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# Dialogue Acts in VERBMOBIL-2

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# Disclaimer

This paper gives a draft description of the dialogue acts which will be used in the second phase of VERBMOBIL. Naturally, this draft suffers from many incompletenesses and inconsistencies, in particular since the dialogue acts have not yet been applied on the annotation of new material. We therefore intend to continously improve this paper as we gain experience with the dialogue acts described here. We will gradually refine and rework the definitions should they not be appropriate, we may even introduce new dialogue acts as the need arises. Also, we will complement this draft by the discussion of some critical examples, which are difficult for the annotator to decide.

We therefore advice the reader of this paper to continuously check the VERBMOBIL web page for new versions (`http://www.dfki.de/cgi-bin/verbmobil/htbin/doc-access.cgi`).

# Chapter 1

# Introduction

This report describes the dialogue phases and the dialogue acts which are used in the second phase of the VERBMOBIL project. 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.

In addition to this, the task to be solved during the dialogue has been extended: formerly we only had to cope with the task of negotation – two dialogue participants have to agree on a date to meet at a given location. In the extended scenario our model additionally has to cope with information-seeking and -giving dialogues, where a travel agent is trying to meet the needs of a client.

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 the second phase of VERBMOBIL the button has been abolished, i.e. the system continuously monitors and processes the input of the dialogue participants. In contrast to the initial setting we now have to foresee 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. 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 (see also [4]):

- **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.

- **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.

- **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.

# 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, aktionsart, etc. (see [1]). 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 dialogue acts. It is important for the translation of discourse particles[1] as well as for generation purposes. Here, we demonstrate the influence of the dialogue act on the translation of particle *vielleicht* (see also [8], page 36).

[1] One example is the translation of the exlamative *bitte*. If it occurs in an utterance with the dialogue act `thank` it is translated into *you are wellcome*, if not - *please* it the appropriate correspondence. Another case that calls for dialogue 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 [7]).

(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 dialogue act recognition.[2]

The dialogue act of the current utterance is requested by the predicate in (2.4)

(2.4) `dialog_act(+DialogAct).`

The values of `dialog_act` are described in section 4.1.

## 2.2 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 of 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

[2]Dialogue 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 dialogue act information does: appearing in an `accept` utterance, the translation into *assume* is out.

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

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

For the dialogue scheme we used in VERBMOBL-1 we achieved a $\kappa$-value of 0.83 for 10 presegmented dialogue labeled by two coders with equal expertise. The values for stability over time was $\kappa = 0.84$ for the same coder labeling identical dialogues with a time of about one year being between the two experiments (for a detailed description see [5]).

## 2.3 Ease and Methods of Recognition

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 made 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 exchanged frequently with one or more other dialogue acts.

One method used is described in [6] 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 [2]. 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 GREETING or SUGGEST are recognized with recall and precision of 60% to 100%. The more irregular like DIGRESS or DEVIATE_SCENARIO that possibly occur everywhere in the dialogues and are per definitionem 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 good separated. While highly conventionalized acts like GREETING 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_ACKNOWLEDGEMENT_POSITIVE acts and the more special ACCEPT. Since FEEDBACK_ACKNOWLEDGEMENT_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.

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 get a even higher recognition rate. The problematic, "irregular" classes should be mappable on a class that simply states that information is communicated that does not contribute to the negotiation.

Note that in addition to the statistic dialogue-act recognition we also have a knowledge-based dialogue-act recognition. Obviously, the fact, that you can (or cannot) seperate the underlying classes with statistical methodes, cannot be the only evidence for the quality of the classes.

If a human a annotator has some rules at hand that lead to a consistent seperation of classes then one should at least try to encode these knowledge on terms of heuristics. These heuristics can rely on various kinds of knowledge that statistic-based methods cannot exploit.

The statistics-based analysis yields good results for a number of DAs, but not for all of them. For example, Reithinger and Klesen [1997] report recall and precision rates below 50SUGGEST-EXCLUDE-DATE, SUGGEST-SUPPORT-LOCATION and -DURATION, FEEDBACK-RESERVATION, the two CLARIFY, CONFIRM, and others. For this reason, the ConEval module analyzes the syntactic/semantic representation of the utterance and draws on contextual and world knowledge to perform a symbolic DA recognition using weighted default rules. The same module is in charge of disambiguation and anaphora resolution, which in many cases interacts heavily with DA recognition. Ultimately, the goal is to combine the benefits of both statistical and symbolic recognition in order to achieve a robust system with good recognition results. One idea is to perform the statistical analysis first, and on the basis of its result and the a priori success rates known for the DAs, decide what additional "deep" analysis is necessary. For discussion, see [10].

# Chapter 3

# Dialogue Phases in VERBMOBIL-2

For translating words (particular certain verbs), it is important to recognize in which phase 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 in VERBMOBIL phase 2:

**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 phases do not necessarily have to occur in the sequence as given above: 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 **recapitulate**.

(3.2a) Könnten Sie das bitte **wiederholen**, ich hab's nicht verstanden.
(3.1b) 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 @(DISCOURSE_MARKER) , dann bleiben wir dabei
@(ACCEPT) . also ich WIEDERHOLE es noch mal , Montag , neunundzwanzigster
November , bis "ahm Freitag , dritter Dezember @(CONFIRM) .
```

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

```
VEG023::  ja @(UPTAKE), ich glaube , da haben Sie recht @(INFORM
:PHASE ?) .  also , dann sind die Leute noch stark motiviert
@(DIGRESS :PHASE ?) .  ja , machen wir es so @(ACCEPT :PHASE
? ).  ähm soll ich die äh Termine nochmal WIEDERHOLEN @(?  :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 phase 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 phase. 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 @(FEEDBACK_POSITIVE :PHASE NEGOTIATION), ist gut
@(ACCEPT :PHASE NEGOTIATION) . dann schreibe ich mir das gleich
auf @(INFORM :PHASE CLOSING), und dann MACHEN wir das jetzt
FIX @(INFORM :PHASE CLOSING) . auf "ah vielen Dank @(THANK_INIT
: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 @(CONFIRM
:PHASE CLOSING).
```

# Chapter 4

# Dialogue Acts in VERBMOBIL-2

## 4.1 Description of the Individual Dialogue Acts

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). In this figure we also indicated, which phases the individual dialogue acts most likely belong to (for more detail see section 3):

A all phases,

H HELLO

O OPENING,

N NEGOTIATION,

C CLOSING,

B GOOD_BYE

In this chapter we describe each of the dialogue acts 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:

**Name:** Name of the dialogue act.

**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 any propositional content, as e.g. the acts subclassified under CONVENTION, which only transport pragmatic information (see also section **??**).

**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

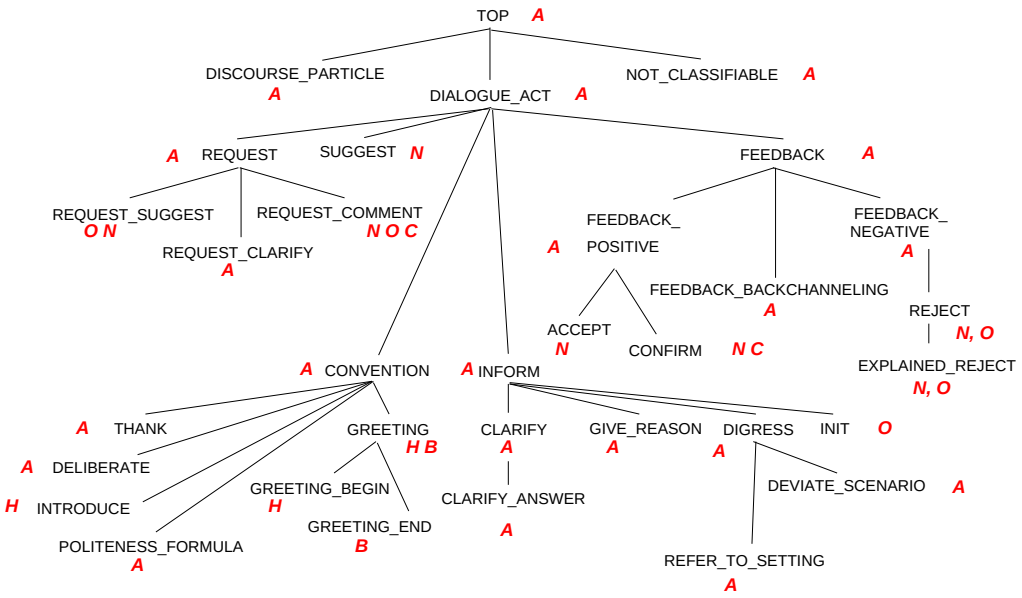


Figure 4.1: The dialogue act hierarchie for VERBMOBIL-2.

the case that more than one definition applies to a dialogue segment. For such a case 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 mulitple annotations to a minimum.

**{German,English, Japanese} Example:** For every language treated in phase 2 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 preceeding 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.

## ACCEPT

**Name:** ACCEPT
**Dialogue Phase:** NEGOTIATION
**Related Propositional Content:**
can contain anaphoric reference to the accepted referent

**Definition:**
With an utterance expressing an ACCEPT the speaker explicitly accepts a proposal. The proposal can be referred to anaphorically, and it can also be explicitly stated. ACCEPT is special case of FEEDBACK_POSITIVE, thus we modelled it as a sub-concept of FEEDBACK_POSITIVE

.

**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 , @(CONFIRM)   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)
```

## CLARIFY

**Name:** CLARIFY
**Dialogue Phase:** IN ALL PHASES
**Related Propositional Content:**
Propositon, i.e. referent and predication

**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. We classified CLARIFY_ANSWER as a sub-concept of CLARIFY.

Note that those cases where the speaker brings an already introduced referent into the common focus of attention by repeating a phrase that refers to that referent are also classified as CLARIFY.

**German Example:** *CDROM 7, g426a.trl*

```
GEP005: <A> gut . @(FEEDBACK_ACKNOWLEDGEMENT BA)
<"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 BA)
<A> <"ah>
        am besten w"are f"ur diesen Zweck ja wahrscheinlich der
        siebenundzwanzigste . @(SUGGEST BA)
da ist Rosenmontag . @(CLARIFY BA)
und das Ganze ist ja nun ziemlich l"acherlich <#Klicken> .
        @(INFORM BA)
```

**German Example:** *CDROM 7, m220d4.trl*

```
ACL024: <#> guten <:<#Mikrowind> Tag:> ,                GREETING_BEGIN
        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:> ,      SUGGEST
        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:> .                                        CARIFY
        <:<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. GIVE_REASON
        <A> <"ahm> <P> ja , <P> was halten Sie <!1 Se> denn von
        Donnerstag , f"unfzehn Uhr ?                         SUGGEST
```

**English Example:** *CDROM 8, r276c.trl*

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

**Japanese Example:**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NAF14:** | hai | wakari | | mashi | ta . | | | |
| | Int | V | | VF | VF | | | |
| | yes | understand | | (polite) | (past tense) | | | |
| | jaa | ichi | ji | ni | nemoto | ga | sochira | no |
| | Int | Card | N | Part | PN | Part | Pron | Part |
| | then | 1 | o'clock | at | Nemoto | (subj) | you | (Genitiv) |
| | kimura | kyooju | no | keNkyuushitsu | ni | ukagai | masu | |
| | PN | N | Part | N | Part | V | VF | |
| | Kimura | Professor | (Genitiv) | Institute | (obj) | visit | (polite) | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| node | soo | yuu | koto | | de | yoroshii | desu | ne . |
| Konj | Adv | V | NOM | | Part | Adj | V | Part |
| because | so | say | (nominalization) | | with | good | be | tag |

| | | | |
|---|---|---|---|
| jaa | shitsuree | shi | masu . |
| Int | N | V | VF |
| then | uncourtesy | make | (polite) |

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

## CLARIFY_ANSWER

**Name:** CLARIFY_ANSWER
**Dialogue Phase:** OPENING, NEGOTIATION, CLOSING
**Related Propositional Content:**

**Definition:**
CLARIFY_ANSWER refers to a an answer which is given to a clarification question that has been made in the preceding context and which is labeled by means of REQUEST_CLARIFY.

**German Example:** *CDROM 7, m065n.trl*

```
CAD026: ... die Reise selbst , <"ah> sind wir uns da einig ,
        vom sechsundzwanzigsten bis zum drei"sigsten ?
        @(REQUEST_CLARIFY BA)

KAK027: richtig vom sechsundzwanzigsten bis zum drei"sigsten
        Juni<Z> . @(CLARIFY_ANSWER AB)
```

**German Example:** *CDROM 7, m236d3.trl*

```
BDF017: ... <A> <"ahm> k"onnen <!1 k"onn'> <:<#> Sie bitte:>
        noch mal die Termine durchgeben ? @(REQUEST_CLARIFY BA)

ADB018: ja , das w"are Montag , Dienstag , Mittwoch und Donnerstag .
        @(CLARIFY_ANSWER AB)
```

**English Example:** *CDROM 8, r261c.trl*

```
NDO006: ... <;period> <;seos> <"ah> +/I/+ I/+ I mean do you have <#> any
        commitments <;comma> <A> <A> shortly after two @(REQUEST_CLARIFY AB)
        because I would like to meet with you for a <:<#Rascheln>
        while:> @(GIVE_REASON AB)

SRH007: <A> <:<#> nope <;period> <;seos> <"ah> I have no commitments
        <;comma> after two o'clock @(CLARIFY_ANSWER BA)
```

**Japanese Example:**

**ABZ04:** soo desu ne kochira no hoo dewa desu ne
Adv V Part Pron Part N Konj V Part
so be tag my part (Genitiv) side for be tag

raishuu no suiyoobi atari ikaga deshoo ka .
N Part N N Adj V Part
next week (Genitiv) Wednesday about how be (cond) (question)

(Let me see. For my part, hm..., how about next week, say, Wednesday?

**NAB05:** raishuu no suiyoobi to osshai
N Part N Part V
next week (Genitiv) Wednesday that say (honorific)

masu to ni juu roku nichi desu ka .
VF Conj Card Card Card N V Part
(polite) if 2 10 6 day be (question)

(If you say next week Wednesday, is this the 26th?)

**ABZ06:** hai soo desu . ni juu roku nichi desu .
Int Adv V Card Card Card N V
yes so be 2 10 6 day be
(Yes, that's right. It is the 26th.)

## CONFIRM

**Name:** CONFIRM
**Dialogue Phase:** NEGOTIATION, TOPIC_CLOSING
**Related Propositional Content:**
can contain an instance of the negotiated topic

**Definition:**
With an utterance expressing a CONFIRM the speaker wraps up the result of the negotiation. This can be done by either giving a summary of the result or by using certain phrases which indicate a closure of this topic of negotiation, such as 'machen wir's so', 'dann halten wir das fest', 'dann trage ich mir das jetzt ein'.

**German Example:** *CDROM7, Z005D2*

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

**English Example:** *CDROM13, R004K*

```
RG3006: <Schmatzen> <A> okay <;comma> @(FEEDBACK_POSITIVE)
        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>  @(GREETING_END)
        <Lachen> <;seos>
```

## CONVENTION

**Name:** CONVENTION
**Dialogue Phase:** IN ALL PHASES
**Related Propositional Content:**
depending on the sub-concept

**Definition:**
The dialogue-act type CONVENTION is defined as being the super-concept for several dialog-act whose main function is to fulfill conventionalized pragmatic functions in the dialogue. The sub-concepts are THANK, DELIBERATE, INTRODUCE, POLITENESS_FORMULA and GREETING.

## DELIBERATE

**Name:** DELIBERATE
**Dialogue Phase:** OPENING, NEGOTIATION, CLOSING
**Related Propositional Content:**
none

**Definition:**
DELIBERATE is used to characterize dialogue segments that serve the time management in a dialogue, as e.g. thinking aloud, holding a turn by talking, etc.

**German Example:** *CDROM 7, m226d1.trl*

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

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

**German Example:** *CDROM 7*

```
GEP004: ... welches Wochenende ist bei
        Ihnen noch frei <A> Ende September oder Mitte <:<#> Oktober:>
        <#Klicken> ? @(REQUEST_COMMENT AB))

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

**German Example:** *CDROM 3, g205a.trl*

```
PRB000: gut , <P> Herr Gro"sheim . Ulf <:<#Klicken> hier:> .
        @(INTRODUCE BA)
        wir sollen<Z> <#Rascheln> <Schmatzen> <A> einen gemeinsamen Besuch in
        Stockholm auf der Messe durchf"uhren , @(INIT BA)
        wie ich hier grade sehe , @(DELIBERATE)
        beziehungsweise auf dem Kongre"s . @(INIT BA)
```

**English Example:** *CDROM 8, r245c.trl*

```
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 AB)
        <;period> <;seos> <A> <"ah> anytime before then
        <;comma> I will <!2 I'll> have to
        <;comma> <"ah> check my schedule @(DELIBERATE AB)
        <;period> <;seos> are you free
        on those days @(REQUEST_COMMENT AB)
```

**Japanese Example:**

| | | | | |
|---|---|---|---|---|
| **NAZ10:** | ku | gatsu | yokka | wa |
| | Card | N | Date | Part |
| | 9 | month | 4th | (theme) |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| chotto | osoi | desu | kedo | yoroshii | deshoo | | ka . |
| Adv | Adj | V | Conj | Adj | V | | Part |
| a bit | late | be | but | good | be (cond) | | (question) |

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

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **AAG11:** | chotto | mat | te | | kudasai | ne . | ku |
| | Adv | V | VF | | V | Part | Card |
| | a bit | wait | (te-form) | | please | tag | 9 |

| | | | | |
|---|---|---|---|---|
| gatsu | no | yokka | desu | to |
| N | Part | Date | V | Conj |
| month | (Genitiv) | 4th | be | if |

| | | | | | | |
|---|---|---|---|---|---|---|
| ai | te | ru | | jikaN | ga | gogo |
| V | VF | V | | N | Part | N |
| be free | te-form | (present tense) | | time | (subj) | afternoon |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| no | ichi | ji | kara | saN | ji | | made |
| Part | Card | N | PP | Card | N | | PP |
| (Genitiv) | 1 | o'clock | from | 3 | o'clock | | until |

shika nai N desu .
Part Adj NOM V desu
except not (nominalization) be

(One moment, please. If this is September the 4th, I would have no time but in the afternoon from one to three.)

## DEVIATE_SCENARIO

**Name:** DEVIATE_SCENARIO
**Dialogue Phase:** OPENING, NEGOTIATION, CLOSING
**Related Propositional Content:**
none

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

**German Example:** *CDROM 7, g406a.trl*

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

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

**English Example:** *CDROM 8, r271c.trl*

```
TEH006: <:<#> <Schmatzen> <A> <#Rascheln> alright <;comma> well
        <;comma> that apart @(NOT_CLASSIFIABLE AB)
```

```
<;comma> hey <;comma> <Ger"ausch> that is
        <!2 that's> pretty exciting @(DEVIATE_SCENARIO AB)
<;period> <;seos> you are <!2
        you're> going to Hawaii this weekend @(DEVIATE_SCENARIO AB)
<;comma> huh <;quest>
        <;seos> +/two/+ <;comma> <;seos> what did you say two
        weeks @(DEVIATE_SCENARIO AB)
        <;quest> <;seos> you ever been there before @(DEVIATE_SCENARIO AB)
<;quest>
        <Schmatzen> <A> <#Klicken> <A>:> <;seos>


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


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

## DIALOGUE_ACT

**Name:** DIALOGUE_ACT
**Dialogue Phase:** OPENING, NEGOTIATION, CLOSING
**Related Propositional Content:**
??

**Definition:**
If a dialogue segment consists of more than only a discourse marker, and if it is not too fragmentary to be attributed some semantic and/or pragmatic meaning it can be minimally chararcterized by DIALOGUE_ACT.

## DIGRESS

**Name:** DIGRESS
**Dialogue Phase:** OPENING, NEGOTIATION, CLOSING
**Related Propositional Content:**
not specifiable

**Definition:**
DIGRESS covers various cases of deviation from the 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.

## EXPLAINED_REJECT

**Name:** EXPLAINED_REJECT
**Dialogue Phase:** NEGOTIATION
**Related Propositional Content:**
full proposition

**Definition:**
Very often the speaker implicitly rejects a proposal by presenting a reason for not accepting it. Therefore we introduced the dialogue act EXPLAINED_REJECT that is modeled as a subconcept of reject.

**German Example:** *CDROM 7, m241d1.trl*

```
BDK003: ja , was h"atten Sie denn da f"ur einen Alternativtermin ?
        @(REQUEST_SUGGEST BA)


ADG004: kleinen <:<#> Moment:> bitte<Z> , @(DELIBERATE)
<#> von<Z> <P> <:<Schmatzen>
        <A>:> Montag , dem <:<#Rascheln> siebzehnten:> <:<#Mikrobe>
        Mai , bis:> zum Freitag , dem einundzwanzigsten Mai ,
        @(SUGGEST AB)
da <:<#> h"atten:> wir nu<Z>r Christi Himmelfahrt im <:<#>
        Weg:> . @(CLARIFY AB)

BDK005: am Montag bin ich <:<#> ich leider:> schon au"ser Haus .
        @(EXPLAINED_REJECT BA)
<A>
        wie w"ar's denn bei Ihnen <"ahm> <#Mikrowind> <Schmatzen>
        <:<#Mikrowind> von achtundzwanzigsten April:> <A> <"ah>
        <:<#Mikrobe> bis:> dritten Mai ? @(SUGGEST BA)
```

**English Example:** *CDROM 8, r153.trl*

```
AKK000: <Schmatzen> <A> hi I <;comma> <A> <Schmatzen> like to make
        another appointment <;quest> <;seos>
        @(INIT AB)
<"ahm> <;comma> <A> <Schmatzen> <A> how is the <"ah> twenty
        first or twenty second <;period> <A> for you <;period> <A>
        <#Klicken> <;seos>
```

```
        @(SUGGEST AB)

KGD001: <A> <Schmatzen> <A> <#Mikrobe> <A> well <;comma> I am <!2 I'm>
        out of <#Mikrobe> town from the twenty first <#Mikrobe> to the
        twenty <#Mikrobe> third <;comma> <A> <;seos> <A>
        @(REJECT BA)
<"ahm> <;comma> <Ger"ausch> I am <!2 I'm> also going to be out
        of town on <#> the twenty ninth <;period> <#Mikrobe> <;seos>
        <A> <A> @(SUGGEST BA)
is the twenty <#Mikrobe> fourth <;quest> <#Mikrobe> okay
        <;quest> <;seos> Thursday <;comma>@(SUGGEST)
I do not <!2 don't> have anything on
        my schedule that day <;period> <#Klicken> <A> <#> <;seos>
        @(GIVE_REASON)
```

## GREETING

**Name:** GREETING
**Dialogue Phase:** SEE SUB-CONCEPTS
**Related Propositional Content:**
no propositional content

**Definition:**
GREETING is defined as the superconcept of GREETING_BEGIN and GREETING_END. It can also be used for greetings that are not specified with respect to their use at the beginning or at the end of the dialogue.

## GREETING_BEGIN

**Name:** GREETING_BEGIN
**Dialogue Phase:** HELLO
**Related Propositional Content:**
no propositional content

**Definition:**
GREETING_BEGIN is used for all kinds of initial greetings.

**German Example:** *CDROM7, z005d.trl*

```
FLR011: ja , hallo , Frau <:<#Mikrobe> Inglefinger:> .
        @(GREETING_BEGIN AB)
```

**English Example:** *CDROM13, r310c.trl*

```
SVG000: <#Klicken> <#> <#> hi <;comma> @(GREETING_BEGIN)
        <:<#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>  @(SUGGEST)
```

**Japanese Example:**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **AAF02:** | nouchi | seNsee | de | irasshai | masu | ka | . |
| | PN | N | V | V | VF | Part | |
| | Nouchi | Professor | - | be (polite) | (polite) | (Question) | |

| | | | |
|---|---|---|---|
| koNnichiwa | hiroishi | desu | . |
| MWLex | PN | V | |
| hello | Hiroishi | be | |

(Oh, is this Professor Nouchi? Hello. This is Hiroishi.)

## GREETING_END

**Name:** GREETING_END
**Dialogue Phase:** BYE
**Related Propositional Content:**
no propositional content

**Definition:**
With an GREETING_END the speaker says good bye to the dialogue partner(s).

**German Example:** *CDROM7, z005d.trl*

```
FLR023: okay , @(FEEDBACK_POSITIVE BA)
        klar . @(FEEDBACK_ POSITIVE BA)
        bis dann , @(GREETING_END BA)
        tschau . @(GREETING_END BA)
```

**English Example:** *CDROM13, r310c.trl*

```
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>
        @(GREETING_END)
```

## FEEDBACK

**Name:**
**Dialogue Phase:** OPENING, NEGOTIATION, CLOSING
**Related Propositional Content:**
possibly anaphoric referents

**Definition:**

FEEDBACK covers various cases of reactions to contributions which have been made by another dialogue participant. The reactions are differentiated according to their attitude towards that previous contribution FEEDBACK_ACKNOWLEDGEMENT_POSITIVE, FEEDBACK_ACKNOWLEDGEMENT_NEGATIVE. One subtype is used for cases where a dialogue participant indicates that he still follows the discourse FEEDBACK_BACKCHANNELING.

## FEEDBACK_BACKCHANNELING

**Name:**
**Dialogue Phase:** OPENING, NEGOTIATION, CLOSING
**Related Propositional Content:**
none

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

**German Example:** *CDROM S, l011n,trl*

```
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 . @(INFORM)
        <A> geht 's bei Ihnen nich' vielleicht ein bi"schen
        fr"uher ? @(SUGGEST)

MAB031: geht nicht . @(REJECT)

MIG032: <hm> @(FEEDBACK_BACKCHANNELING)

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

**German Example:** *CDROM S, k015d.trl*

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

WOG017: (@mhm) . @(FEEDBACK_BACKCHANNELING)

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

WOG019: (@mhm ,mhm) @(FEEDBACK_BACKCHANNELING)

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

**English Example:** *CDROM 3, m023n.trl*

```
So far, no English examples available in our corpus.
```

## FEEDBACK_NEGATIVE

**Name:** FEEDBACK_NEGATIVE
**Dialogue Phase:** IN ALL PHASES
**Related Propositional Content:**
no propositional content

**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_POSITIVE is often expressed by lexemes or phrases such as 'nein', 'nee', 'tut mir leid', 'schwierig'.

**German Example:** *CDROM7, M245D3*

```
BDO015: ...
        <Schmatzen> am Montag , den f"unften<Z> Juli , haben
        <!1 ham> Sie da Zeit "uber Mittag ? @(SUGGEST BA)


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

**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:** | juu | ni | ji | haN | kara | soo | desu | ne |
| | Card | Card | N | N | PP | Adv | V | Part |
| | 10 | 2 | o'clock | half | from | therefore | be | tag |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| ni | ji | deshi | tara | ichi | jikaN | haN | to | yuu |
| Card | N | V | VF | Card | N | N | Part | V |
| 2 | o'clock | be | (cond) | 1 | hour | half | that | say |

| | | | | |
|---|---|---|---|---|
| koto | desu | yo | | ne . |
| NOM | V | Part | | Part |
| (nominalization) | be | (enhancement) | | tag |

(If this is from twelve thirty until two, that would be one hour and half, right?)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **AAG23:** | ie | juu | ni | ji | kara | ni | ji |
| | Int | Card | Card | N | PP | Card | N |
| | no | 10 | 2 | o'clock | from | 2 | o'clock |

| | | | | | |
|---|---|---|---|---|---|
| made | demo | kekkoo | desu | yo . | |
| PP | Part | Adj | V | Part | |
| until | even | very well | be | (enhancement) | |

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

## FEEDBACK_POSITIVE

**Name:** FEEDBACK_POSITIVE
**Dialogue Phase:** IN ALL PHASES
**Related Propositional Content:**
no propositional content

**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 BA)

WAR021: <Schmatzen> <P> gut , @(FEEDBACK_POSITIVE AB)
        dann lassen Sie uns das so vereinbaren
        <#Rascheln> . @(ACCEPT AB)
```

**English Example:** *CDROM13, R322C*

```
AJH006: <:<#> that is <!2 that's> great <;period> <A> <;seos>
        @(ACCEPT)
        <#Klicken> why do not <!2 don't> we go to the <"ah> <;comma>
        Spaghetti Warehouse at five thirty and see if <"ah> <;comma>
        <A> <Schmatzen> <:<#Klicken> Trevor notices:> us this time
        <;period> <A> <#Klicken> <A> <A>:> <;seos> @(SUGGEST)
RGM007: <A> <Schmatzen> okay <;comma> <;seos> @(FEEDBACK_POSITIVE_<#>
        sounds like a plan <;period> <;seos> @ (CONFIRM)<:<#> I will:>
        <!2 I'll> see you then <;period> <#Klicken> <;seos>
```

```
@(GREETING_END)
```

## GIVE_REASON

**Name:** GIVE_REASON
**Dialogue Phase:** OPENING, NEGOTIATION, CLOSING
**Related Propositional Content:**
full proposition

**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. Utterances to be labeled with GIVE_REASON can be differentiated from utterances to be labeled with REJECT insofar as in the latter case the emphasis is on the impossibility of a given option rather than on the reason why this is the case. Also, keywords may serve as good indicator when to use GIVE_REASON: typical key words are *because, since, weil, denn.* In some cases, this distinction may nevertheless be difficult to make and an utterance has to be labeled multiply with both dialogue acts. GIVE_REASON can in principle occur anywhere in a dialogue.

**German Example:** *CDROM 7, z005d2.trl*

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

**German Example:** *CDROM 7, z007d2.trl*

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

## INFORM

**Name:** INFORM
**Dialogue Phase:** OPENING, NEGOTIATION, CLOSING
**Related Propositional Content:**
to be determined

**Definition:**
The label INFORM is reserved for cases where none of the categories REQUEST, SUGGEST, CONVENTION or FEEDBACK apply. INFORM can be subcategorized as CLARIFY, INIT, GIVE_REASON, OR DIGRESS. 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:** *CDROM 7, m220d1.trl*

```
BCP001: ja , guten Tag<Z> , <"ahm> Frau G"urtner ,  @(GREETING_BEGIN)
        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 Bettag ist <!1 is'> .
        @(INFORM)
        <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:** *CDROM 7, m065n.trl*

```
CAD038: <Lachen> <:<#Klicken> ja:> , da hatten wir +/g=/+ %wirklich
        <:<#> Gl"uck:> mit unseren Terminen<Z> ,
        @(FEEDBACK_POSITIVE AB)
        <A> ja , falls sich nochwas ver_ <P> _"andert , <:<#Mikrobe>
        w"urd' ich Sie<Z>:> anrufen<Z> . @(INFORM AB)
        <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:> ? @(CONVENTION AB))
```

**English Example:** *CDROM8, r134c.trl*

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

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

## INIT

**Name:** INIT
**Dialogue Phase:** OPENING, NEGOTIATION, CLOSING
**Related Propositional Content:**
the topic of the dialogue

**Definition:**
The dialogue act INIT is used to describe utterances where the topic of the interaction to follow is introduced.

INIT co-occurs very often with SUGGEST as multiple dialogue act.

**German Example:** *CDROM 7, z007d1.trl*

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

**German Example:** *CDROM 7, z008d2.trl*

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

**English Example:** *CDROM 8, r198c.tr*

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

## INTRODUCE

**Name:** INTRODUCE
**Dialogue Phase:** OPENING
**Related Propositional Content:**
e.g. name, profession, position

**Definition:**
When dialogue partners have not met each other they usually start with an introduction. They may introduce themselves by giving their name, his/her profession or position and - depending on the scenario - other person-related information that may be relevant for the dialogue.

**German Example:** *CDROM 7, m232d2.trl*

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

**English Example:** *CDROM 8, r259c.trl*

```
NAA000: <#Rascheln> <Schmatzen> <A> hi Ian @(GREETING_BEGIN AB)
        this is Nick @(INTRODUCE AB)
```

## NOT_CLASSIFIABLE

**Name:** NOT_CLASSIFIABLE
**Dialogue Phase:** OPENING, NEGOTIATION, CLOSING
**Related Propositional Content:**
none

**Definition:**
Dialogue segments are labeled NOT_CLASSIFIABLE if they are either too fragmentary or too uncomprehensible to reliably characterize them by a dialogue act.

**German Example:** *CDROM 7, m243d1.trl*

```
BDM009: <:<Schmatzen> <A>:> das ist <!1 is'> auch <!1 au'>
        schlecht , @(REJECT BA)
        weil ich da am Samstag , den sechsundzwanzigsten einen <!1 'n>
        Termin hab' . @(GIVE_REASON BA)
        <A> also scheint <#> der Juni/- @(NOT_CLASSIFIABLE BA)
        also <!1 a'so> <:<#Mikrobe> ich:> kann Ihnen ja noch mal
        <!1 ma'> sagen , @(DELIBERATE BA)
        also
        ich k"onnte zum Beispiel vom achtzehnten an <A> die f"unf Tage
        oder eben vom achten , also im Bereich vom achten bis zum
        <:<#Mikrobe> sechzehnten:> Juni . @(SUGGEST BA)
```

**English Example:** *CDROM 8, r168c.trl*

```
Bgl002: <#> <Schmatzen> <A> <"ah> Friday is pretty bad for me
        <;period> <;seos>@(REJECT AB)
        +/I/+ <"ah> I have <!2 I've> got/+ <;seos>@(NOT_CLASSIFIABLE AB)
        I am <!2 I'm> busy from two to five @(SUGGEST AB)
        unless you can meet me some time before that <;period>
        <#Klicken> <#> <#Klicken> <#> <;seos> @(SUGGEST AB)
```

**English Example:** *CDROM 8, r209c.trl*

```
SKH001: <Schmatzen> <A> nope <;period> <A> I am <!2 I'm> on vacation
        then @m(REJECT BA) @m(GIVE_REASON BA)
        <;period> <;seos> +/why do not <!2 don't> we/+ @(NOT_CLASSIFIABLE BA)
        <;seos> <"ah> <;comma> <Schmatzen> <A> let me see
        @(DELIBERATE BA)
```

```
<;period> <;seos> seventh is free <;comma> ninth is free
<;comma> <Schmatzen> <"ahm> <Schmatzen> either of tho=/+
@(SUGGEST BA)
```

## POLITENESS_FORMULA

**Name:** GREETING_END
**Dialogue Phase:** IN ALL PHASES
**Related Propositional Content:**
politeness_formula

**Definition:**
POLITENESS_FORMULAE are linguistic patterns which are tied to certain recurrent social situations. They do not provide anything to the content of a contribution, but they are relevant for a smooth interaction. Speakers use them in the dialogue in order to stabilize their relationship and to fullfil certain conventions.

**German Example:** *CDROM7, z008d2.trl*

```
TAT027: ja , hallo , Frau Michaelis . @(GREETING_BEGIN AB)
        wie geht 's Ihnen <!1 Ihn'> denn ?
        @(POLITENESS_FORMULA AB)
        <P> lange nicht <!1 nich'> gesehen . @(POLITENESS_FORMULA AB)

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

**English Example:** *CDROM13, R429C*

```
SXL000: <#Klicken> <:<#> <Schmatzen> <A> hi Rob <;comma>
        @(GREETING_BEGIN BA)
        good to see you again <#Klicken> @(POLITENESS_FORMULA)
```

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| **NAU07:** | raishuu | desu | to | ni | juu | roku | ga |
| | N | V | Conj | Card | Card | Card | Part |
| | next week | be | if | 2 | 10 | 6 | (subj) |

| | | | |
|---|---|---|---|
| ai | te | masu | kedomo . |
| V | VF | VF | Part |
| be free | te-form | (polite) | (end of sentence) |

(If this is the next week, the 26th is free.)

**ACC08:** mooshiwake nai N desu
N Adj NOM V
excuse no (subst) be

watakushi ni juu roku nichi wa ichi nichi juu
Pron Card Card Card N Part Card N PP
I 2 10 6 dat (theme) 1 day whole

kaigi de tsumat te ori mashi te
N Part V VF V VF VF
meeting with be occupied te-form be (polite) te-form

dekire ba ni juu nana nichi mokuyoobi no
V VF Card Card Card N N Part
be possible (cond) 2 10 7 day Thursday (Genitiv)

gogo ka ni juu hachi nichi no
N Conj Card Card Card N Part
afternoon or 2 10 8 day (Genitiv)

kiNyoubi gozeNchuu **atari** ga arigatai N desu ga
N Adv N Part Adj NOM V Part
Friday morning about (subj) grateful (Subst) be (end of sent.)

seNsee go tsugoo ikaga desu ka .
N Hon N Adv V Part
Professor (polite) how be (question)

(I have no word to excuse me. On the 26th I have meetings all the day, I would be grateful if we could make it on Thursday the 27th, in the afternoon, or on Friday the 28th in the morning, if possible. Would that suit you?)

## REFER_TO_SETTING

**Name:** REFER_TO_SETTING
**Dialogue Phase:** OPENING, NEGOTIATION, CLOSING
**Related Propositional Content:**
none

**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:** *CDROM 1, n016k.trl*

```
MS4021: <P> <A> gut da kann ich nur viel Gl"uck w"unschen <A>
        @(DEVIATE_SCENARIO AB) und <Z> Du kannst wieder r"uberkommen .
        @(REFER_TO_SETTING AB)
```

**German Example:** *CDROM 2, g113a.trl*

```
JAK000: <A> n'Tag . @(GREET AB)
        hier ist<Z> Herr M"uller-L"udenscheidt . @(INTRODUCE AB)
        <P> h"oren Sie mich <#Klicken> ? @(REFER_TO_SETTING AB)

REK001: <A> Tag , Herr M"uller-L"udenscheidt . @m(GREETING_BEGIN BA)
        @m(INTRODUCE BA) Doktor Kl"ubner . @(INTRODUCE BA)
        h"ore Sie wunderbar . @(REFER_TO_SETTING BA)
```

**English Example:** *CDROM 8, r261c.trl*

```
NDO004: <"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 AB)
        <;period> <;seos> <#> <#>
        +/wh=/+ <Ger"ausch> <#> what happ=/+ <;seos> <#> <#>
        <;crosstalk> what happened there @(REFER_TO_SETTING AB)
        <;period> <;seos> <;crosstalk>
        <#Klicken> <#Klicken> <Schmatzen> <A> <#Rascheln> <:<#>
        <#Klicken> <#Klicken> <#> <#Mikrobe> the system has
        stopped @(REFER_TO_SETTING AB)
```

## REJECT

**Name:** REJECT
**Dialogue Phase:** OPENING, NEGOTIATION
**Related Propositional Content:**
a proposition

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

**German Example:** *CDROM 7, m228d3.trl*

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

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

**German Example:** *CDROM 7, m230d4.trl*

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

ACV024: <:<#Mikrobe> gr"u"s Gott:> , @(GREETING_BEGIN BA)
        mein Name ist <!1 is'> von Sudniz , <A> +/$F $A/+ <"ah>
        <:<#> $F:> <;statt $V> $O $N <#> <Schmatzen> <A>
        $S $U $D $N $I $Z , @(INTRODUCE BA)
        <#Mikrobe> <A> und der zehnte August <:<#Mikrowind> pa"st
        mir leider:> gar nicht . @(REJECT BA)
        <"ahm> <Ger"ausch> <Schmatzen> vielleicht +/am<Z> September/+
        f"unfzehnter September ? @(SUGGEST BA))
```

**English Example:** *CDROM 8, /r197c.trl*

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

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

**English Example:** *CDROM 8, r218c.trl*

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

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

**Japanese Example:**

**NAB09:**

| soo | desu | ne | sukoshi | ni |
|---|---|---|---|---|
| Adv | V | Part | Adv | Card |
| so | be | tag | a bit | 2 |

| juu | go | nichi | no | hoo | mo |
|---|---|---|---|---|---|
| Card | Card | N | Part | N | Part |
| 10 | 5 | day | (Genitiv) | side | also |

| tsugoo | ga | warui | N | desu | ga | . |
|---|---|---|---|---|---|---|
| N | Part | Adj | NOM | V | Part | |
| circumstances | (subj) | bad | (Subst) | be | (end of sentence) | |

| ni | juu | nana | nichi | no |
|---|---|---|---|---|
| Card | Card | Card | N | Part |
| 2 | 10 | 7 | day | (Genitiv) |

| gogo | wa | doo | deshoo | ka | . |
|---|---|---|---|---|---|
| N | Part | Adv | V | Part | |
| afternoon | (theme) | how | be (cond) | (question) | |

(Oh, okay. The 25th wouldn't suit me very well either. How about the 27th in the afternoon?)

## REQUEST

**Name:** REQUEST
**Dialogue Phase:** IN 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 the speaker requests some action from the hearer, but if it is undecidable whether it is a REQUEST_CLARIFY, a REQUEST_COMMENT, a REQUEST_SUGGEST or some other type of request, the dialogue act REQUEST is used.

## REQUEST_CLARIFY

**Name:** REQUEST_CLARIFY
**Dialogue Phase:** IN ALL PHASES
**Related Propositional Content:**
Propositon, i.e. referent and predication

**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:** *CDROM 7, M246d2*

```
ADL007: ja , gr"u"s Gott , Herr Quell , @(GREETING_BEGIN BA)
        mein Name ist <A> <:<#Mikrowind> Walberg:> , $W <Schmatzen> $A
        $L $B $E $R <#Mikrobe> $G . @(INTRODUCE BA) <:<#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 BA)
        sagen <:<#Mikrobe> Sie:> mir das <!1 des> <:<#Mikrobe> doch:>
        bitte noch mal . @(REQUEST_CLARIFY BA)
```

**German Example:** *CDROM 7, Z007D1*

```
BET003: Montag , Dienstag , sagen Sie , neunzehnter , zwanzigster
        Juni ? @(REQUEST_CLARIFY BA)
```

**Japanese Example:**

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **AAG19:** | soo | desu | ka | . | deshi | tara | mikka | no | shuu | wa |
| | Adv | V | Part | | V | VF | Date | Part | N | Part |
| | so | be | (Question) | | be | (cond) | 3rd | (Genitiv) | week | (theme) |

| | | | | | |
|---|---|---|---|---|---|
| muzukashii | kato | | omoware | masu | ga |
| Adj | Part | | V | VF | Part |
| difficukt | (question) | that | seem | (polite) | (end of sentence) |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| tooka | no | shuu | desu | to | gomeNnasai | desu | nee | |
| Date | Part | N | V | Conj | V | V | Part | |
| 10th | (Genitiv) | week | be | if | sorry | be | tag | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| nakanaka | ai | te | ru | jikaN | ga | ari | mase | N | node |
| Adv | V | VF | V | N | Part | V | VF | VF | Conj |
| not easy | free | te-form | (pres.) | time | (subj) | be | (polite) | not | because |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| mokuyoobi | no | juu | ni | ji | kara | ni | ji | made |
| N | Part | Card | Card | N | PP | Card | N | PP |
| Thursday | (Genitiv) | 10 | 2 | o'clock | from | 2 | o'clock | until |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| chuushoku | o | heNjoo | shi | te | o | ai | |
| N | Part | N | V | VF | Hon | N | |
| lunch | (Obj) | doing without | make | te-form | (polite) | meeting | |

| | | | | | | |
|---|---|---|---|---|---|---|
| suru | koto | wa | deki | masu | ga | . |
| V | NOM | Part | V | VF | Part | |
| make | (nominalization) | (theme) | be possible | (polite) | (end of sentence) | |

(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.)

**NAZ20:**

| | | | | | |
|---|---|---|---|---|---|
| ku | gatsu | no | nanoka | desu | ka . |
| Card | N | Part | Date | V | Part |
| 9 | month | (Genitiv) | 7th | be | (Question) |

(Is this September the 7th?)

## REQUEST_COMMENT

**Name:** REQUEST_COMMENT
**Dialogue Phase:** TOPIC_OPENING, NEGOTIATION, TOPIC_CLOSING
**Related Propositional Content:**
no propositional content

**Definition:**
With an utterance expressing a REQUEST_COMMENT the speaker explixitly 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:** *CDROM 7, M246d4*

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

**German Example:** *CDROM 7, M245d4*

```
BDO029: da k"onnte <:<#> ich:> erst ab dreizehn oder ab vierzehn Uhr ,
        @(SUGGEST AB)
        <P> wenn das <!1 des> nichts <:<#> ausmacht:> ?
        @(REQUEST_COMMENT AB)
```

**English Example:** *CDROM 13, R005K*

```
PN1004: Thursday <;comma> evening <;period> <A> @(SUGGEST)
        would <:<#> that be:> fine <;quest> <#Klicken> <;seos>
        @(REQUEST_COMMENT BA)
```

## REQUEST_SUGGEST

**Name:** REQUEST_SUGGEST
**Dialogue Phase:** TOPIC_OPENING, NEGOTIATION
**Related Propositional Content:**
possibly an anaphoric expression, refering to the type of the proposal that is requested

**Definition:**
With an utterance expressing a REQUEST_SUGGEST the speaker asks the dialogue partner to make a proposal.

**German Example:** *CDROM 7, g422a.trl*

```
GEP005: <A> ja , @(FEEDBACK_POSITIVE BA)
        <"ah> es geht bei mir. @(ACCEPT BA)
        aber welcher Tag ?  @(REQUEST_SUGGEST BA)
```

**German Example:** *CDROM 7, m229d.trl*

```
ULJ001: ja , guten Tag , Frau Meesters ,
        @(GREETING\_BEGIN BA)
        dann<Z> <"ahm> <Schmatzen> <A> wollen wir mal schauen , was
        wir da<Z> <A> vereinbaren k"onnen . @(INIT BA) 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 BA)
```

**English Example:** *CDROM 8, r126c.trl*

```
SRH005: okay <;comma> @(FEEDBACK_POSITIVE)
        the twenty seventh +/sound f=/+ <;comma> sounds
        fine <;period> @(ACCEPT AB)
 <;seos> <"ah> pick a time <;comma> <A>
        <#Klicken> <;seos> @(REQUEST_SUGGEST AB)
```

**English Example:** *CDROM 8, r126c.trl*

```
JBT006: <Schmatzen> how 'bout one $P $M of the twenty seventh
        <;period> @(SUGGEST BA)
        <;seos> where do you think we should meet <;period> <#Klicken>
        <;seos> @(REQUEST_SUGGEST BA)
```

## SUGGEST

**Name:** SUGGEST
**Dialogue Phase:** NEGOTIATION
**Related Propositional Content:**
explicit instance or aspect of the negotiated topic (can be a set)

**Definition:**
With an utterance expressing a SUGGEST the speaker proposes an explicit instance or aspect of the negotiated topic (not neccessarily only one instance or aspect, could also be a set of instances). We decided to subsume negative suggestions under SUGGEST ('The first of April is impossible for me'). 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:** *CDROM 14, 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:** *CDROM 14, 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"uhestens am
        achtzehnten Februar , <#> dem <:<#> Sonntag:> <#> . @(SUGGEST)
```

**English Example:** *CDROM 13, 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

**Name:** THANK
**Dialogue Phase:** IN ALL PHASES
**Related Propositional Content:**
no propositional content

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

**German Example:** *CDROM7, m244d3.trl*

```
BDN024: <#> alles klar , @(FEEDBACK_POSITIVE BA)
        wir sehen uns dann am Montag um elf . @(CONFIRM BA)

ADJ025: okay , @(FEEDBACK_POSITIVE AB)
        danke sch"on , @(THANK AB)
        Wiedersehen <!1 Wiedersehm> . <A> @(GREETING_END AB)
```

**English Example:** *CDROM13, r311c.trl*

```
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> @(GREETING_END)
```

**Japanese Example:**

| | | | | | | |
|---|---|---|---|---|---|---|
| **AAQ02:** | oosaka | daigaku | no | kisaka | desu | ga . |
| | PN | N | Part | PN | V | Part |
| | Osaka | Uni | (Genitiv) | Kisaka | be | (end of sentence) |

| | | | | | | |
|---|---|---|---|---|---|---|
| seNjitsu | wa | doomo | arigatoo | gozai | mashi | ta . |
| N | Part | Adv | Adv | V | VF | VF |
| a few days ago | (theme) | really | thankful | be (polite) | (polite) | (Past) |

(I am Kisaka of Osaka University. Thanks a lot for a few days ago.)

## 4.2 The label DISCOURSE_PARTICLE

DISCOURSE_PARTICLE is a concept that we decided not to annotate. We describe it here for two reasons:

1. This concept and its hierarchy of subconcepts is used in the system. Some system-produced segments might not be utterances according to the segmentation principles as described in section 4.5. It does not make sense to assign dialogue acts to these segments. But some of these segments do express a discourse function that we capture in terms of the sub-concepts of the concept DISCOURSE_PARTICLE.

2. Some phrases, such as German 'ja', 'okay' etc., can be interpreted as either being utterances expressing a dialogue act (namely FEEDBACK_POSITIVE) or as discourse particles. In this section we show how to distinguish between these possibilities on the basis of contextual knowledge.

We represent the discourse function of utterances as dialogue acts (for a definiton of the unit of analysis *utterance* see section 4.5). But not only utterances express discourse functions: there are segments that are not to be classified as whole utterances but nevertheless express a certain discourse function. Examples for these segments, which do not contribute to the denotational meaning of an utterance, are discourse markers such as German 'aber', 'allerdings', 'also', 'beziehungsweise', 'da', 'dann', 'das hei"st', 'denn', 'direkt', 'doch', 'eigentlich', 'halt', 'ja', ' naja', 'ne', 'noch', 'nur', 'oder', 'ruhig', 'schon', 'so', 'sonst', 'vielleicht'. Their frequent occurence is a characteristic property of German spontaneously spoken discourse. Our scheme of classification gives us the possibility to analyse these segments as DISCOURSE_PARTICLES. In [9] the authors introduce a set of discourse functions for discourse particles. This set basically consists of the following four classes:

**Structuring** consists of the following sub-concepts:

- *uptake* enables the hearer to adopt to acoustic properties of the speaker's utterances without losing propositional content, signals a turn taking at the beginning of a turn and a turn holding within a turn. (Examples: 'ja', 'also').
- *check* is a turn yielding signal, prompts the dialogue partner to respond. With a phrase expressing a check the speaker seeks the approval of the hearer. (Example: 'oder').

- *repair marking* indicates problems in planning and performing the output, signals a new start, is a turn holding signal. (Examples: 'ach nein', ' äh').

**Speaker-Attitude Signaling** The signaling of speaker attitudes is represented by values like *positive*, *negative* (example: 'leider') and *indifferent* (example: 'ruhig').

**Smoothing** refers to the relation between the discourse participants, serves as a means to express cooperativity, expresses politeness. (Examples: 'denn', 'doch') Some smoothing discourse particles are used as fillers: They allow the speaker to plan the output, avoid undue pauses, help her to to keep the right to speak. (Examples: 'ich würde sagen', 'äh').

**Coherence Marking** This function guarantees the embedding of the contents of the utterance within the context, it is used to check the common basis of the participants. (Example: 'schon').

A further elaboration of this set is given in [11]. A set for Verbmobil-2 is currently under development.

Note that there might be a problem in classifying occurences of certain lexemes: German 'ja' can either be used as an utterance expressing the dialogue act FEEDBACK_POSITIVE, or it can be used as a DISCOURSE_PARTICLE, expressing either the discourse function UPTAKE or the discourse function CHECK. The latter two can be distinguished by the position of the 'ja' within the sentence: only a sentence-final 'ja' can express the discourse function CHECK. In order to distinguish between FEEDBACK_POSITIVE and UPTAKE for a sentence-initial 'ja': we propose the following heuristics:

1. If 'ja' presents a whole term, it is either classified as FEEDBACK_POSITIVE or FEEDBACK_BACKCHANNELING.

2. If 'ja' can be interpreted as an answer to a yes/no-question (expressing a CLARIFY_QUERY, a REQUEST_COMMENT or a SUGGEST_SUPPORT) then we regard it as a FEEDBACK_POSITIVE.

3. If 'ja' is combined with a lexeme or phrase marking a FEEDBACK_POSITIVE or an ACCEPT, then we regard the 'ja' together with this lexeme or phrase as a FEEDBACK_POSITIVE (e.g. 'ja, wunderbar', 'ja, alles klar', 'ja, genau', 'ja, paßt blendend', 'ja, einverstanden'.)

4. In all other cases (this is the majority of all cases) we regard 'ja' as an UPTAKE.

**German Example:** *CDROM 14, j531a.trl*

```
EP003: <Schmatzen> <A> also , ich k"onnte<Z> <P> ab<Z> <P> Sonntag ,
       achtundzwanzigster<Z> Januar , bis<Z> <Ger"ausch> +/Februar/+
       bis zum<Z> ersten Februar <A> , <:<#Klopfen> Donnerstag:> .
       @(SUGGEST)
OSH004: <A> ja , das <:<#Mikrobe> freut:> mich ja sehr . @(ACCEPT)
       das pa"st bei mir auch . @(ACCEPT)
       ich bin zwar <:<#Mikrobe> vorher:> in Hamburg
       unterwegs gewesen , @(INFORM)
       aber<Z> <A> <Ger"ausch> <:<#Mikrobe>
       nachdem:> das letzte Arbeitstreffen so schwierig<Z> <P>
       <Ger"ausch> zu vereinbaren war , +/w=/+ w"urd' ich sagen ,
       <:<#> halten:> wir jetzt achtundzwanzigster bis<Z> zweiter
       Februar fest<;T> @(CONFIRM)
```

## 4.3 The Dialogue Act Hierarchy as Decision Tree

From the dialogue act hierarchy developed in VERBMOBIL 1 only the leaves have been used to annotate the transcribed material. In VERBMOBIL 2 we use the dialogue act hierarchy differently; we see the hierarchy rather as a decision tree.

This point of view has various implications for the use of the dialogue acts in VERBMOBIL 2. 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 4.2 we show the dialogue act hierarchy as introduced in chapter 4.1. The numbers at the nodes correspond to decision questions which we will describe in the following:

**Decision 1: TOP**

**if** the segment consists only of an element which is a member of the list defined as DISCOURSE_PARTICLE

**then** branch to DISCOURSE_PARTICLE.

**else if** the segment is too fragementary or incomprehensible to make any sense **then** branch to NOT_CLASSIFIABLE.

**else** branch to DIALOGUE_ACT.

**Decision 2: DIALOGUE_ACT**

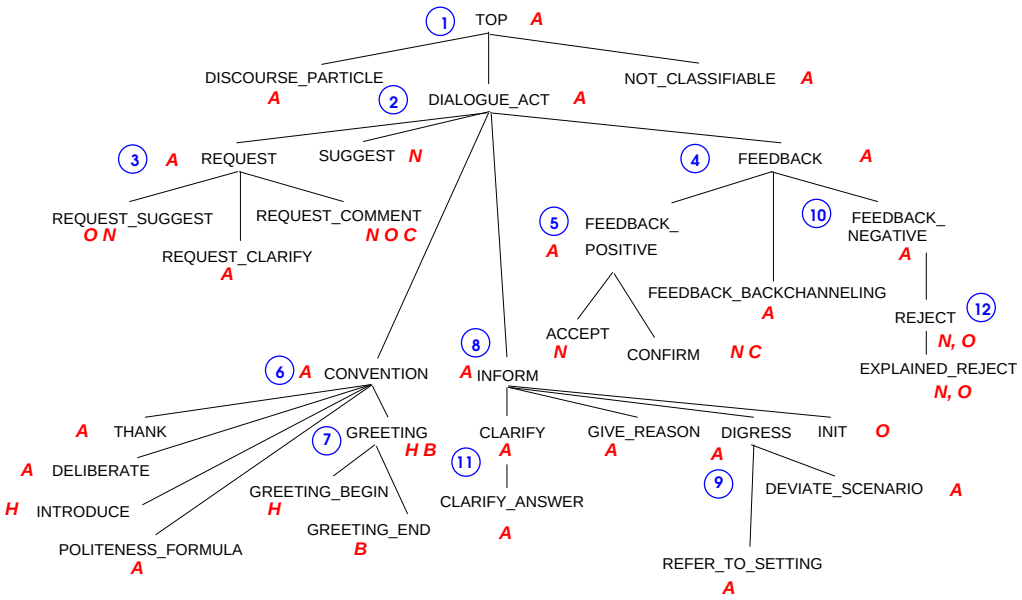


Figure 4.2: The dialogue act hierarchy as decision tree.

**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 contains a suggestion which is given by means of an explicitly mentioned instance or an aspect of such an instance **then** branch to SUGGEST.

**else if** the segment is solely concerned with conventionalized / ritual / social actions and/or if it only consists of routine formula **then** branch to CONVENTION.

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

**else** branch to INFORM.

**Decision 3: REQUEST**

**if** the dialogue segment contains a request for dialogue participant to provide information **then** branch to REQUEST_SUGGEST.

**else if** the dialogue 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 (i.e. which is not mentioned explicitly in the current segment) **then** branch to REQUEST_COMMENT.

**else if** the dialogue segment contains a request for a a clarification of in-

formation, i.e by requesting additional unknown detail, or by repeating something that has been forgotten in the course of the interaction **then** branch to REQUEST_CLARIFY.

**else** do not branch; label with REQUEST instead.

**Decision 4: FEEDBACK**

**if** in the dialogue segment the speaker reacts to a contribution of the dialogue partner in a positive way, i.e. if the segment signals understanding of a previous contribution, 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 dialogue 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 **then** branch to FEEDBACK_NEGATIVE.

**else if** in the segment the dialogue participant signals that he is still following the conversation **then** branch to FEEDBACK_BACKCHANNELING.

**else** do not branch; label with FEEDBACK.

**Decision 5: FEEDBACK_POSITIVE**

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

**else if** the segment contains a positive reaction to one or more objects which have been mentioned previously 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** do not branch; label with FEEDBACK_POSITIVE.

**Decision 6: FEEDBACK_NEGATIVE**

**if** the dialogue segment is used to express gratefulness to the other dialogue participant(s) **then** branch to THANK.

**else if** the dialogue segment contains expressions of welcoming, greeting or salutation **then** branch to GREETING.

**else if** the dialogue unit contains conventionalized forms that are used to maintain a good contact between the dialogue participants, as e.g. to apologize, **then** branch to POLITENESS_FORMULA.

**else if** the dialogue segment includes a (self-) introduction of the dialogue participant, e.g. his name, profession, position, etc. **then** branch to INTRODUCE.

**else if** the dialogue segment consists of self-talk or thinking-aloud **then** branch to DELIBERATE.

**else** do not branch; label with CONVENTION.

**Decision 7: GREETING**

**if** the segment includes a greeting phrase which is typical for the beginning of a conversation **then** branch to GREETING_BEGIN.

**else if** the segment includes a greeting phrase which signals the end of a conversation **then** branch to GREETING_END.

**Decision 8: INFORM**

**if** the dialogue segment introduces the topic of the interaction to follow **then** branch to INIT.

**else if** the dialogue segment addresses topic unrelated to the task or adresses the scenario as such **then** branch to DIGRESS.

**else if** the dialogue segmeny provides a reason or a motivation for a preceding or following statement (possibly indicated by cue words like e.g. causal conjunctions) **then** branch to GIVE_REASON.

**else if** the dialogue segment contains additional information regarding a previous dialogue contribution, either as a repetition or as an explicit answer upon a request **then** branch to CLARIFY.

**Decision 9: DIGRESS**

**if** the content of the dialogue segment addresses the setting of the dialogue, as e.g. the quality of the transmission, the noisyness of the environment, **then** branch to REFER_TO_SETTING.

**else if** the dialogue segment does not address topics relevant for the task or belonging to the scenario **then** branch to DEVIATE_SCENARIO.

**else** do not branch; label with DIGRESS.

**Decision 10: FEEDBACK_NEGATIVE**

**if** the segment contains a negative reaction to one or more objects which have been mentioned previously in the dialogue - these objects can be either realized explicitly or implicitly, i.e. anaphorically – **then** branch to REJECT.

**else** do not branch; label with FEEDBACK_NEGATIVE.

**Decision 11: CLARIFY_ANSWER**

**if** the dialogue segment is the answer to a clarification question that has been labeled with REQUEST_CLARIFY **then** branch to CLARIFY_ANSWER.

**else** do not branch; label with CLARIFY.

**Decision 12: EXPLAINED_REJECT**

**if** the dialogue segment contains both the (implizit or explizit) rejection of a proposal and the reason why the proposal has been rejected **then** branch tp EXPLAINED_REJECT.

**else** do not branch; label with REJECT.

## 4.4 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 (§6.3), *'mooshiwake 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 §6.3 and §6.3.

The translation and annotation of the Japanese sentences given in this report are jointly done by Fujinami and Maier. We owe to Gerd Fliedner at DFKI for his German translation and annotation of the same sentences.

## 4.5 The Manual Segmentation of Turns into Individual Utterances

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

The segmentation process should follow certain criteria. The following list of criteria gives a definition of the notion *utterance*.

1. An utterance corresponds to a clause; it must contain a finite verb. 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. 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 in 4.1 as *complement verbs*.

(10)
```
ACL017: <A> guten <:<#Mikrowind> Tag ,
        @(GREETING_BEGIN)
        hier:> ist K"opp , $K $"O doppel $P .
        @(INTRODUCE)
        <:<Schmatzen> <A>:> <:<#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)
        (M220D3)
```

2. There are certain cases in which an utterance does not correspond to a clause as defined in (1).

   (a) 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 in (1), it nevertheless is regarded as an utterance.

   (b) 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.

   FEEDBACK_POSITIVE: 'ja', 'gut', 'okay', 'schön', 'hervorragend', 'alles klar', 'prima', 'wunderbar', 'einverstanden', 'genau' etc.

   FEEDBACK_NEGATIVE: 'nein','nee', 'tut mir leid', 'schwierig' etc.

   FEEDBACK_BACKCHANNELING: 'mhm', 'aha', 'ja' etc.

   THANK: 'Danke', 'Vielen Dank'

   GREETING: 'Guten Tag', 'Hallo' etc.

   (c) The dialogue acts SUGGEST, CLARIFY_ANSWER and DELIBERATE can be linguistically expressed by a *Nominal Phrase*, as the following examples demonstrate. In such a case the NP is regarded as an utterance.

   (10)
   ```
   KAP005: <A> ja , <A> also<Z> , im November .
           @(DELIBERATE)
           <hm> <Schmatzen> <A> also dienstags
           pa"st es Ihnen ja <P> eventuell<Z> ,
   ```

```
                ne ? ja<;T>  @(CLARIFY_QUERY)

        OLV006: <;T>a , eventuell , ja , am Dienstag .
                @CLARIFY_ANSWER) <A>
                vielleicht Montag und Dienstag , der achte ,
                neunte November <#Klicken> ?@(SUGGEST)
                (G121A)
(10)    BLA001: <Schmatzen> <A> ja , das w"urde bei mir
                sehr gut passen . @(ACCEPT AB)
                Samstag , zw"olfter <P> und
                dreizehnter <#Klicken> . @(SUGGEST)
                (G205A)
```

From these criteria a set of segmentations rules is derived:

1. Try to find segments according to the criteria above.
2. For all segments that are not utterances according to the criteria above, do the following:
   (a) If the segment is recognized as a *false start*, then it is not regarded as an utterances. It should be deleted from the turn representation.
   (b) If the segment is a *discourse particle that functions as a structuring device* in the discourse, then you have to identify its paricular discourse function before deciding how to deal with it. [9] suggest three discourse functions that are used to structure the discourse: **Uptake**, **Check** and **Repair-Marking**. A discourse particle expressing an **Uptake** has to be added to the following utterance, wheras a discourse particle expressing a **Check** has to be added to the preceding utterance.

   What about particles expressing a **Repair-Marking**? Here different repair patterns are to be distinguished. According to [3, p.44] a self-repair typically consists of three parts: the *original part*, which contains the trouble spot, the *editing part*, i.e. a period of hesitation, possibly containing an editing term such as 'uh', 'well', and the *repair*. It should be the aim of the segmentation to combine these three segments into one single utterance. Thus the following two examples both consist of one utterance each.

   (10) ⟨A⟩ ich ⟨:⟨#Mikrowind⟩ w"urd':⟩ Ihnen ⟨:⟨#Mikrowind⟩ jetzt:⟩ mal vorschlagen, ⟨A⟩ ⟨"ah⟩ ⟨P⟩ +/die ⟨:⟨#Mikrowind⟩ zweite:⟩ Juliwoche/+ ⟨A⟩

oh nein, Moment,

⟨"ah⟩ die ⟨P⟩ ⟨:⟨#Mikrowind⟩ dritte:⟩ Juliwoche. (M348D_AEO000)

(10) ⟨:⟨#⟩ ⟨A⟩:⟩ erste Februarwoche f"allt aus, ⟨A⟩ ⟨P⟩ +/d=/+ ⟨P⟩

⟨#⟩ nee,

die zwote ⟨!1 zwode⟩ Februarwoche ist ⟨!1 is'⟩ das ⟨!1 des⟩ (M342_BER003)

If a repair marker follows a false start as in the following example, then both the false start and the repair marker should be deleted from the representation.

(10) ⟨A⟩ ich⟨Z⟩ k"onnte⟨Z⟩ ⟨A⟩ ⟨P⟩ eventuell⟨Z⟩/- ⟨P⟩

nein,

im April kann ich gar nicht. (M273D_ADV002)

3. If you are in doubt about the segmentation, then follow the general maxim to only assume a seperate utterance if the presented material expresses a seperate dialogue act.

# Chapter 5

# Guidelines for a Number of Critical Cases

As the dialogue acts described in this report will be used for the annotation of new material critical cases will emerge the annotation of which will be documented in this chapter. Everybody who is working with this manual is therefore requested to submit such cases to the authors of this report.

# Chapter 6

# Some Fully Annotated Dialogues

## 6.1 German Dialogues

### 6.1.1 Example 1

```
        Dialogue Phase                                  Dialogue act
        ==============                                  ============

ACL000:
        HELLO
        <A> guten <:<#Mikrowind> Tag:> ,                GREETING_BEGIN
        mein Name ist G"urtner , $G $"U <:<#> $R:> $T $N $E $R .
        OPENING                                         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> ,
        NEGOTIATION                                     INIT
        und wollte fragen , <:<#Klicken> wann:> Sie daf"ur Zeit
        h"atten .                                       REQUEST_SUGGEST


BCP001:
        HELLO
        ja , guten Tag<Z> , <"ahm> Frau G"urtner ,      GREETING_BEGIN
        mein Name ist <!1 is'> J"ansch , $J $"A $N $S $C $H .
        OPENING
                                                        INTRODUCE
        <:<#Mikrobe> <A>:> ja , das  f"unft"agige Arbeitstreffen .
        NEGOTIATION
                                                        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 Bettag ist <!1 is'> .
        INFORM
        <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 , oder <#Mikrobe> <#>
        zweiundzwanzigsten <#> bis Ende <:<#> Oktober:> , <A> oder aber
        <Ger"ausch> <A> einschlie"slich 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 achtzehnten 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"slich .                                CLARIFY_ANSWER
        <#> <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
        CLOSING
        dann w"urd' ich sagen , <Ger"ausch> machen wir 's so . <P>
                                                    CONFIRM
        <#Mikrobe> dann bedank' ich mich <:<#Mikrobe>    THANK
        und freu' mich auf:> das <!1 des> Sehen beim Treffen .
                                                    POLITENESS_FORMULA
        GOOD_BYE
        <:<#Mikrobe> Wiedersehen:> .   GREETING_END

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

### 6.1.2 Example 2

```
        Dialogue Phase                              Dialogue act
        ==============                              ============

BCP008:
        HELLO
        <A> gr"u"s Gott ,                           GREETING_BEGIN
        hier ist <!1 is'> Herr Walberg , $W $A $L $B $E $R $G .
        OPENING                                     INTRODUCE
        <A> ich ruf' an wegen dem Gesch"aftsessen , das wir
        <"ah> im November noch <"ah> machen wollten .
        NEGOTIATION                                 INIT
        wollt' mich mal erkundigen , <A> wann Sie denn da Zeit h"atten
        .                                           REQUEST_SUGGEST
        irgendein Sonntag im November .             SUGGEST


ACL009:
        HELLO
        guten Tag , Herr Walberg ,                  GREETING_BEGIN
        <:<#Mikrowind> hier:> ist <!1 is'> Quell , $Q <;$U fehlt>
        <#> $E <:<#Mikrobe> doppel $L .             INTRODUCE
        NEGOTIATION
        <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 .
                                                                GIVE_REASON
        <"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 .                         INFORM
        <:<#Mikrobe> also:> <Schmatzen> <:<#Mikrobe>
        einundzwanzigster:> oder achtundzwanzigster .           CLARIFY
```

```
BCP014: ja , gut .                                          FEEDBACK_POSITIVE
        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 .                 INFORM
        CLOSING
        <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_POSITIVE
        GOOD_BYE
        dann bedank' ich mich ,                             THANK
        und  <!1 un'> noch einen <!1 'n> sch"onen Tag .
                                                            POLITENESS_FORMULA
        Wiedersehen . <#>                                   GREETING_END


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

### 6.1.3 Example 3

```
        Dialogue Phase                                  Dialogue act
        ==============                                  ============

ACL017:
        HELLO
        <A> guten <:<#Mikrowind> Tag ,                  GREETING_BEGIN
        hier:> ist K"opp , $K $"O doppel $P . <:<Schmatzen> <A>:>
        OPENING                                         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
        NEGOTIATION
        <#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:
        HELLO
        ja , gr"u"s Gott ,                                      GREETING_BEGIN
        mein Name ist <!1 is'> Niehmeyer <A> , $N $I $E $H $M $E $Y $E $R .
        NEGOTIATION                                             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:> .                  SUGGEST

BCP020: 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"aftigt ,                                          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
        CLOSING
        das ist <!1 is'> also <;verschliffen> dann der Dienstag ,
        der f"unfte , elf Uhr .                                 CONFIRM
        GOOD_BYE
        <P> <#Mikrobe> dann <:<#Mikrobe> bedank':> ich <:<#Mikrowind>
        mich:>                                                  THANK
        und Wiedersehen . <#>                                   GREETING_END

BCP022: ja , gut , danke sch"on .                               THANK
        Wiederschauen .                                         GREETING_END
```

### 6.1.4 Example 4

```
        Dialogue Phase                                          Dialogue act
        ==============                                          ============

BCP023:
        HELLO
        ja , sch"onen guten Tag ,                               GREETING_BEGIN
        hier ist <!1 is'> Flex wie die Motors"age , $F $L $E $X .
        OPENING                                                 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 .
        NEGOTIATION                                             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:
```

```
        HELLO
        <#> guten <:<#Mikrowind> Tag:> ,                GREETING_BEGIN
        hier ist von Sundniz <;falscher Name> , <A> $V $O $N , von ,
        $S $U $D $N $I $Z , <:<#Mikrobe> Sudniz:> .     INTRODUCE
        NEGOTIATION
        <#> <:<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:> ,      SUGGEST
        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. GIVE_REASON
        <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
        CLOSING
        <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
        GOOD_BYE
        dann freu' <:<#Mikrowind> ich mich:> ,          POLITENESS_FORMULA
        und <!1 un'> auf Wiedersehen .                  GREETING_END

BCP031: ja , danke sch"on ,                             THANK
        Wiedersehen , bis morgen .                      GREETING_END
```

**Evaluation with the statistical dialogue act recognition**

Using the material annotated in VERBMOBIL phase 1 for the training that was mapped onto the categories presented in this report, we had a good recognition rate for the dialogues shown above. However, we could immediately identify one problematic category, namely GIVE_REASON (see section 2.3). It has to be taken care of the fact that it is often confused with the categories SUGGEST or REJECT, a fact that could also be observed with the dialogue act system of phase 1.

## 6.2 English Dialogues

### 6.2.1 Example 1

*CDROM 8, r279c.trl*

```
        Dialogue Phase                                          Dialogue act
        ==============                                          ============

TJD000:
        HELLO
        <:<#> <#Mikrobe> <Schmatzen> hello
        <;period> <A> <;seos> <A>                               @(GREET AB)
        OPENING
        <"ahm> I would <!2 I'd> like to make an appointment <;comma>
        <#Rascheln> <"ah> <P> <;seos>                           @(INIT AB)
        NEGOTIATION
        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)
        GOOD_BYE
        thank you very much <;period> <#Klicken>:> <;seos>
                                                          @(THANK AB)
```

### 6.2.2 Example 2

*r311c.trl*

```
        Dialogue Phase                                    Dialogue act
        ==============                                    ============

SVG000:
        HELLO
        <:<#> <#Klicken> <A> hi <#>                       @(GREETING_BEGIN)
```

```
        NEGOTIATION
        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>
                                                        @(SUGGEST)
        <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>
                                                        @(SUGGEST)

        <#> <"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>
GOOD_BYE                                        @(ACCEPT)
        see you then <;period> <#> <#> <#Klicken> <#> <#> <#Klicken>:>
        <;seos>                                         @(GREETING_END)
```

### 6.2.3 Example 3

*r367c.trl*

```
        Dialogue Phase                                  Dialogue act
        ==============                                  ============

JDL000:
        NEGOTIATION
        <:<#> <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>
                                                        @(CONVENTION)
        <"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> <#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)
GOOD_BYE
we will <!2 we'll> see you <;period> <#Klicken> <#> <#>
<;seos>                                             @(GREETING_END)
```

**Evaluation with the statistical dialogue act recognition**

As for the German dialogues, we used the mapped English material annotated in VERBMOBIL phase 1 for the training of the statistical dialogue act recognition. We got a very good recognition rate for the dialogues shown above. Again the category GIVE_REASON was problematic. In two cases, REJECTs in the above annotations were recognized as GIVE_REASONs , and the sole GIVE_REASON was recognized as SUGGEST.

## 6.3 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 English followed by annotated Japanese.

**Ogawa introduces himself to Koozai**

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

**NAY01:** hai ogawa desu kedo .
Int PN V Part
Hello Ogawa be (Sentence end)
Hello, I am Ogawa. ⟨introduce_name⟩

**Koozai introduces himself to Ogawa**

Greeted by Ogawa, Koozai introduces himself to Ogawa.

**NBA02:** moshimoshi koozai desu keredomo .
Int PN V Part
Hello Koozai be (Sentence end)
Hello, I am Koozai. ⟨introduce_name⟩

**Koozai starts the negotiation**

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

**NBA02:** koNkai wa gakkaishi no
N Part N Part
This time (Theme) scientific journal (Genitiv)

tookooroNbuN no naiyoo no uchiawase
N Part N Part N
submitted paper (Genitiv) content (Genitiv) meeting

o shi tai to omot te deNwa
Part V VF Part V VF N
(Object) make (want) that think (te-Form) telephone

sashi te itadai ta N
V VF V VF NOM
make (te-Form) (formal) (modal) (nominalization)

desu keredomo .
V Part
be (Sentence end)

I call you up this time because I want to discuss the content of our paper to be submitted to the journal. ⟨motivate_appointment⟩

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:** hi nichi o
N N Part
date date (Object)

kime tai N desu keredomo
V VF NOM V Part
fix (want) (nominalization) be (Sentence end)

yoroshii deshoo ka
Adj V Part
good be (conditional) (question)

I would like to make an appointment. Is it okay? ⟨init⟩

**Ogawa agrees to Koozai**

Ogawa agrees to schedule their meeting.

**NAY03:** hai .
Int
Yes
Yes, ⟨feedback_positive⟩

Ogawa asks which day is suitable to Koozai

**NAY03:** sochira no sono uchiawase
Pron Part Det N
For your part (Genitiv) its meeting

no go yotee wa itsu ga
Part Hon N Part N Part
(Genitiv) (honorific) schedule (Theme) when (Subject)

yoroshii N deshoo ka .
Adj NOM V Part
good (nominalization) be (conditional) (question)

When is good to you for the meeting? ⟨request_suggest_date⟩

**Koozai suggests a date**

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

| | | | | | | |
|---|---|---|---|---|---|---|
| **NBA04:** | hachi | gatsu | no | juu | roku | |
| | Card | N | Part | Card | Card | |
| | 8 | month | (Genitiv) | 10 | 6 | |

| | | | | | | |
|---|---|---|---|---|---|---|
| nichi | naN | | te | doo | deshoo | ka . |
| N | Pron | | Part | Adv | V | Part |
| date | for example | | then | how | be (conditional) | (question) |

How about the 16th August? ⟨suggest_support_date⟩

**Ogawa rejects the date**

Ogawa rejects the date implicitely by explaining why the date is not good to him. He does not say *'no'* in turning down Koozai's suggestion.

| | | | | | | |
|---|---|---|---|---|---|---|
| **NAY05:** | juu | roku | nichi | wa | ainiku | ichi |
| | Card | Card | N | Part | Adv | Card |
| | 10 | 6 | date | (Theme) | unfortunately | 1 |

| | | | | | | |
|---|---|---|---|---|---|---|
| nichi | juu | seminaa | ga | gozai | masu | node |
| N | PP | N | Part | V | VF | Conj |
| date | whole | seminar | (Subject) | be (honorific) | (honorific) | because |

Because unfortunately I have scheduled a seminar all the day for the sixteenth, ⟨give_reason⟩

Ogawa asks Koozai to suggest other dates.

| | | | | | |
|---|---|---|---|---|---|
| **NAY05:** | hoka | no | hi | o | o |
| | N | Part | N | Part | Hon |
| | Another | (Genitiv) | date | (Object) | (honorific) |

| | | | | | |
|---|---|---|---|---|---|
| negai | shi | tai | N | desu | keredomo . |
| N | V | VF | NOM | V | Part |
| Please | make | (want) | (nominalization) | be | (Sentence end) |

I would like you to suggest another date. ⟨request_suggest_date⟩

**Koozai suggests another date**

Koozai accepts Ogawa's rejection.

| | | | | | |
|---|---|---|---|---|---|
| **NBA06:** | hai | soo | desu | ka | . |
| | Int | Adv | V | Part | |
| | Yes | so | be | (Sentence end) | |
| | All right, I see. ⟨feedback_positive⟩ | | | | |

Koozai proposes to hold the meeting on the 17th.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **NBA06:** | so | shi tara | juu | nana | nichi | no | gogo | kara |
| | Conj | | Card | Card | N | Part | N | PP |
| | Then | | 10 | 7 | date | (Genitiv) | afternoon | from |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| to | yuu | koto | de | doo | deshoo | | ka |
| Part | V | NOM | Part | Adv | V | | Part |
| that | say | (nominalization) | by | how | be | (conditioal) | (question) |

Then, how about the seventeenth from afternoon? ⟨request_comment_date⟩

**Ogawa rejects the date, too**

First, Ogawa apologizes to Koozai.

| | |
|---|---|
| **NAY07:** | suimaseN |
| | V |
| | Sorry |
| | I'm sorry, POLITENESS_FORMULA |

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:** juu nana nichi mo
Card Card N Part
10 7 date too

ichi nichi juu yotee ga tsumat
Card N PP N Part V
1 day whole schedule (Subject) filled

te ori masu node
VF V VF Conj
(te-Form) be (honorific) (honorific) because

Because the seventeenth, too, is filled up all the day, ⟨give_reason⟩

Ogawa tells Koozai about his preferences.

**NAY07:** dekire ba
V VF
possible (Cond)

ni juu ichi nichi ikoo ni o
Card Card Card N N Part Hon
2 10 1 date after at (honorific)

negai shi tai N desu keredomo .
N V VF NOM V Part
ask make (want) (nominalization) be (Sentence end)

If possible, I would like to ask you to schedule it after the 21st. ⟨request_suggest_date⟩

### Koozai suggests the other date

Koozai accepts Ogawa's rejection.

**NBA08:** hai
Int
Yes
Okay, ⟨feedback_positive⟩

Koozai suggests the other date, the 21st.

**NBA08:** soredewa ni juu ichi nichi
Conj Card Card Card N
Then 2 10 1 date

doo deshoo ka .
Adv V Part
How be (Cond) (question)

Then, how about the 21st? ⟨suggest_support_date⟩

**Ogawa accepts the date**

Ogawa responds positively to Koozai's suggestion.

**NAY09:** hai
Int
Yes
Yes, ⟨feedback_positive⟩

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

**NAY09:** ni juu ichi nichi
Card Card Card N
2 10 1 date

nara ba gogo wa ai te
V VF N Part V VF
be (Cond) afternoon (Theme) be free (te-Form)

ori masu node
V VF Conj
be (honorific) (honorific) because

If it will be scheduled on the 21st, I am free in the afternoon. ⟨accept_date⟩

Ogawa asks then if Koozai is free in the afternoon.

**NAY09:** sochira no
Pron Part
For your part (Genitiv)

go yotee gogo wa ikaga deshoo ka
Hon N N Part Adv V Part
(honorific) schedule afternoon (Theme) how be (Cond) (question)

What about your schedule in the afternoon? ⟨request_comment_date⟩

**Koozai confirms**

Koozai says that he can hold the meeting then.

**NBA10:** hai daijoobu desu .
Int Adj V
Yes okay be
Yes, it's okay. ⟨feedback_positive⟩

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

**NBA10:** soredewa ni juu
Conj Card Card
then 2 10

ichi nichi no gogo no ni
Card N Part N Part Card
1 date (Genitiv) afternoon (Genitiv) 2

ji kara yo ji made to yuu
N PP Card N PP Part V
hour from 4 hour till that say

koto de doo deshoo ka .
NOM Part Adv V Part
(nominalization) with how be (Cond) (question)

Then, how do you think, if we see each other in the afternoon from 2 o'clock to 4 o'clock on the 21st? ⟨suggest_support_date⟩

**Ogawa suggests the location**

Ogawa agrees as to the time.

**NAY11:** hai
Int
Yes
Yes, ⟨feedback_positive⟩

Ogawa would like Koozai to come to his room.

**NAY11:** sore nara ba ni juu
Pron V VF Card Card
it be (Cond) 2 10

ichi nichi no ni ji ni
Card N Part Card N Part
1 date (Genitiv) 2 hour at

watakushi no keNkyuushitsu no hoo
Pron Part N Part N
I (Genitiv) institute (Genitiv) site

ni kite itadaki tai
Part V VF V VF
to come (te-Form) formal (want)

no desu ga
NOM V Part
(nominalization) be (Sentence end)

If so, I will appreciate your kindness if you would come to my institute at 2 o'clock on the 21st. ⟨suggest_support_location⟩

Ogawa asks if Koozai can come to his room.

**NAY11:** yoroshii deshoo ka .
Adj V Part
good be (conditional) (question)
Would it be good?

**Koozai agrees with the location**

Koozai accepts Ogawa's suggestion.

**NBA12:** hai
Int
Yes
Yes, ⟨feedback_positive⟩

Koozai confirms that he will come.

**NBA12:** so shi tara ukagai masu .
Conj V VF
then come (honorific)
Then, I come to you. ⟨confirm⟩

Koozai says goodbye.

**NBA12:** soredewa shitsuree shi masu .
Conj N V VF
then discourtesy make (honorific)
then, see you!

**Ogawa closes the conversation**

Ogawa says goodbye, too.

**NAY13:** shitsuree shi masu .
N V VF
discourtesy make (honorific)
See you!

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