Ger"ausch> <"ahm> I can meet you between  
nine and ten <;comma> <#Klicken> <#Klicken> <#> <#> and any  
time <;comma> <Schmatzen> after like ten thirty (SUGGEST)

<;period> <;seos> <#> <#> +/wh=/+ <Ger"ausch> <#> what happ=/+  
<;seos> <#> <#> <;crosstalk> what happened there  
(REFER\_TO\_SETTING) <;period> <;seos> <;crosstalk>  
<#Klicken> <#Klicken> <Schmatzen> <A> <#Rascheln> <:<#>  
<#Klicken> <#Klicken> <#> <#Mikrobe> the system has stopped  
(REFER\_TO\_SETTING)

## REJECT

**Upper level dialogue act:** FEEDBACK

**Dialogue phase:** OPENING, NEGOTIATION

**Related propositional content:**

can contain anaphoric or explicit reference to the rejected proposition, e.g. a date or duration, a location, a selection of transportation or accommodation, an action (especially a commitment)

**Definition:**

REJECT concerns the rejection of a proposal that has been introduced in a preceding utterance. The proposal can be referred to anaphorically, and it can also be explicitly stated.

**Note:**

a REJECT can also be a partial reject or one that defines a larger period of time to be excluded (like in EXCLUDE)

**German Example:** *cdrom7 ,m228d*

ACT019: <A> <"ahm> <:<#Mikrowind> w"urd':> es da bei Ihnen <!1 I'>  
am <:<#Mikrowind> Vormittag:> gehen <#Mikrowind> ? (SUGGEST)  
<#> so<Z> <#> <:<#Mikrowind> gleich:> neun Uhr , zehn Uhr rum  
<#Mikrowind> ? (SUGGEST)

BCX020: <A> nein , da sieht es <:<#Mikrowind> leider:> sehr  
<:<#Mikrowind> schlecht aus:> , (REJECT)

**German Example:** *cdrom7 ,m230d*

BCZ023: <A> gr"u"s Gott , (GREET) mein Name ist <!1 is'> <:<#>  
Flex:> , (INTRODUCE) und das buchstabiert sich \$F \$L \$E \$X  
, (INTRODUCE) <A> und wir wollten noch einen <!1 ein'>  
Termin ausmachen zur Reisevorbereitung <A> . (INIT)  
<:<#Mikrobe> <A:> <"ahm> ich w"urd' da direkt mal den<Z> <P>  
<"ahm> zehnten August , <:<#> Dienstag:> , %den zehnten <:<#>  
August vorschlagen:> . (SUGGEST) pa"st Ihnen <!1 Ihn'> das  
<!1 des> ? (REQUEST\_COMMENT))

ACV024: <:<#Mikrobe> gr"u"s Gott:> , (GREET) mein Name ist <!1  
is'> von Sudniz , <A> +/\$F \$A/+ <"ah> <:<#> \$F:> <;statt \$V>

\$0 \$N <#> <Schmatzen> <A> \$S \$U \$D \$N \$I \$Z , (INTRODUCE)  
 <#Mikrobe> <A> und der zehnte August <:<#Mikrowind> pa"st mir  
 leider:> gar nicht . (REJECT) <"ahm> <Ger"ausch>  
 <Schmatzen> vielleicht +/am<Z> September/+ f"unfzehnter  
 September ? (SUGGEST))

**English Example:** *cdrom8 ,r197c*

DTL002: <#Klicken> <Schmatzen> <A> the <#Mikrobe> twenty first or the  
 <#Mikrobe> twenty second <;quest> are looking good <;period>  
 <Ger"ausch> <A> <#Klicken> <;seos> (SUGGEST)

SRH003: <A> <"ah> that will be impossible for me <;seos> (REJECT)

**English Example:** *cdrom8 ,r218c*

AB000: (...) <;period> <A> my schedule seems to be pretty tight  
 <;period> <A> this month (DELIBERATE) <;period> <"ahm>  
 <;comma> <Schmatzen> <A> <;seos> how is <!2 how's> the twenty  
 first for you (SUGGEST)

SRH001: <A> twenty first for me is bad (REJECT)

**Japanese Example:**

NAB09: (Oh, okay. Er, the 25th wouldn't suit me very well either.  
 Er, how about the 27th in the afternoon?)

NAB09: soo desu ne <P> <h> /ee/ sukoshi <P> ni  
 \*NAB09: [Adv soo] [V desu] [Part ne] [Int ee] [Adv sukoshi] [Kard ni]  
 >NAB09: [so] [be] [tag] [aeh] [a bit] [2]

NAB09: juu go nichi no hoo mo <P> /ee/  
 \*NAB09: [Kard juu] [Kard go] [N nichi] [Part no] [N hoo] [Part mo] [Int ee]  
 >NAB09: [10] [5] [day] [(Genitiv)] [side] [also] [aeh]

NAB09: tsugoo ga warui N desu ga <P> {seos} <h>  
 \*NAB09: [N tsugoo] [Part ga] [Adj warui] [NOM N] [V desu] [Part ga]  
 >NAB09: [circumstances] [(subj)] [bad] [(Subst)] [be] [(end of sentence)]

NAB09: /ee/ <P> ni juu nanachino/- ni juu nana nichi no  
 \*NAB09: [Int ee] [Kard ni] [Kard juu] [Kard nana] [N nichi] [Part no]  
 >NAB09: [aeh] [2] [10] [7] [day] [(Genitiv)]

NAB09: gogo wa <P> doo deshoo ka . {seos}  
 \*NAB09: [N gogo] [Part wa] [Adv doo] [V deshoo] [Part ka]  
 >NAB09: [afternoon] [(theme)] [how] [be (cond)] [(question)]

## **REQUEST**

**Upper level dialogue act:** PROMOTE\_TASK

**Dialogue phase:** ALL PHASES

**Related propositional content:**

can only be specified for the sub-concepts

### **Definition:**

REQUEST is defined as being a not further specifiable request. If you realize that the speaker requests some action from the hearer, but cannot decide whether it is a REQUEST\_CLARIFY, a REQUEST\_COMMENT, a REQUEST\_SUGGEST or some other type of request, you use the dialogue act REQUEST.

## REQUEST\_CLARIFY

**Upper level dialogue act:** REQUEST

**Dialogue phase:** ALL PHASES

**Related propositional content:**

contains anaphoric or explicit reference to the proposition for which clarification is needed, e.g. a date or duration, a location, a selection of transportation or accommodation, an action that was proposed

**Definition:**

With an utterance expressing a REQUEST\_CLARIFY the speaker asks the dialogue partner to present more information about something that has already been either explicitly or implicitly introduced into the discourse, e.g. by asking him to further specify a referent.

**German Example:** *cdrom7,m246d*

ADL007: ja , gr"u"s Gott , Herr Quell , (GREET) mein Name ist <A>  
<:<#Mikrowind> Walberg:> , \$W <Schmatzen> \$A \$L \$B \$E \$R  
<#Mikrobe> \$G . (INTRODUCE) <:<#Mikrobe> <A:> <"ahm> <A>  
<P> <A> jetzt <!1 'etz'> hab' ich nat"urlich <:<#Mikrobe>  
nicht:> <:<Lachen> aufgepa"st:> , <A> an welchen Tagen Sie  
Zeit haben . (INFORM) sagen <:<#Mikrobe> Sie:> mir das  
<!1 des> <:<#Mikrobe> doch:> bitte noch mal  
. (REQUEST\_CLARIFY)

**German Example:** *cdrom7,z007d*

BET003: Montag , Dienstag , sagen Sie , neunzehnter , zwanzigster  
Juni ? (REQUEST\_CLARIFY)

**Japanese Example:**

AAG19: (Oh yes? If this is so, there seem to be difficulties in the  
week of the third. If it was in the week of the tenth... Oh,  
sorry. Because in any case there is no time soon, we might  
just as well meet on Thursday from 12 to 2 -- I could do  
without lunch.)

AAG19: soo desu ka . {seos} <h> deshi tara <P> mikka  
\*AAG19: [Adv soo] [V desu] [Part ka] [V deshi] [VF tara] [Date mikka]  
>AAG19: [so] [be] [(Question)] [be] [(cond)] [3rd]

AAG19: no shuu wa muzukashii kato  
 \*AAG19: [Part no] [N shuu] [Part wa] [Adj muzukashii] [Part kato]  
 >AAG19: [(Genitiv)] [week] [(theme)] [difficukt] [(question) that]

AAG19: omoware masu ga {seos} <P> <h> tooka no shuu  
 \*AAG19: [V omoware] [VF masu] [Part ga] [Date tooka] [Part no] [N shuu]  
 >AAG19: [seem] [(polite)] [(end of sentence)] [10th] [(Genitiv)] [week]

AAG19: desu to <P> /att/ gomeNnasai /ee/ desu  
 \*AAG19: [V desu] [Konj to] [Int att] [V gomeNnasai] [Int ee] [V desu]  
 >AAG19: [be] [if] [oh] [sorry] [aeh] [be]

AAG19: nee {seos} <P> nakanaka ai te ru  
 \*AAG19: [Part nee] [Adv nakanaka] [V ai] [VF te] [V ru]  
 >AAG19: [tag] [not easy] [be freen] [te-form] [(present tense)]

AAG19: jikan ga ari mase N node <P> /ee/ <P>  
 \*AAG19: [N jikan] [Part ga] [V ari] [VF mase] [VF N] [Konj node] [Int ee]  
 >AAG19: [time] [(subj)] [be] [(polite)] [not] [because] [aeh]

AAG19: mokuyoobi no <P> juu ni ji kara <P>  
 \*AAG19: [N mokuyoobi] [Part no] [Kard juu] [Kard ni] [N ji] [PP kara]  
 >AAG19: [Thursday] [(Genitiv)] [10] [2] [o'clock] [from]

AAG19: ni ji made <P> chuushoku o heNjoo shi  
 \*AAG19: [Kard ni] [N ji] [PP made] [N chuushoku] [Part o] [N heNjoo] [V shi]  
 >AAG19: [2] [o'clock] [until] [lunch] [(Obj)] [doing without] [make]

AAG19: te o ai suru koto wa  
 \*AAG19: [VF te] [Hon o] [N ai] [V suru] [NOM koto] [Part wa]  
 >AAG19: [te-form] [(polite)] [meeting] [make] [(nominalization)] [(theme)]

AAG19: deki masu ga . {seos}  
 \*AAG19: [V deki] [VF masu] [Part ga]  
 >AAG19: [be possible] [(polite)] [(end of sentence)]

NAZ20: (Is this September 7?)

NAZ20: ku gatsu no nanoka desu ka . {seos}  
 \*NAZ20: [Kard ku] [N gatsu] [Part no] [Date nanoka] [V desu] [Part ka]  
 >NAZ20: [9] [month] [(Genitiv)] [7th] [be] [(Question)]

## REQUEST\_COMMENT

**Upper level dialogue act:** REQUEST

**Dialogue phase:** TOPIC\_OPENING, NEGOTIATION, TOPIC\_CLOSING

**Related propositional content:** none

### Definition:

With an utterance expressing a REQUEST\_COMMENT the speaker explicitly asks his dialogue partner to comment on a proposal. It is often used to yield the turn; in that case it prompts the dialogue partner to respond. A REQUEST\_COMMENT can easily be distinguished from a SUGGEST, because a REQUEST\_COMMENT does not contain explicit information about a concrete topic. Instead, the topic can be referred to anaphorically.

### German Example: *cdrom7,m246d*

ADL024: und Donnerstag , den dreiundzwanzigsten h"att' ich noch gut  
<:<#Mikrowind> Zeit:> den ganzen Tag . (SUGGEST)  
wie sieht 's da bei Ihnen aus ? (REQUEST\_COMMENT)

### German Example: *cdrom7,m245d*

BD0029: da k"onnte <:<#> ich:> erst ab dreizehn oder ab vierzehn Uhr ,  
(SUGGEST) <P> wenn das <!1 des> nichts <:<#> ausmacht:> ?  
(REQUEST\_COMMENT)

### English Example: *cdrom13,r005k*

PN1004: Thursday <;comma> evening <;period> <A> (SUGGEST) would <:<#>  
that be:> fine <;quest> <#Klicken> <;seos> (REQUEST\_COMMENT)

## REQUEST\_COMMIT

**Upper level dialogue act:** REQUEST

**Dialogue phase:** NEGOTIATION

**Related propositional content:**

contains anaphoric or explicit reference to the requested commitment (the commitment can be expressed implicitly, e.g. by a vehicle or accommodation)

**Definition:**

The speaker asks the dialogue partner to make a commitment.

**German Example:** *cdrom15 ,g041ac*

ACN032: <Ger"ausch> +/@7den <:<#Klopfen> @7r=:>/+ <#Klopfen> <A> den R"uckflug , <P> <Schmatzen> machen Sie das auch ?  
(REQUEST\_COMMIT)

**German Example:** *cdrom15 ,g013ac*

ABE039: <:<#Klopfen> w<Z>"urden:> Sie mir <!1 ma> da vielleicht <:<#> gleich:> ein <!1 a> Ticket mitbuchen ? <Ger"ausch> <A> <#Rascheln> (REQUEST\_COMMIT)

## REQUEST\_SUGGEST

**Upper level dialogue act:** REQUEST

**Dialogue phase:** TOPIC\_OPENING, NEGOTIATION

**Related propositional content:**

can contain the topic, a suggest is requested for, e.g. scheduling, location, transportation, accommodation, entertainment

**Definition:**

With an utterance expressing a REQUEST\_SUGGEST the speaker asks the dialogue partner to make a proposal.

**German Example:** *cdrom7,g422a*

GEP005: <A> ja , (ACCEPT) <"ah> es geht bei mir. (ACCEPT) aber welcher Tag ? (REQUEST\_SUGGEST)

**German Example:** *cdrom7,m229d*

ULJ001: ja , guten Tag , Frau Meesters , (GREET) dann<Z> <"ahm> <Schmatzen> <A> wollen wir mal schauen , was wir da<Z> <A> vereinbaren k"onnen . (INIT) haben Sie denn da<Z> eine bestimmte<Z> Vorstellung oder Vorgabe<Z> , was Sie<Z> <"ah> , <A> also , sagen w"urden +/wa=/+ <P> wann man sich treffen soll ? (REQUEST\_SUGGEST)

**German Example:** *cdrom12,j462a*

CLK000: ... wir haben mal wieder einen Besuch in einer unsrer Filialen zu planen , in der \$A \$G \$T \$R in Bonn . (INIT) f"unf Tage soll das Ganze dauern . (INIT) k"onnen Sie mir da einen Vorschlag im April , Mai , Juni machen ? (REQUEST\_SUGGEST)

*time constraints can be included which makes this look like a suggest*

**English Example:** *cdrom8,r126c*

SRH005: okay <;comma> (FEEDBACK\_POSITIVE) the twenty seventh +/sound f=/+ <;comma> sounds fine <;period> (ACCEPT\_DATE) <;seos> <"ah> pick a time <;comma> <A> <#Klicken> <;seos> (REQUEST\_SUGGEST)

**English Example:** *cdrom8 ,r126c*

GBT006: <Schmatzen> how 'bout one \$P \$M of the twenty seventh  
<;period> (SUGGEST) <;seos> where do you think we should  
meet <;period> <#Klicken> <;seos> @REQUEST\_SUGGEST)

## SUGGEST

**Upper level dialogue act:** PROMOTE\_TASK

**Dialogue phase:** NEGOTIATION

**Related propositional content:**

contains the suggested proposition, e.g. a date or duration, a location, a selection of transportation or accommodation, an action

**Definition:**

With an utterance expressing a SUGGEST the speaker proposes an explicit instance or aspect of the negotiated topic (not necessarily only one instance or aspect, could also be a set of instances). A further point of the definition is that the proposed instance must be either a new referent or a further specification of an already introduced one.

**German Example:** *cdromx ,moko*

m067arr1\_035\_LAU\_000000: <\*tGER> ja , das w"are doch gut , (ACCEPT)  
<#Klopfen> dann k"ummern Sie sich um den Flug  
und dann kann ich mich um die Hotelbuchung  
noch% k"ummern . (SUGGEST)

**German Example:** *cdrom14 ,j521a*

CLS003: <Schmatzen> <A> ja , ich schau' hier auch grade . <Schmatzen>  
(DELIBERATE) <A> <"ahm> es w"urde +/Ende/+ Ende Januar <P>  
vom achtundzwanzigsten<Z> bis zum zweiten Februar bei mir  
gehen <#Klicken> . (SUGGEST)

**German Example:** *cdrom14 ,j511a*

ULP009: <;T>ja , ich "uberlege <:<#> soeben:> . (DELIBERATE) <A>  
vielleicht <"ah> ab dem zehnten<Z> Februar w"are es <:<#>  
m"oglich:> bei mir <#Klicken> . (SUGGEST)

JMP010: <A> <"ahm> tut mir <:<#Klopfen> leid:> ,(REJECT) liegen  
zwei<Z> <A> <:<#> Gesch"aftsreisen:> bei mir vor ,  
(GIVE\_REASON) <:<#> einmal nach Bremen und Minden:>  
. (INFORM) <A> ich k"onnte <:<#> ab:> sechzehntem Februar .  
(SUGGEST)

ULP011: <A> das ist bei +/wi=/+ <h"as> mir nun wieder schlecht. (REJECT) <"ahm> da geht es fr"uhstens am achtzehnten Februar , <#> dem <:<#> Sonntag:> <#> . (SUGGEST)

*here a set of  
possible options  
is suggested* **German Example:** cdrom7,m068n

JUJ018: ja , das kommt mir auch sehr gelegen . (ACCEPT)  
lieber an dem Samstag oder lieber an dem Sonntag ?  
(SUGGEST)

MCE019: <"ah> mir w"ar' der Samstag lieber . (ACCEPT)

**English Example:** cdrom13,r005k

CK2001: <A> okay <;period> <;seos> what date would be good <;period>  
<A> <;seos> (REQUEST\_SUGGEST)

PN1002: <#Klicken> <A> almost any day <;comma> as long <;comma> as it  
<#> is not the weekend <;period> or Wednesday <;period>  
<#Klicken> <;seos> (SUGGEST)

## THANK

**Upper level dialogue act:** CONTROL\_DIALOGUE

**Dialogue phase:** ALL PHASES

**Related propositional content:** none

### Definition:

With an utterance expressing a THANK the speaker expresses his gratitude to the dialogue partner(s).

#### German Example: *cdrom7 ,m244d*

BDN024: <#> alles klar , (FEEDBACK\_POSITIVE) wir sehen uns dann am Montag um elf . (CONFIRM)

ADJ025: okay , (FEEDBACK\_POSITIVE) danke sch"on , (THANK)  
Wiedersehen <!1 Wiedersehm> . <A> (BYE)

#### English Example: *cdrom8 ,r279c*

TJD004: <:<#> <#Mikrobe> <Schmatzen> <A>okay <;period> <;seos>  
(ACCEPT) that sounds fine with me <;comma> <;seos>  
(FEEDBACK\_POSITIVE) thank you very much <;period> <#Klicken:>  
<;seos> (THANK)

#### Japanese Example:

AAQ02: (Hello, this is Kisaka of Osaka University. Thanks a lot for a few days ago.)

AAQ02: moshimoshi {seos} <P> oosaka daigaku no kisaka  
\*AAQ02: [Int moshimoshi] [PN oosaka] [N daigaku] [Part no] [PN kisaka]  
>AAQ02: [hello] [Osaka] [Uni] [(Genitiv)] [Kisaka]

AAQ02: desu ga . {seos} seNjitsu wa doomo  
\*AAQ02: [V desu] [Part ga] [N seNjitsu] [Part wa] [Adv doomo]  
>AAQ02: [be] [(end of sentence)] [a few days ago] [(theme)] [really]

AAQ02: arigatoo gozai mashi ta . {seos}  
\*AAQ02: [Adv arigatoo] [V gozai] [VF mashi] [VF ta]  
>AAQ02: [thankful] [be (polite)] [(polite)] [(Past)]

# Chapter 5

## Further Investigations

### 5.1 Reliability of Coding

A coding scheme for dialogue acts has to enable reliable coding: this means that there has to be a maximal agreement (i) between two coders coding the same dialogues, and (ii) between the coding done by the same coder on different point of time, given the same dialogues.

As measure for the determination of coding reliability two methods are used predominantly: one is the setup pf confusion matrices that show which dialogue acts have been confused most frequently. This method clearly indicates, which dialogue act definitions are not sufficiently specified and which categories possibly have to be removed and/or merged. A second reliability measure is the determination of the so-called *kappa* value. The kappa koefficient is computed as

$$\kappa = \frac{P(A) - P(E)}{1 - P(E)}$$

where  $P(A)$  represents the probability that the annotators agree, while  $P(E)$  stands for the probability that the coders agree by chance. The per chance agreement is determined as

$$P(E) = \sum_{i=1}^n p_i^2$$

A good coding scheme aims at a kappa value higher than 0.8, where a value of  $0.67 < \kappa < 0.8$  still allows tentative conclusions to be drawn.

The reliability of coding scheme like the one proposed in this paper his to be continuously evaluated using the measures described above. If necessary, improvements have to be made to the scheme which is again evaluated periodically.

## 5.2 Dialogue Acts Specific to Japanese

The dialogue acts observed in the Japanese corpus are not dramatically different from those found in German or English. But there are some expressions characteristic to Japanese.

- A phrase for excuse is often uttered when the speaker turns down the other's suggestion, e.g., '*suimaseN*' (Entschuldigung) at [006]:NAY07 (§A.3), '*mooshi-wake gozai mase N*' (Entschuldigung) at [025]:ABZ12, and '*mooshiwake nai*' at [034]:ACC08. They are at the moment classified as POLITENESS\_FORMULA.
- A phrase for cooperation is quite often uttered when the speaker confirms their meeting, e.g., '*yoroshiku o negai shi masu*'. The expression is often translated to '*bye*' or '*Auf Wiederhoeren*', but the literal meaning is to ask for one's good will.
- A speaker can turn down the other's suggestion by explaining the reason why it does not suit him, without explicitly saying '*no*'. The examples can be found at §A.3 and §A.3.

The German translation and annotation of the Japanese material given in this paper are attributed to Gerd Fliedner at DFKI.

# **Appendix A**

## **Some Fully Annotated Dialogues**

## A.1 German Dialogues

### A.1.1 Example 1

ACL000: <A> guten <:<#Mikrowind> Tag:> , GREET  
mein Name ist G"urtner , \$G \$"U <:<#> \$R:> \$T \$N \$E \$R . INTRODUCE  
<A> ich rufe an , <#> um mit Ihnen <!1 Ihn'> einen <!1 ein'>  
Termin f"ur ein f"unft"agiges <:<#> Arbeitstreffen:> in  
W"urzburg zu <:<Ger"ausch> vereinbaren:> <!1 verinibaren> , INIT  
und wollte fragen , <:<#Klicken> wann:> Sie daf"ur Zeit  
h"atten . REQUEST\_SUGGEST

BCP001: ja , guten Tag<Z> , <"ahm> Frau G"urtner , GREET  
mein Name ist <!1 is'> J"ansch , \$J \$"A \$N \$S \$C \$H . INTRODUCE  
<:<#Mikrobe> <A>: ja , das f"unft"agige Arbeitstreffen . INFORM  
<:<Schmatzen> <A>: ja , das ist <!1 is'> so 'n bi"schen  
schwierig bei mir , FEEDBACK\_NEGATIVE  
weil eigentlich sollte das ja m"oglichst  
bald stattfinden . GIVE\_REASON  
ich seh' aber die +/eigen=/+ einzige M"oglichkeit im November  
<A> , SUGGEST  
und zwar h<Z>"att' ich da ein Fenster von zw"olften bis  
siebzehnten , SUGGEST  
wobei der siebzehnte ja der Bu"s- und Betttag ist <!1 is'> . CLARIFY  
<A> meinerseits <"ah> w"ar' das jetzt <!2 des 'etz'> kein  
Problem , <h"as> nachdem sich der Sonntag bei mir so oder  
so nicht vermeiden lie"se . INFORM  
das <!1 des> ist <!1 is'> <Ger"ausch> eigentlich <!1 einglich>  
so die einzige M"oglichkeit . INFORM  
+/w=/+ was sagen Sie denn dazu ? REQUEST\_COMMENT

ACL002: <#> das <!1 des> <:<#> ist:> <!1 is'> ziemlich schlecht ,  
REJECT  
<:<#> genau:> +/diese=/+ diesen Termin bin ich nicht da .  
GIVE\_REASON  
<A> <"ahm> <#Mikrobe> <Schmatzen> bei mir ginge es<Z> , <A> ja ,

<:<#Mikrobe> ansonsten:> Oktober , <P> <A> von <:<#Mikrowind>  
achten:> bis dreizehnten , SUGGEST  
oder <#Mikrobe> <#>  
zweiundzwanzigsten <#> bis Ende <:<#> Oktober:> , <A> SUGGEST  
oder aber  
<Ger"ausch> <A> einschlie"sllich des Totensonntags , im November  
vom <:<#> achtzehnten bis einundzwanzigsten:> <A> , <:<#> <A>:>  
oder <!1 o'> dann wieder <:<#Mikrobe> Ende:> November , Anfang  
<:<#Mikrobe> Dezember:> . SUGGEST

BCP003: <hm> ja , also <!1 a'so> <#Mikrobe> +/ich bin/+ <Ger"ausch>  
<"ah> ich bin zuerst in Dresden im Oktober und dann in Leipzig  
, GIVE\_REASON  
also da bin ich auf Gesch"aftsreise , GIVE\_REASON  
da seh' ich <Ger"ausch> wenig M"oglichkeit <Ger"ausch> .  
REJECT  
<A> Ende Oktober hab' ich noch zwei wichtige Termine .  
SUGGEST  
ja , <"ahm> was sagten Sie jetzt im November ?  
REQUEST\_CLARIFY  
<A> <"ahm> <Schlucken> von achtzehn bis einundzwanzigsten  
<!1 einunzwansegnstn> sind 's jetzt <!1  
'etz'> meiner Z"ahlung nach nur vier Tage . INFORM  
<"ah> <A> k"onnen <!1 k"onn'> Sie <!1 Se> das <!1 des> noch  
mal genauer erkl"aren , was Sie <!1 Se> da gemeint haben  
<!1 ham> ? REQUEST\_CLARIFY

ACL004: <:<#Mikrobe> %ja:> , FEEDBACK\_POSITIVE  
das <!1 des> war ein Fehler meinerseits .  
INFORM  
ich meinte bis zum <:<#Mikrobe> zweiundzwanzigsten:>  
einschlie"slisch . CLARIFY  
<#> <A> <P> also von <:<#Mikrobe> achtzehnten:> November  
<:<#Mikrobe> bis<Z:> <:<#Klicken> zweiundzwanzigsten:>  
oder <#> <Schmatzen> ab siebenundzwanzigsten <!1  
siemunzwanzichsten> November <A> bis<Z> <:<#Mikrowind>  
eigentlich:> <!1 ei'ntlich> <Schmatzen> <Schlucken> neunten  
Dezember ist <!1 is'> bei mir auch frei ,  
obwohl da nat"urlich<Z> Feiertage dabei <:<#> sind:> , die

vielleicht nicht <:<#> unbedingt:> eingeschlossen sein sollten.  
SUGGEST

BCP005: <#> man <!1 ma'> k"onnt's nat"urlich von neunundzwanzigsten  
November <Ger"ausch> bis einschlie"slich dritten Dezember  
machen , SUGGEST  
das w"ar' dann genau die Werktagswoche . INFORM  
gut , FEEDBACK\_POSITIVE  
also <:<#Mikrowind> von:> meiner Seite her <h"as> k"onnen  
<!1 k"onn'> wir ruhig den Sonntag auch %mal einschieben , wenn 's  
ganz dringend ist <!1 is'> . SUGGEST  
ich hab' am<Z> +/a=/+ achtzehnten November noch bis siebzehn  
Uhr einen <!1 ein'>  
Termin , k"onnte vorher nicht weg und am Freitag einen <!1 'n>  
Termin in Augsburg . SUGGEST  
wenn 's ganz dringend werden sollte , <A>  
<"ah> k"onnt' ich da nat"urlich <"ah> dann auch <h"as> hin und  
<!1 un'> her fahren , SUGGEST  
aber falls es<Z> <"ah> gen"ugt , dann  
w"ar' eigentlich <!1 einglich> ab <h"as> neunundzwanzigsten <!1  
neun'n'zwanzigst'n> November <:<#> <A>:> bis dritten Dezember  
<A> <"ahm> <Ger"ausch> sehr angenehm f"ur mich . SUGGEST

ACL006: das <!1 des> <:<#Mikrobe> ist <!1 is'> ja:> dann ideal .  
ACCEPT  
dann w"urd' ich sagen , <Ger"ausch> machen wir 's so . <P>  
CLOSE  
<#Mikrobe> dann bedank' ich mich <:<#Mikrobe> THANK  
und freu' mich auf:> das <!1 des> Sehen beim Treffen .  
POLITENESS\_FORMULA  
<:<#Mikrobe> Wiedersehen:> . BYE

BCP007: ja , danke sch"on . THANK  
auf <!1 'f> Wiederschauen . BYE

### A.1.2 Example 2

BCP008: <A> gr"u"s Gott , GREET  
hier ist <!1 is'> Herr Walberg , \$W \$A \$L \$B \$E \$R \$G .

INTRODUCE  
 <A> ich ruf' an wegen dem Gesch'aftsessen , das wir  
 <"ah> im November noch <"ah> machen wollten .  
 INIT  
 wollt' mich mal erkundigen , <A> wann Sie denn da Zeit h'atten  
 .  
 REQUEST\_SUGGEST  
 irgendein Sonntag im November .  
 SUGGEST

ACL009: guten Tag , Herr Walberg ,  
 GREET  
 <:<#Mikrowind> hier:> ist <!1 is'> Quell , \$Q <;\$U fehlt>  
 <#> \$E <:<#Mikrobe> doppel \$L .  
 INTRODUCE  
 <Schmatzen> <A> <"ahm:> <Schmatzen> ja<Z> , <:<Schmatzen>  
 <A:> bei mir w"ar's g"unstig <A> , der siebte , Sonntag , der  
 siebte , <Schmatzen>  
 SUGGEST  
 o<Z>der <A> , <#> <:<Schmatzen> <A:>:  
 <Ger"ausch> <"ahm> ja , auch der einundzwanzigste <P> w"are  
 m"oglich , <:<Schmatzen> <A:> und achtundzwanzigste ebenso .  
 SUGGEST

BCP010: ja . <A> nun , also der Totensonntag , <"ah> <A> <#> <Ger"ausch>  
 w"urd' ich nicht so gerne machen ,  
 REJECT  
 <:<#> auch:> der erste Advent w"ar' eigentlich <!1 eingich>  
 <;verschliffen> nicht so wahnsinnig angenehm f"ur mich .  
 REJECT  
 <A> <"ahm> wenn 's gar nicht <!1 nich'> <:<#Mikrobe> anders  
 geht:> , k"onnen wir <!2 k"omma> da vielleicht noch mal  
 dr"uber reden .  
 INFORM  
 aber wie sieht 's denn bei Ihnen am vierzehnten November aus ?  
 SUGGEST  
 das w"ar' mir %so wesentlich sympathischer .  
 GIVE\_REASON

ACL011: <:<#Mikrobe> da:> mu"s ich Sie leider entt"auschen .  
 REJECT  
 <:<#Mikrowind> ich:> bin <:<#Mikrobe> von:> zw"olften bis  
 <:<#Mikrobe> siebzehnten:> November nicht in der <:<#Mikrobe>  
 Stadt:> .  
 GIVE\_REASON  
 <A> <"ahm> Sie haben <!1 ham> sich jetzt nicht <!1  
 nich'> ge"au"sert .  
 REQUEST  
 was ist mit dem siebten <#> <A> ?  
 REQUEST\_COMMENT

BCP012: <:<Schmatzen> ja:> , da bin ich leider in Leipzig unterwegs . EXPLAINED\_REJECT  
<"ah> also da seh' ich keine M"oglichkeit . REJECT  
dann werden wir <!1 wa> wohl irgendwie in den sauren Apfel  
bei"sen m"ussen und es doch in der zweiten Novemberh"alfte  
machen . SUGGEST  
welchen Termin w"urden Sie denn da vorziehen ? REQUEST\_SUGGEST

ACL013: <:<#Mikrobe> da <h"as>:> orientier' ich mich <:<#Mikrowind>  
v"ollig:> an <#Mikrobe> Ihnen . FEEDBACK  
<:<#Mikrobe> also:> <Schmatzen> <:<#Mikrobe>  
einundzwanzigster:> oder achtundzwanzigster . CLARIFY

BCP014: ja , gut . FEEDBACK\_POSITIV  
also dann w"urd' ich sagen , den ersten Advent <:<#Mikrobe>  
v<Z>erbringen:> wir vielleicht doch lieber mit der  
Familie , <"ahm> <A> zumindest was mich betrifft ,  
REJECT  
und dann machen wir das am Totensonntag , ACCEPT  
und <"ahm> <A> ja , <P> ja , also das <!1 des> w"ar'  
dann angenehm . ACCEPT  
dann k"onnen <!1 k"onn'> wir uns ja vielleicht beizeiten noch  
<"ah> "uber Genaueres unterhalten . DEFER  
<A> <"ahm> <Schmatzen> ja , dann w"urd' Ich sagen , halten wir  
den einundzwanzigsten elften da einfach mal fest .  
CONFIRM

ACL015: <:<#Mikrobe> ist:> <!1 is'> gut . FEEDBACK\_POSITIV  
dann bedank' ich mich , THANK  
und <!1 un'> noch einen <!1 'n> sch"onen Tag .  
POLITENESS\_FORMUL  
Wiedersehen . <#> BYE

BCP016: <Schmatzen> ja , danke sch"on ,  
ebenfalls . THANK  
Wiederschauen . BYE

### A.1.3 Example 3

ACL017: <A> guten <:<#Mikrowind> Tag , GREET  
hier:> ist K"opp , \$K \$"0 doppel \$P . <:<Schmatzen> <A:>  
INTRODUCE  
<:<#Mikrowind> ich:> rufe an , da wir <:<#Mikrobe> uns ja:>  
in dieser Woche noch treffen wollten ,  
um<Z> eine kurze <:<#Mikrowind> Besprechung:> <Schlucken>  
<Schmatzen> zu haben , INIT  
<#Mikrobe> <A> und<Z> <A> wollt' jetzt einfach mal <!1 ma'>  
fragen , wann Sie da Zeit h"atten . REQUEST\_SUGGEST  
dazu mu"s ich gleich sagen , <:<#> <A:> da"s <:<#Mikrowind> ich:>  
<"ahm> diesen Donnerstag <A> <:<#> <Ger"ausch>:> ab <:<#>  
vierzehn:> Uhr keine Zeit <:<#Mikrobe> mehr:> habe . <#>  
SUGGEST

BCP018: ja , gr"u"s Gott , GREET  
mein Name ist <!1 is'> Niehmeyer <A> , \$N \$I \$E \$H \$M \$E \$Y \$E \$R .  
INTRODUCE  
<A> ja , Donnerstag ab vierzehn Uhr haben <!1 ham> Sie  
keine Zeit , sagen Sie <A> . CLARIFY  
<"ahm> <:<Schmatzen> <A>:> ja , da erg"anzen wir uns ja wunderbar zu  
<:<Lachen> einem:> <Lachen> <A> nicht stattfindenden Termin am  
Donnerstag , INFORM  
weil <!1 wei'> ich n"amlich genau bis<Z> <"ah> vierzehn Uhr  
besch"aftigt bin . GIVE\_REASON  
<A> dann f"allt der Donnerstag schon mal flach, CLARIFY  
dann lassen Sie uns doch mal <:<#Mikrobe>  
"uberlegen:> , was sich da noch f"ur M"oglichkeiten ergeben .  
REQUEST\_SUGGEST  
<A> ich w"urd' sagen , wir machen das so fr"uh wie m"oglich .  
SUGGEST  
<"ah> wie schaut 's denn morgen bei Ihnen zeitlich aus ?  
SUGGEST

ACL019: das w"are sehr gut . ACCEPT  
ich <:<#Mikrowind> hab':> von neun bis zehn Uhr eine  
<:<#Mikrowind> Besprechung:> und <!1 un'>  
ansonsten noch keine <:<#> Termine:> . EXCLUDE

BCPO20: ja , wunderbar . FEEDBACK\_POSITIVE

```

<"ahm> <Ger"ausch> dann w"urd' ich sagen ,
<"ah> <A> g"onnen <!1 g"onn'> Sie <!1 Se> sich vielleicht doch
  'ne kurze Stunde Pause ,                                     SUGGEST
und wir machen einfach den Termin morgen um elf . <A>
<Ger"ausch> von elf bis vierzehn Uhr ,                   SUGGEST
ich denk' in drei Stunden ist <!1 is'> das <!1 des> also locker zu
erledigen ,                                              INFORM
weil um vierzehn Uhr bin ich dann noch mal
besch"iftigt ,                                         GIVE_REASON
<A> <"ahm> aber das sollte ja kein Problem sein.INFORM
dann w"urd' ich sagen , <"ah> sehen wir uns <"ah> morgen
p"unktlich um elf Uhr .                                SUGGEST

ACL021: <#Mikrobe> wunderbar ,                      FEEDBACK_POSITIVE
das ist <!1 is'> also <;verschliffen> dann der Dienstag ,
der f"unfte , elf Uhr .                               CONFIRM
<P> <#Mikrobe> dann <:<#Mikrobe> bedank':> ich <:<#Mikrowind>
mich:>                                         THANK
und Wiedersehen . <#>                           BYE

BCP022: ja , gut ,                      FEEDBACK_POSITIVE
danke sch"on .                                 THANK
Wiederschauen .                                BYE

```

#### A.1.4 Example 4

```

BCP023: ja , sch"onen guten Tag ,                  GREET
hier ist <!1 is'> Flex wie die Motors"age , $F $L $E $X .
                                                 INTRODUCE
<"ahm> <A> <:<#> ja:> , ich ruf' an
wegen dieser <!1 deser> <:<#Mikrowind> Reisevorbereitung:> ,
die wir noch zusammen durchgehen wollten ,      INIT
<"ahm> %und wollte
da mit Ihnen <!1 Ihn'> einen <!1 'en> Termin ausmachen .
                                                 INIT
<A> <"ah> <Ger"ausch> wie schaut 's denn aus bei Ihnen ?
                                                 REQUEST_SUGGEST
wann k"onnten wir uns denn da treffen ?          REQUEST_SUGGEST

ACL024: <#> guten <:<#Mikrowind> Tag:> ,           GREET
hier ist von Sundniz <;falscher Name> , <A> $V $O $N , von ,
$S $U $D $N $I $Z , <:<#Mikrobe> Sudniz:> .      INTRODUCE

```

<#> <:<Schmatzen> <A> <"ahm:> das  
 w"are wahrscheinlich <:<#> ganz:> g"unstig , das <!1 des>  
 relativ bald zu machen . SUGGEST  
 <:<#> <Ger"ausch>:> und<Z> <A> <Ger"ausch> montags<Z> <A> <#>  
 ist <!1 is'> bei mir generell so/- also <:<#Mikrowind>  
 heute:> ging's <:<#Mikrowind> schlecht:> , EXCLUDE  
 aber <!1 abam> <P> die restliche Woche ist <!1 is'>  
 nachmittags immer <:<#> gut und Donnerstag den ganzen:>  
 Tag . SUGGEST

BCP025: ja<Z> <A> , <Schmatzen> <"ah> Donnerstag den ganzen Tag , sagen  
 <:<#> Sie:> . CLARIFY  
 <:<Schmatzen> <A>:> ja , <P> <#> ja , dann w"urd'  
 ich doch sagen , <"ahm> treffen wir uns einfach am Donnerstag ,  
 vielleicht nachmittags , <A> nachdem 's morgen und "ubermorgen  
 <P> doch 'n bi"schen voll ist <!1 is'> bei mir. SUGGEST  
 <A> <"ahm> <P> ja , <P> was halten Sie <!1 Se> denn von  
 Donnerstag , f"unfzehn Uhr ? SUGGEST

ACL026: <A> jetzt <!1 'etz'> mu"s ich <:<#Mikrobe> mich:> entschuldigen  
 und widerrufen , INFORM  
 ich <:<#Mikrowind> hab':> gerade eben gesehen  
 , <:<#Mikrobe> ein:> Termin , den ich in meinen <!1 mein'>  
 Wochenkalender <:<#Mikrobe> <#Mikrowind> nicht eingetragen:>  
 hatte , INFORM  
 <#Mikrobe> <A> da"s ich diese Woche , donnerstags ab  
 <:<#Mikrobe> vierzehn:> Uhr <:<#> leider:> keine Zeit mehr  
 <:<#> habe:> . REJECT  
 <Ger"ausch> also <#Mikrobe> <Schmatzen> bitt' ich um  
 Entschuldigung . POLITENESS\_FORMULA  
 %wir m"u"sten vielleicht doch einen <!1 ein'> anderen  
 <:<#Mikrobe> Termin:> finden . <#> REQUEST\_SUGGEST

BCP027: <A> na ja , <:<#> das ist:> <!1 is'> ja gar kein Problem .  
 FEEDBACK\_POSITIVE  
 <"ahm> <A> dann<Z> m"ussen wir vielleicht doch einen Vormittag  
 opfern . SUGGEST  
 <A> <"ahm> <Schmatzen> <A> ja , also wenn 's Ihnen <!1  
 Ihn'> nichts ausmacht , wenn Ihnen <!1 Ihn'> das <!1 des> nicht  
 <!1 nich'> zu fr"uh ist , dann w"urd' ich vorschlagen ,  
 entweder der Dienstag oder der Mittwoch . SUGGEST  
 <"ah> <P> <#> um zehn Uhr vielleicht ? SUGGEST

was denken Sie ?	REQUEST_COMMENT
ACL028: <:<Schmatzen> <A>:> <#Mikrobe> dienstags ginge , <:<#>	ACCEPT
mittwochs:> bin ich vormittags besch'aftigt ,	REJECT
allerdings w'are mir halb elf lieber ,	SUGGEST
da ich bis zehn Uhr in einer Besprechung bin .	GIVE_REASON
BCP029: also , das w'are <:<#Klicken> dienstags:> <!1 dienfags> um halb elf .	CLARIFY
<A> <#> ja , <#> <A> ja , <hm> das ist <!1 is'> so die Frage .	DELIBERATE
ich wei's jetzt nicht , inwieweit wir <h"as> da durchkommen ,	FEEDBACK_NEGATIVE
weil ich m'u"ste eben um <:<#Mikrowind> vierzehn:> Uhr dann auch wieder weg .	GIVE_REASON
<A> <"ahm> <A> na ja , <A> <:<#> na ja , doch:> , gut . ich mein' , wenn wir 's straff durchziehen , dann sollt' es eigentlich zu machen sein ,	ACCEPT
<Ger"ausch> die Vorbereitungen sind ja <#> zum Gro"steil schon getroffen .	INFORM
<A> <%> dann noch die Details abkl"aren , dann sollte das <!1 d's> eigentlich nicht l"anger als zwei Stunden dauern .	INFORM
<A> dann w"urd' ich sagen , <"ahm> sehen wir uns am Dienstag um halb elf , ja , also morgen .	CONFIRM
ACL030: <:<#> ist:> <!1 is'> gut ,	FEEDBACK_POSITIVE
dann freu' <:<#Mikrowind> ich mich:> ,	POLITENESS_FORMULA
und <!1 un'> auf Wiedersehen .	BYE
BCP031: ja , danke sch'on ,	THANK
Wiedersehen , bis morgen .	BYE

## A.2 English Dialogues

### A.2.1 Example 1

*CDROM 8, r279c.trl*

```
TJD000: <:<#> <#Mikrobe> <Schmatzen> hello <;period> <A> <;seos> <A>
@ (GREET AB) <"ahm> I would <!2 I'd> like to make an
appointment <;comma> <#Rascheln> <"ah> <P> <;seos> @ (INIT AB)
are <;comma> any of the days <;comma> the seventh <;comma>
eighth <;comma> or ninth <;comma> of July open <;quest>
<#Klicken>:> <;seos> @ (SUGGEST AB)

DSG001: <:<#> <Schmatzen> <A> I am <!2 I'm> sorry <;period> <;seos>
@ (FEEDBACK_NEGATIVE BA) but the seventh <;comma> eighth
<;comma> and ninth <;comma> of July <;comma> were last week
<;comma> <;seos> @ (CLARIFY BA) it is <!2 it's> the twelfth
right now <;quest> <;seos> <A> @ (CLARIFY BA) so <;comma> I am
<!2 I'm> free <;comma> the thirteenth <;comma> and fourteenth
<;period> <#Klicken> <A> <#Rascheln>:> <;seos> @ (SUGGEST BA)

TJD002: <:<#> <A> <A> I am <!2 I'm> sorry <;comma>
@ (FEEDBACK_NEGATIVE) I feel like such a fool <;period>
@ (POLITENESS_FORMULA AB) <A> <"ahm> <Lachen> <;seos> <A> the
<;comma> thirteenth <;comma> I have an all day <;period>
seminar <;comma> <;seos> @ (REJECT AB) and the fourteenth I am
<!2 I'm> on vacation <;period> <;seos> @ (REJECT AB) but
<;comma> <A> the twenty first <;comma> I am <!2 I'm> open
<;comma> <;seos> @ (SUGGEST AB)<A> and the twenty second and
twenty third <;comma> I am <!2 I'm> open in the mornings
<;period> <;seos> @ (SUGGEST AB) so <;comma> the twenty first
<!1 firth> I am <!2 I'm> open all day <;comma> <;seos>
@ (SUGGEST AB) the twenty second <;comma> twenty third <;comma>
I am <!2 I'm> open in the mornings <;period> <;seos> @ (SUGGEST
AB) do you have any times then <;period> <#Klicken> <A>:>
<;seos> @ (REQUEST_COMMENT AB)

DSG003: <:<#> <Schmatzen> <A> yeah <;period> <;seos>
@ (FEEDBACK_POSITIVE BA) the +/twe=/+ morning of the twenty
third would be fine <;period> <;seos> @ (ACCEPT BA) I am <!2
I'm> out of town on the twenty first <;period> <;seos>
@ (REJECT BA) so <;comma> the twenty third <;comma> at say
<;comma> ten o'clock <;period> <#Klicken> <A>:> <;seos>
```

@(SUGGEST BA)

TJD004: <:<#> <#Mikrobe> <Schmatzen> <A> okay <;period> <;seos>  
@(ACCEPT AB) that sounds fine with me <;comma> <;seos>  
@(ACCEPT AB) thank you very much <;period> <#Klicken:>  
<;seos> @(THANK AB)

### A.2.2 Example 2

*r311c.trl*

SVG000: <:<#> <#Klicken> <A> hi <#> @(GREET)  
I would <!2 I'd> like to make an appointment with you <;quest>  
either <;comma> <A> the week of the twenty fifth <;comma> or  
<#> the week of the first <;period> <#Klicken:><;seos>  
@m(SUGGEST) @m(INIT)

AKK001: <#Klicken> <Schmatzen> <A> well this is a pretty rough week  
<;comma> <;seos> @(FEEDBACK\_NEGATIVE) +/I have/+ <;seos>  
<"ahm> <;comma> <A> <Schmatzen> <A> <Ger"ausch> <Ger"ausch> I  
am <!2 I'm> pretty busy <;comma> <Ger"ausch> on <;comma>  
Monday <;period> @(EXCLUDE) <A> <A> and <;comma> the <#>  
twenty sixth <;comma> <A> <A> I am <!2 I'm> only free in the  
afternoon from like four to five <;quest> <A> <;seos>  
@(SUGGEST) <A> <"ahm> then I am <!2 I'm> out of <#Klopfen>  
town 'till the <#Rascheln> first <;period> <;seos>  
@(EXCLUDE)<#> <"ahm> <;comma> <A> <A> <Schmatzen> <A> Tuesday  
the second I am <!2 I'm> free in the afternoon from <#> three  
to five <;comma> <;seos> @(SUGGEST) how is <!2 how's> then for  
you <;period> <#> <#Klicken> <;seos> @(REQUEST\_COMMENT)

SVG002: <:<#> <Schmatzen> <A> well <;comma> on Tuesday the second I am  
<!2 I'm> going to be <#> out of town <;period> <;seos>  
@(REJECT) <A> but <;comma> the third is really good for me  
<;comma> @(SUGGEST) because <;comma> <A> <Schmatzen> <A> I  
will <!2 I'll> be free <;comma> at around <"ah> <;comma>  
twelve o'clock <;period> <;seos> @(SUGGEST) because I have a  
meeting from nine thirty until twelve <;period> <#Klicken:>  
<;seos> @(GIVE\_REASON)

AKK003: <Schmatzen> <A> <:<#> on the third:> I do have a business

appointment from one to two in the afternoon <;period> <A> <;seos> @ (SUGGEST) <A> so <"ahm> <;comma> <A> <#> how 'bout three o'clock to five o'clock then <;quest> <A> <#> on <"ah> <;comma> Wednesday the third <;quest> <#Klicken> <#> <;seos> @ (SUGGEST)

SVG004: <:<#> <#Klicken> <Schmatzen> <A> yes <;period> <;seos> <#> @ (FEEDBACK\_POSITIVE) three o'clock to five o'clock is good for me <;period> <;seos> @ (ACCEPT) see you then <;period> <#> <#> <#Klicken> <#> <#> <#Klicken>: > <;seos> @ (BYE)

### A.2.3 Example 3

*r367c.trl*

JDL000: <:<#> <A> <:<#Mikrobe> okay <;comma> @ (FEEDBACK\_POSITIVE) I am <!2 I'm> looking at <#> next week:> <;comma> <;seos> @ (INFORM) <#> and <"ah> <;comma> <#Klicken> the <:<#Mikrobe> twenty seventh looks:> <#> really good for me <;period> <#> <"ahm> <;comma> @ (SUGGEST) <A> <#Klicken> <:<#Mikrobe> virtually any:> time <#> after eleven <;comma> <;seos> @ (SUGGEST) how does that sound <;comma> <#Klicken> <#>: > <;seos> @ (REQUEST\_COMMENT)

BRT001: <#> <#Klicken> <"ah> you know <#> what <;quest> <;seos> @ (DELIBERATE) <"ah> Wednesday I <#Klicken> fly out to Hawaii <;period> <;seos> @ (REJECT) and I do not <!2 don't> get <#> back <#> until <;comma> <A> Monday night <;comma> <A> very late <;period> <;seos> @ (REJECT) so <;comma> <#Klicken> <A> <#Klicken> <"ah> <;comma> <#Klicken> we are <!2 we're> going to <!2 gonna> <#Klicken> have to push it into <;comma> <A> the week <#> of the <#> second <;period> @ (SUGGEST) <#Klicken> <;seos> +/any t=/+ any day that week <;period> @ (SUGGEST) <;seos> <#> <"ah> what does <!2 what's> your schedule <#> look <#> like <;period> <#Klicken> <#Klicken> <;seos> @ (REQUEST\_SUGGEST)

JDL002: <:<#> <A> <#Mikrobe> okay <;comma> <;seos> @ (FEEDBACK\_POSITIVE) <#> <"ahm> <;comma> <A> <Schmatzen> really the only day I <#Mikrobe> could do it is <;comma> Wednesday the <#Mikrobe> third <;period> <#> <;seos> @ (SUGGEST) <"ahm> <;comma> <Schmatzen> <A> but <;comma> I

could also <#> do it the twenty fifth <;quest> or the <;comma>  
twenty eighth <;period> if that is <!2 that's> <#Mikrobe>  
better <;period> <#Klicken>:> <;seos> @ (SUGGEST)

BRT003: <#Klicken> <Schmatzen> <"ah> <;comma> well <;comma> I am <!2  
I'm> <#Klicken> tied <#Klicken> up on the twenty fifth  
<;period> <A> <;seos> @ (REJECT) <#> but <"ahm> <#Klicken>  
<Schmatzen> <A> did you say +/the/+ <"ah> <;comma> <#Klicken>  
the Wednesday the third <;quest> <A> <;seos>  
@ (REQUEST\_CLARIFY) <"ah> +/wh=/+ <;comma> <;seos> what is/+  
<!2 what's> <;seos> what is <!2 what's> your schedule look  
like in the afternoon <;period> <#> @ (SUGGEST) say after two  
o'clock <;quest> <#Klicken> <#Klicken> <#> <;seos> @ (SUGGEST)

JDL004: <:<#> <#> <#> <"ahm> <;comma> after <#Mikrobe> two is fine  
<;quest> <;seos> @ (ACCEPT) should we say around <#Klicken> two  
<;comma> or two thirty <;quest> Wednesday the third <;quest>  
<#Klicken> <#Klicken> <#Klicken>:> <;seos>  
@ (SUGGEST)

BRT005: <#> <#> <#> <"ah> yeah <;period> <;seos> @ (FEEDBACK\_POSITIVE)  
that is <!2 that's> fine <;period> <;seos> @ (ACCEPT) I will  
<!2 I'll> <#> be <#> in my office <;quest> @ (INFORM) and <"ah>  
<;comma> <A> you <#> can <#> stop in <;comma> <#> say +/two/+  
<;comma> <#> two o'clock <;period> @ (SUGGEST) <;seos> <#> okay  
<;quest> <;seos> @ (FEEDBACK\_POSITIVE) we will <!2 we'll> see  
you <;period> <#Klicken> <#> <#> <;seos> @ (BYE)

## A.3 A Japanese Dialogue

We show in the below how a typical conversation proceeds by examining an example. The conversations below are taken from the dialogue No. 6 of VERBMOBIL corpus. Assuming the reader is not familiar with Japanese, we present the conversation by explaining what the sentence means in order. Each sentence is translated to German followed by annotated Japanese. The German translation and annotation are attributed to Gerd Fliedner at DFKI.

### Ogawa introduces himself to Koozai

One of the two persons, Ogawa, starts thier conversation by introducing himself to the other, Koozai.

NAY01: (Ja, hier ist Ogawa.) (INTRODUCE)

NAY01: hai <P> ogawa desu kedo . {seos}  
\*NAY01: [Int hai] [PN ogawa] [V desu] [Part kedo]  
>NAY01: [ja] [Ogawa] [sein] [(Satzende)]

### Koozai introduces himself to Ogawa

Greeted by Ogawa, Koozai introduces himself to Ogawa.

NBA02: (Hallo,) (GREET) (hier ist Koozai.) (INTRODUCE)

NBA02: <a> moshimoshi <P> koozai desu keredomo . {seos} /ano/  
\*NBA02: [Int moshimoshi] [PN koozai] [V desu] [Part keredomo] [Int ano]  
>NBA02: [hallo] [Koozai] [sein] [(Satzende)] [also]

### Koozai starts the negotiation

Koozai first explains to Ogawa why he calls him up; He would like to hold a meeting.

NBA02: (Diesmal habe ich angerufen, weil ich eine Besprechung des  
Inhaltes des Aufsatz-Beitrags fuer die wissenschaftliche  
Zeitschrift machen moechte.) (GIVE\_REASON)

NBA02: koNkai wa <P> gakkaishi no  
\*NBA02: [N koNkai] [Part wa] [N gakkaishi] [Part no]  
>NBA02: [diesmal] [(Thema)] [wissensch. Zeitschrift] [(Genitiv)]

NBA02: tookooroNbuN no naiyoo no uchiawase  
 \*NBA02: [N tookooroNbuN] [Part no] [N naiyoo] [Part no] [N uchiawase]  
 >NBA02: [Aufsatz-Beitrag] [(Genitiv)] [Inhalt] [(Genitiv)] [Besprechung]  
  
 NBA02: o shi tai to omot te deNwa  
 \*NBA02: [Part o] [V shi] [VF tai] [Part to] [V omot] [VF te] [N deNwa]  
 >NBA02: [(Objekt)] [machen] [(Wunsch)] [dass] [denken] [te-Form] [Telefon]  
  
 NBA02: sashi te itadai ta N  
 \*NBA02: [V sashi] [VF te] [V itadai] [VF ta] [NOM N]  
 >NBA02: [machen] [te-Form] [freundlicherweise] [(Verg)] [(Substantivierung)]  
  
 NBA02: desu keredomo . {seos}  
 \*NBA02: [V desu] [Part keredomo]  
 >NBA02: [sein] [(Satzende)]

Koozai asks Ogawa if he can schedule their meeting with him. This sort of dialogue act seems not to be included in the list.

NBA02: (Ich wuerde gerne einen Termin vereinbaren. Ist das in  
 Ordnung?) (INIT)  
  
 NBA02: /anoo/ hi nichi o  
 \*NBA02: [Int anoo] [N hi] [N nichi] [Part o]  
 >NBA02: [also] [Tag] [Tag] [(Objekt)]  
  
 NBA02: kime tai N desu keredomo {seos} <P>  
 \*NBA02: [V kime] [VF tai] [NOM N] [V desu] [Part keredomo]  
 >NBA02: [vereinbaren] [(Wunsch)] [(Substantivierung)] [sein] [(Satzende)]  
  
 NBA02: yoroshii deshoo ka . {seos}  
 \*NBA02: [Adj yoroshii] [V deshoo] [Part ka]  
 >NBA02: [gut] [sein (Kond)] [(Frage)]

### Ogawa agrees to Koozai

Ogawa agrees to schedule their meeting.

NAY03: (Ja,) (FEEDBACK\_POSITIVE)  
  
 NAY03: hai . {seos}  
 \*NAY03: [Int hai]  
 >NAY03: [ja]

Ogawa asks which day is suitable to Koozai

NAY03: (wann wuerde ihnen denn diese Besprechung gut passen?)  
(REQUEST\_SUGGEST)

NAY03: /anoo/ sochira no <P> sono <P> uchiawase  
\*NAY03: [Int anoo] [Pron sochira] [Part no] [Det sono] [N uchiawase]  
>NAY03: [also] [sie] [(Genitiv)] [jener] [Besprechung]

NAY03: no go yotee wa itsu ga  
\*NAY03: [Part no] [Hon go] [N yotee] [Part wa] [N itsu] [Part ga]  
>NAY03: [(Genitiv)] [(hoefl)] [Zeitplan] [(Thema)] [wann] [(Subjekt)]

NAY03: yoroshii N deshoo ka . {seos}  
\*NAY03: [Adj yoroshii] [NOM N] [V deshoo] [Part ka]  
>NAY03: [gut] [(Substantivierung)] [sein (Kond)] [(Frage)]

### Koozai suggests a date

Koozai proposes to hold the meeting on the 16th August.

NBA04: (Also, wie waere denn der 16. August?) (SUGGEST)

NBA04: /eeto/ hachi gatsu no juu roku  
\*NBA04: [Int eeto] [Kard hachi] [N gatsu] [Part no] [Kard juu] [Kard roku]  
>NBA04: [also] [8] [Monat] [(Genitiv)] [10] [6]

NBA04: nichi naN te doo deshoo ka . {seos}  
\*NBA04: [N nichi] [Pron naN] [Part te] [Adv doo] [V deshoo] [Part ka]  
>NBA04: [Tag] [wie] [denn] [wie] [sein (Kond)] [(Frage)]

### Ogawa rejects the date

Ogawa rejects the date implicitly by explaining why the date is not good to him.  
He does not say ‘no’ in turning down Koozai’s suggestion.

NAY05: (Weil am 16. leider den ganzen Tag Seminar ist,) (GIVE\_REASON)

NAY05: <a> <P> juu roku nichi wa ainiku <P> ichi  
\*NAY05: [Kard juu] [Kard roku] [N nichi] [Part wa] [Adv ainiku] [Kard ichi]  
>NAY05: [10] [6] [Tag] [(Thema)] [leider] [1]

NAY05: nichi juu seminaa ga gozai masu  
\*NAY05: [N nichi] [PP juu] [N seminaa] [Part ga] [V gozai] [VF masu]  
>NAY05: [Tag] [waehrend] [Seminar] [(Subjekt)] [sein (hoefl)] [(hoefl)]

NAY05: node {seos}  
\*NAY05: [Konj node]  
>NAY05: [weil]

Ogawa asks Koozai to suggest other dates.

NAY05: (bitte ich um einen anderen Tag.) (REJECT)

NAY05: hoka no hi o o

\*NAY05: [N hoka] [Part no] [N hi] [Part o] [Hon o]

>NAY05: [anderer] [(Genitiv)] [Tag] [(Objekt)] [(hoefl)]

NAY05: negai shi tai N desu

\*NAY05: [N negai] [V shi] [VF tai] [NOM N] [V desu]

>NAY05: [Bitte] [machen] [(Wunsch)] [(Substantivierung)] [sein]

NAY05: keredomo . {seos}

\*NAY05: [Part keredomo]

>NAY05: [(Satzende)]

### Koozai suggests another date

Koozai accepts Ogawa's rejection.

NBA06: (Ja, ach so.) (FEEDBACK\_POSITIVE)

NBA06: hai <P> soo desu ka . {seos}

\*NBA06: [Int hai] [Adv soo] [V desu] [Part ka]

>NBA06: [ja] [so] [sein] [(Frage)]

Koozai proposes to hold the meeting on the 17th.

NBA06: (Wenn das so ist, wie waere der 17. ab nachmittags?)  
(SUGGEST)

NBA06: so shi tara <P>

\*NBA06: [Konj soshitara]

>NBA06: [dann]

NBA06: juu nana nichi no <P> gogo kara <P>

\*NBA06: [Kard juu] [Kard nana] [N nichi] [Part no] [N gogo] [PP kara]

>NBA06: [10] [7] [Tag] [(Genitiv)] [Nachmittag] [von]

NBA06: to yuu koto de doo deshoo

\*NBA06: [Part to] [V yuu] [NOM koto] [Part de] [Adv doo] [V deshoo]

>NBA06: [dass] [sagen] [(Substantivierung)] [in] [wie] [sein (Kond)]

NBA06: ka . {seos}

\*NBA06: [Part ka]

>NBA06: [(Frage)]

## Ogawa rejects the date, too

First, Ogawa apologizes to Koozai.

NAY07: (Entschuldigung.) (POLITENESS\_FORMULA)

NAY07: <a> <P> suimaseN {seos}  
\*NAY07: [V suimaseN]  
>NAY07: [Entschuldigung]

Then, he explains why the date is not good to him either. Again he does not say 'no' to turn down the proposed date.

NAY07: (Weil auch am 17. der ganze Tag verplant ist,) (GIVE\_REASON)

NAY07: juu nana nichi mo  
\*NAY07: [Kard juu] [Kard nana] [N nichi] [Part mo]  
>NAY07: [10] [7] [Tag] [auch]  
  
NAY07: ichiniijuu <P> yotee ga tsumat  
\*NAY07: [Kard ichi] [N nichi] [PP juu] [N yotee] [Part ga] [V tsumat]  
>NAY07: [1] [Tag] [waehrend] [Zeitplan] [(Subjekt)] [belegt sein]

NAY07: te ori masu node {seos} <P>  
\*NAY07: [VF te] [V ori] [VF masu] [Konj node]  
>NAY07: [te-Form] [sein (hoefl)] [(hoefl)] [weil]

Ogawa tells Koozai about his preferences.

NAY07: (moechte ich, wenn moeglich, um einen Tag nach dem 21. bitten.) (SUGGEST)

NAY07: dekire ba <P>  
\*NAY07: [V dekire] [VF ba]  
>NAY07: [moeglich sein] [(Kond)]  
  
NAY07: ni juu ichi nichi ikoo ni <P> o  
\*NAY07: [Kard ni] [Kard juu] [Kard ichi] [N nichi] [N ikoo] [Part ni] [Hon o]  
>NAY07: [2] [10] [1] [Tag] [nach] [um] [(hoefl)]  
  
NAY07: negai shi tai N desu  
\*NAY07: [N negai] [V shi] [VF tai] [NOM N] [V desu]  
>NAY07: [Bitte] [machen] [(Wunsch)] [(Substantivierung)] [sein]

NAY07: keredomo . {seos}  
\*NAY07: [Part keredomo]  
>NAY07: [(Satzende)]

**Koozai suggests the other date**

Koozai accepts Ogawa's rejection.

NBA08: (Ja,) (FEEDBACK\_POSITIVE)

NBA08: hai . {seos}  
\*NBA08: [Int hai]  
>NBA08: [ja]

Koozai suggests the other date, the 21st.

NBA08: (wie waere es denn am 21.?) (SUGGEST)

NBA08: hai . {seos} soredewa <P> ni juu ichi nichi <P>  
\*NBA08: [Int hai] [Konj soredewa] [Kard ni] [Kard juu] [Kard ichi] [N nichi]  
>NBA08: [ja] [dann] [2] [10] [1] [Tag]

NBA08: doo deshoo ka . {seos}  
\*NBA08: [Adv doo] [V deshoo] [Part ka]  
>NBA08: [wie] [sein (Kond)] [(Frage)]

**Ogawa accepts the date**

Ogawa responds positively to Koozai's suggestion.

NAY09: (Ja,) (ACCEPT)

NAY09: hai  
\*NAY09: [Int hai]  
>NAY09: [ja]

Ogawa mentions that nothing is scheduled on that date and proposes to hold the meeting in the afternoon.

NAY09: (also, wenn das der 21. ist: Da ist am Nachmittag frei.)  
(ACCEPT)

NAY09: /ano/ ni juu ichi nichi  
\*NAY09: [Int ano] [Kard ni] [Kard juu] [Kard ichi] [N nichi]  
>NAY09: [also] [2] [10] [1] [Tag]

NAY09: nara ba <P> gogo wa <P> ai te  
\*NAY09: [V nara] [VF ba] [N gogo] [Part wa] [V ai] [VF te]

>NAY09: [werden] [(Kond)] [Nachmittag] [(Thema)] [frei sein] [te-Form]

NAY09: ori masu node {seos}

\*NAY09: [V ori] [VF masu] [Konj node]

>NAY09: [sein (hoefl)] [(hoefl)] [weil]

Ogawa asks then if Koozai is free in the afternoon.

NAY09: (Wie wuerde es ihnen am Nachmittag passen?) (SUGGEST)

NAY09: sochira no

\*NAY09: [Pron sochira] [Part no]

>NAY09: [sie] [(Genitiv)]

NAY09: go yotee gogo wa ikaga deshoo

\*NAY09: [Hon go] [N yotee] [N gogo] [Part wa] [Adv ikaga] [V deshoo]

>NAY09: [(hoefl)] [Zeitplan] [Nachmittag] [(Thema)] [wie] [sein (Kond)]

NAY09: ka . {seos}

\*NAY09: [Part ka]

>NAY09: [(Frage)]

## Koozai confirms

Koozai says that he can hold the meeting then.

NBA10: (Ja, das ist in Ordnung.) (ACCEPT)

NBA10: hai daijoobu desu . {seos}

\*NBA10: [Int hai] [Adj daijoobu] [V desu]

>NBA10: [ja] [in Ordnung] [sein]

Koozai proposes to hold the meeting from 2pm to 4pm.

NBA10: (Wie waere es dann am 21. Nachmittags von zwei Uhr bis vier Uhr?) (SUGGEST)

NBA10: soredewa <P> ni juu

\*NBA10: [Konj soredewa] [Kard ni] [Kard juu]

>NBA10: [dann] [2] [10]

NBA10: ichi nichi no gogo no <P> ni

\*NBA10: [Kard ichi] [N nichi] [Part no] [N gogo] [Part no] [Kard ni]

>NBA10: [1] [Tag] [(Genitiv)] [Nachmittag] [(Genitiv)] [2]

NBA10: ji kara <P> yo ji made to yuu  
\*NBA10: [N ji] [PP kara] [Kard yo] [N ji] [PP made] [Part to] [V yuu]  
>NBA10: [Uhr] [von] [4] [Uhr] [bis] [dass] [sagen]

NBA10: koto de <P> doo deshoo ka . {seos}  
\*NBA10: [NOM koto] [Part de] [Adv doo] [V deshoo] [Part ka]  
>NBA10: [(Substantivierung)] [in] [wie] [sein (Kond)] [(Frage)]

## Ogawa suggests the location

Ogawa agrees as to the time.

NAY11: (Ja,) (ACCEPT)

NAY11: hai  
\*NAY11: [Int hai]  
>NAY11: [ja]

Ogawa would like Koozai to come to his room.

NAY11: (wenn es so ist: Wuerden sie dann bitte am 21. um 2 Uhr in  
unser Institut kommen?) (SUGGEST)

NAY11: /anoo/ sore nara ba <P> ni juu  
\*NAY11: [Int anoo] [Pron sore] [V nara] [VF ba] [Kard ni] [Kard juu]  
>NAY11: [also] [jener] [werden] [(Kond)] [2] [10]

NAY11: ichi nichi no ni ji ni <P> /ano/  
\*NAY11: [Kard ichi] [N nichi] [Part no] [Kard ni] [N ji] [Part ni] [Int ano]  
>NAY11: [1] [Tag] [(Genitiv)] [2] [Uhr] [um] [also]

NAY11: watakushi no keNkyuushitsu no hoo  
\*NAY11: [Pron watakushi] [Part no] [N keNkyuushitsu] [Part no] [N hoo]  
>NAY11: [ich] [(Genitiv)] [Institut] [(Genitiv)] [Seite]

NAY11: ni kite itadaki tai  
\*NAY11: [Part ni] [V ki] [VF te] [V itadaki] [VF tai]  
>NAY11: [in] [kommen] [te-Form] [freundlicherweise] [(Wunsch)]

NAY11: no desu ga  
\*NAY11: [NOM no] [V desu] [Part ga]  
>NAY11: [(Substantivierung)] [sein] [(Satzende)]

Ogawa asks if Koozai can come to his room.

NAY11: (Waere das gut?) (REQUEST\_COMMENT)

NAY11: yoroshii deshoo  
\*NAY11: [Adj yoroshii] [V deshoo]  
>NAY11: [gut] [sein (Kond)]

NAY11: ka . {seos}  
\*NAY11: [Part ka]  
>NAY11: [(Frage)]

### Koozai agrees with the location

Koozai accepts Ogawa's suggestion.

NBA12: (Ja,) (ACCEPT)

NBA12: <a> hai  
\*NBA12: [Int hai]  
>NBA12: [ja]

Koozai confirms that he will come, thereby closing the topic.

NBA12: (dann komme ich vorbei.) (CLOSE)

NBA12: so shi tara <P> ukagai masu . {seos}  
\*NBA12: [Konj soshitara] [V ukagai] [VF masu]  
>NBA12: [dann] [besuchen] [(hoefl)]

Koozai says goodbye.

NBA12: (Dann auf Wiederhoeren.) (BYE)

NBA12: soredewa shitsuree shi masu . {seos}  
\*NBA12: [Konj soredewa] [N shitsuree] [V shi] [VF masu]  
>NBA12: [dann] [Unhoeftlichkeit] [machen] [(hoefl)]

### Ogawa closes the conversation

Ogawa says goodbye, too.

NAY13: (Auf Wiederhoeren.) (BYE)

NAY13: shitsuree shi maasu . {seos}  
\*NAY13: [N shitsuree] [V shi] [VF maasu]  
>NAY13: [Unhoeftlichkeit] [machen] [(hoefl)]

# Bibliography

- [1] Jan Alexandersson, Bianka Buschbeck-Wolf, Tsutomu Fujinami, Elisabeth Maier, Norbert Reithinger, Birte Schmitz, and Melanie Siegel. Dialogue Acts in VERBMOBIL-2. Verbmobil-Report 204, DFKI Saarbrücken, Universität Stuttgart, Technische Universität Berlin, Universität des Saarlandes, 1997.
- [2] Jan Alexandersson and Baerbel Ripplinger. Disambiguation and translation of german particles in verbmobil. Verbmobil Memo 70, DFKI GmbH and IAI, 1996.
- [3] Christoph Birkenhauer. Das Dialoggedächtnis des Übersetzungssystems Verbmobil. Universität des Saarlandes, 1998. Diplomarbeit.
- [4] Harry C. Bunt. Context and Dialogue Control. *Think*, 3:19–31, May 1994.
- [5] Bianka Buschbeck-Wolf and C. Tschernitschek. What you always wanted to know about semantic transfer. Verbmobil-Report 114, IBM Deutschland Informationssysteme GmbH, 1996.
- [6] Mark Core and James Allen. Coding Dialogs with the DAMSL Annotation Scheme. In *AAAI Fall Symposium on Communicative Action in Humans and Machines*, Boston, MA, 1997.
- [7] S.J. Jekat, C. Scheer, and T. Schultz. VMII Szenario I: Instruktionen für alle Sprachstellungen - VMII Scenario I: Instructions. VM-Techdoc 62, Universität Hamburg, LMU München, Universität Karlsruhe, 1997.
- [8] Susanne Jekat, Alexandra Klein, Elisabeth Maier, Ilona Maleck, Marion Mast, and J. Joachim Quantz. Dialogue Acts in VERBMOBIL. Verbmobil-Report 65, Universität Hamburg, DFKI Saarbrücken, Universität Erlangen, TU Berlin, 1995.
- [9] Stephen C. Levinson. *Pragmatics*. Cambridge University Press, 1993.

- [10] Norbert Reithinger and Martin Klesen. Dialogue act classification using language models. In *Proceedings of EuroSpeech-97*, pages 2235–2238, Rhodes, 1997.
- [11] Mandred Stede and Birte Schmitz. Partikeln: Diskusfunktionen für die Übersetzung. Vermobil-Report, TU Berlin, 1998. to appear.