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# Ambiguity labelling for disambiguation experiments

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## Abstract

This report describes two month research stay, from 9 October 1995 to 8 December 1995, at GETA in Grenoble in the framework of the MIDDIM project. The project was agreed between CNRS-IMAG-GETA and ATR-ITL, and cooperative research officially started on June 1993. This project aims at studying ambiguities and their disambiguation methods on multimodal system for spontaneously-spoken dialogues as well as for written texts, for the Japanese, English and French languages. The current work has extended previous one in two directions. First, we investigated ambiguities in automatically-processed data by a parser and compared them with ambiguities in non-processed data. Second, we conducted disambiguation experiments for Japanese dialogues on a man-machine interactive system called LIDIA-II. The experiments satisfied us that user's intervention would be helpful for disambiguation in Japanese dialogue parsing as well as in English and French.

## Keywords

ambiguity classification, ambiguity database, ambiguity kernel, ambiguity scope, ambiguity labelling, ambiguity representation, disambiguation

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# Contents

1	Introduction	1
2	Data Collation and Ambiguity Labelling	1
2.1	Chosen texts . . . . .	1
2.2	Manual ambiguity labelling . . . . .	2
2.2.1	Ambiguity scope . . . . .	2
2.2.2	Ambiguity type . . . . .	3
2.2.3	Ambiguity representation . . . . .	4
2.3	Ambiguity distribution . . . . .	5
2.3.1	Ambiguity distribution according to data . . . . .	5
2.3.2	Ambiguities labelled by a state-of-the-art speech analyzer . . . . .	7
3	Disambiguation Experiments on LIDIA-II	8
3.1	Data production . . . . .	8
	References	
	Appendix 1 Papers written	
	Appendix 2 Meetings, Seminars and Conferences	
	Appendix 3 Manual Labelling of Ambiguities	

# List of Tables

1	Used data . . . . .	2
2	Ambiguity distribution in processed/non-processed data(1) . . . . .	6
3	Ambiguity distribution in processed/non-processed data(2) . . . . .	7
4	Ambiguity distribution in non-processed data(1) . . . . .	8
5	Ambiguity distribution in non-processed data(2) . . . . .	9

## 1 Introduction

We previously investigated GETA text corpus, ATR & EMMI dialogue corpus and Canadian dialogue corpus<sup>1</sup> for the purpose of an ambiguity analysis in the context of machine translation or man-machine dialogue system. We also made an ambiguity classification for labelling ambiguities and developing an ambiguity database which will be used on machine translation systems or interactive disambiguation systems in the near future.

This report extends the investigation of ambiguities in two directions. First, we noted a significant difference between processed-data labelling and non-processed-data labelling in ambiguity distribution. The processed-data have been parsed by a parser actually used on a machine translation system [7], thus the “ambiguity” in processed data means multifarious outputs as a result for an input. The non-processed data are data which were not parsed by any analyzer, and a state-of-the-art language based speech analyzer was supposed to be used. The state-of-the-art speech analyzer was presumed to produce syntactic, semantic and pragmatic information. The collation of two kinds of data analysis gave us useful knowledge for disambiguation experiments.

Second, we conducted disambiguation experiments on an interactive disambiguation system called LIDIA-II. The experiments were confined to disambiguation of syntactic ambiguities. However, knowledge obtained from here can be applied to disambiguation of semantic and pragmatic ambiguities.

## 2 Data Collation and Ambiguity Labelling

### 2.1 Chosen texts

We have chosen different types of texts for ambiguity labelling to investigate what kinds of ambiguities are observed according to data.

In Table 1, the TAC22011 was parsed by a parser which was really used on a machine translation system or similar system to this in order to obtain ambiguities which still stay after being parsed and to compare them with ambiguities labelled to raw data.

The other texts are raw data, which were not parsed by any analyzer. When ambiguities for these texts were labelled, a state-of-the-art language based speech analyzer was supposed to be used. The state-of-the-art speech analyzer was presumed to produce syntactic, semantic and pragmatic information. The TAC22011 and TAC12012 come from ATR dialogue corpus. Its task domain is hotel accommodation by a receptionist of an hotel and a client on telephone [12].

The BB.TEL.ORTH.TR is a dialogue simulated on ATRs mutimodal experiment platform, called EMMI. Its task domain is an itinerary guide, and there are three participants: a Japanese speaker, an English speaker, and an interpreter [3][15].

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<sup>1</sup>This corpus has no its name. Cedergren J. Henrietta, Université de Quebec à Montreal, Departement de Linguistique, gave us two long dialogues in French, when visited ATR in 1994.

text name	turns	language	data processing
TAC22011	47 turns	Japanese	non-processed
TAC12012	39 turns	Japanese	non-processed
TAC22011	47 turns	Japanese	processed
BB.TEL.ORTH.TR	258 turns	Japanese & English	non-processed
Total			391 turns

Table 1: Used data

## 2.2 Manual ambiguity labelling

### 2.2.1 Ambiguity scope

When ambiguities are labelled by hand for dialogues, parsing units should be previously fixed. In ordinary CFG grammar for syntactic analyses, the basic parsing unit is *sentence*, and the end of *sentence* is a comma or a full stop. However, there are no commas, nor full stops in dialogues, but we can presume instead dialogues, turns, utterances, sentences, phrases or fragments to be parsing units [4][5][6]. Among these units, the turn and utterance are a reasonable parsing unit, because of Japanese dialogue peculiarities well known [16].

The turn is defined here as a speech unit uttered one time by a speaker, excluding overlapped turn takings.

The utterance is defined here as the smallest unit wherein communicative acts are achieved. In Japanese, utterance units are distinguished by some cue patterns which are generally located at the end of sentences or phrases. Hence, utterance length is defined as follows from the view point of a standard grammar [1][8].

if  $\exists$  simple sentence in a turn, then: cue pattern  $\subseteq$  utterance  $\equiv$  simple sentence,  
 if not, then: utterance  $\equiv$  a cue pattern or : utterance  $\equiv$  a turn

In addition, segments of dialogues bounded by pauses of at least 100 milliseconds or turn boundaries from the waveform in speech recognition for dialogues [1][8], called provisionally *pause units* coincide roughly with the utterance. Thus, the utterance is units yielded by pauses.

Labelled ambiguities are cited from BB.TEL.ORTH.TR below according to processing units: dialogues, turn and utterances.  $\rightarrow$  Vide appendix 3.

1. Ambiguities at the level of the dialogue: in BB.TEL.ORTH.TR, there are an agent (A), a client (C) and an interpreter (I), and the turn takings occur irregularly: there are often found successive turns of an identical speaker. {...} in *e.g.1* denotes speech uttered simultaneously with the speech of the other participant.

*e.g.1*

I : [ah] Do you know {A;which way is;A} east and west  
 A : {I; わかんないですね;I}  
 C : [um] {I;No;I}  
 I : {C;Maybe;C} you're not familiar

If participants of the dialogue do not help the system by pressing a button, the system can not know who is speaker, nor what language is spoken [4][5][6].

2. Ambiguities at the level of the turn: A turn consists of some utterances, so when the turn is assumed as processing units, there are often found segmentation ambiguities within a turn.

*e.g.2*

A : 分かりましたホテルはいくつかあるんですけども

This turn can be segmented in two ways:

[[分かりました][ホテルはいくつかあるんですけども...]] and  
[[分かりましたホテルは][いくつかあるんですけども...]]

The first segmentation way yields two propositions from the turn. The second way, in contrast yields a proposition having a noun phrase which consists of a relative clause.

3. Ambiguities at the level of the utterance: an utterance may be a sentence, a phrase, a sequence of words, etc<sup>2</sup>. When the utterance is assumed to be processing units, or when a sufficient pause is recognized for being an utterance between “分かりました” and “ホテル” in *e.g.2*, the ambiguity disappear. In our corpus, are observed ambiguities of grammatical constituents such as seen in (a) in *e.g.3*, ambiguities of communicative goals due to unknown prosodic information such as seen in (b), ambiguities of referents in anaphoric expressions such as seen in (c), ambiguities of fragments such as seen in (d), etc.

*e.g.3*

- (a) 見えます
- (b) 一時ですね (confirmation-question or inform)
- (c) もし安いのがあればそれで、いいんですが (pronoun)
- (d) C : B E T T Y (Speaker is spelling out.)  
I : [えー] ビーイーティーティーワイ

### 2.2.2 Ambiguity type

Ambiguity types are classified from the point of view of morpho-syntax, logico-semantics, pragmatics and relationship with real world. Morpho-syntactic ambiguities contain ambiguities of categories, segmentations. Logico-semantic ambiguities range from ambiguities of polysemy words, referents of anaphoric expressions and grammatical roles of grammatical constituents to ambiguities of logical relationship between words, clauses or sentences. Ambiguities of pragmatics contain ambiguities of communicative goals of utterances, or word usage depending on the context. Ambiguities concerning to real world arise from different habits that dialogue participants have and contain misunderstanding of signified things in actuality. These ambiguity types are listed in first column in Tables 2 and 3.

<sup>2</sup>The utterance is transcribed into commas, full stops or the end of turn in our transcription way.

### 2.2.3 Ambiguity representation

Ambiguities were represented using a format of f-structures with disjunctions. Attributes and their values in f-structures were explained in detail in [4][5][6] and [14], so here is given simple explanatory notes for ambiguity representation while citing an example.

*e.g.* “そちらの五番のバス” (the number five bus)

```
(ambiguity BB.TEL.621-2.2.2 ((scope “そちらの五番のバス”)
                             (status expert-system)
                             (type-structure (((そちらの五番の)(バス))
                                             ((そちらの)(五番のバス))))
                             (importance crucial)))
```

Figure 1: Ambiguity representation

In Fig. 1, the ambiguity lies in whether an adjectival phrase, “そちらの” modifies the noun phrase, “五番” or the “バス”.

The “BB.TEL.” is text name chosen for ambiguity labelling, and “621” is serial ambiguity numbers in the text. The “2.2.2” is ambiguity classification number, based on Tomokiyo’s ambiguity classification [14]. The *scope* expresses a level on which ambiguities appear, and its value is quoted texts. In fact, ambiguities appear or disappear depending on the described values.

The *status* expresses the kind of supplementary knowledge needed to reliably solve the considered ambiguity. Its value is “expert-system”, “interpreter” or “user”. When the “expert-system” is described, disambiguation should be automatically made by an expert-system. When “interpreter” or “user” is described, disambiguation should be interactively made with “user” or “interpreter” on a multimodal system.

The *type* expresses ambiguity type from the linguistic point of view, and its values necessarily contain disjunctions. The type names came from ambiguity classification: category, structure, lex, Japanese, English, Francais, CA, situation, mode, reference, deictic, simple, information-known, implied, etc. The values are quoted texts, tagged-texts, category names, pragmatic labels, etc. In Fig. 1, ambiguity scope ranges on the utterance level. The ambiguities is described to be solved by an expert-system. Also, the ambiguity type is specified as a structural ambiguity of the noun phrase, “そちらの五番のバス”. The importance expresses the impact of solving the ambiguity in the context of the intended task. Its value are: crucial, important, not-important or negligible. In this example, the considered ambiguity is meant to be crucially solved in the context of machine translation.

## 2.3 Ambiguity distribution

### 2.3.1 Ambiguity distribution according to data

Among data we have chosen, TAC22011 was analyzed in two ways: by a state-of-the-art speech analyzer and by an existing analyzer<sup>3</sup> at ATR [7].

Distinctive distribution of ambiguities is observed according to the analyzers. Let's compare the two labelling results for TAC22011 according to the above-mentioned ambiguity classification [14]. Only morphological and structural ambiguities are found in the output from T-parser. In contrast, ambiguities which the state-of-the-art speech analyzers are believed not to be able to specify are morphological, syntactical, semantic, pragmatic ambiguities. The gap between the two arises from:

1. The T-parser accepts transcription texts from dialogues, where prosody of dialogues has been recognized, so there are no segmentation ambiguities within a turn such as seen in *e.g.2* and *4* no longer.

*e.g.4*

which part of the Kyoto Station are you in right now?

- (1) which part of the Kyoto Station? Are you in?
- (2) which part of the Kyoto Station are you in?

(1) in *e.g.4* is understandable as well as (2), when there are a relatively-long pause between "Station" and Are" and a stress put on "in". Thus, the utterance is possible to be segmented in two ways when uttered. However, the T-parser outputs only one interpretation of (1) or (2). In contrast the state-of-the-art speech analyzers might keep ambiguities of (1) and (2).

2. The T-parser is a syntactical analyzer, so categorical ambiguities and modification ambiguities of grammatical constituents are involved. In contrast, the state-of-the-art speech analyzers might output ambiguities at the various points of view: polysemy ambiguity such as seen in (3) in *e.g.5*, communicative act one such as seen in (4), anaphoric expression one such as seen in (5), syntactic one such as seen in (6), etc.

*e.g.5*

A : はいそちらの五番のバスにお乗り下さい

I : Please get on the bus number five.

- (3)(ambiguity BB.TEL.60-3.1.1 ((scope 'はい')  
(status expert-system)  
(type-lex (肯定応答 注目表示))  
(importance crucial)))
- (4)(ambiguity BB.TEL.61-5.1 ((scope 'はい')

<sup>3</sup>We call this analyzer T-parser provisionally.



- (status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance crucial)  
 (discourse CA-sequences)))
- (5)(ambiguity BB.TEL.62-2.2.7.1 ((scope ‘‘そちら’’)  
 (status user)  
 (type-deictic (previous utterances  
 nothing others))  
 (importance crucial)  
 (multimodal interactive-with-user))
- (6)(ambiguity BB.TEL.621-2.2.2 ((scope ‘‘そちらの五番のバス’’)  
 (status expert-system)  
 (type-structure  
 (((そちらの)(五番のバス))  
 ((そちらの五番の)(バス))))  
 (importance crucial)))

The Tables 2 and 3 show distribution of ambiguities labelled in two ways. First column denotes ambiguity classification list. Second column denotes ambiguity occurrence according to the list, ambiguities in total and its percentages in non-processed data for TAC22011 and third column denotes them in processed data for the same text.

Classification of ambiguities	non-processed data	processed-data
1.Categorical ambiguity		
1.1 morphological ambiguity	9/230(3.91%)	25/71(35.21%)
1.2 syntactic ambiguity	2/230(0.87%)	
2.Structural ambiguity		
2.1 words, expressions, segmentations		
2.2 grammatical constituent structure		
2.2.1 coordinate or apposition	3/230(1.30%)	
2.2.2 subordinate	32/230(13.91%)	46/71(64.79%)
2.2.3 specific or generic	6/230	
2.2.4 aspect, modality and tense		
2.2.5 quantifier scope	1/230(0.43%)	
2.2.6 negation scope		
2.2.7 anaphora		
2.2.7.1 pronoun	16/230(6.96%)	
2.2.7.2 adjective	3/230(1.30%)	
2.2.7.3 adverbs	11/230(4.78%)	

Table 2: Ambiguity distribution in processed/non-processed data(1)

Classification of ambiguities	non-processed data	processed-data
2.2.8 ellipsis		
2.2.8.1 simple	14/230(6.09%)	
2.2.8.2 known information	11/230(4.78%)	
2.2.8.3 implied	2/230(0.87%)	
2.2.9 inversion		
2.2.10 repeat		
2.2.11 insertion or revision	2/230(0.87%)	
2.2.12 ungrammatical		
3. Semantic ambiguity		
3.1 polysemy		
3.1.1 internal polysemy	36/230(15.65%)	
3.1.2 external polysemy	10/230(4.35%)	
3.2 substitution		
4. Logico-semantic ambiguity	25/230(10.89%)	
5. Discourse ambiguity		
5.1 speaker's intention	38/230(16.52%)	
5.2 real world	3/230(1.30%)	

Table 3: Ambiguity distribution in processed/non-processed data(2)

### 2.3.2 Ambiguities labelled by a state-of-the-art speech analyzer

The Tables 4 and 5 show ambiguities which presumably persist after a state-of-the-art parsing process for three texts. First column denotes ambiguity classification list. Second column denotes ambiguities according to classification list, labelled ambiguities in total and its percentages in BB.TEL.ORTH.TH. Third Column denotes them in TAC22011 and forth column in TAC12012. Ambiguities due to polysemy of words (3.1.1), ambiguities concerning speaker's intentions (5.1) and structural ambiguities (2.2.2) are observed to be relatively high percentages in common with three texts.

Classification of ambiguities	BB.TEL.	TAC22011	TAC22012
1. Categorical ambiguity			
1.1 morphological ambiguity	23/349(6.59%)	9/230(3.91%)	6/161(3.73%)
1.2 syntactic ambiguity		2/230(0.87%)	
2. Structural ambiguity			
2.1 words, expressions, segmentations	4/349(1.15%)		4/161(2.48%)
2.2 grammatical constituent structure			
2.2.1 coordinate or apposition	2/349(0.57%)	2/230(1.30%)	3/161(1.86%)
2.2.2 subordinate	36/349(10.32%)	32/230(13.91%)	13/161(8.07%)
2.2.3 specific or generic	10/349(2.87%)	6/230(2.60%)	7/161(4.35%)
2.2.4 aspect, modality and tense			
2.2.5 quantifier scope	2/349(0.57%)		
2.2.6 negation scope			
2.2.7 anaphora			
2.2.7.1 pronoun	18/349(5.16%)	16/230(6.96%)	4/161(2.48%)
2.2.7.2 adjective	11/349(3.15%)	3/230(1.30%)	1/161(0.62%)
2.2.7.3 adverbs	10/349(2.87%)	11/230(4.78%)	14/161(8.69%)

Table 4: Ambiguity distribution in non-processed data(1)

### 3 Disambiguation Experiments on LIDIA-II

Disambiguation experiments for the English and French languages had been conducted on LIDIA-I [9][10][11] and disambiguation for the Japanese language was tested in the same framework. Experiments are currently going on and should be continued further. So, we will only give an outline of disambiguation here.

#### 3.1 Data production

The BB.TEL.ORTH.TR was chosen as subcorpus for disambiguation experiments for Japanese dialogues. Among labelled 349 ambiguities in total, there were 36 syntactic ambiguities. They can be roughly classified into seven varieties:

- modification ambiguity within an adjectival noun phrase by “の”:

*e.g.*  
そちらの5番のバス

- modification scope ambiguity of adverbs, temporizers, interjections, noun phrases, etc.:

*e.g.*  
[[だいたい][3分ほどでこちらに着きます]]  
[[だいたい3分ほどで][こちらに着きます]]  
[[[その場所から][旅行案内所を後ろに見て]][左側にまっすぐ進んでください]]

Classification of ambiguities	BB.TEL.	TAC22011	TAC22012
2.2.8 ellipsis			
2.2.8.1 simple	48/349(13.75%)	14/230(6.09%)	11/161(6.83%)
2.2.8.2 known information	34/349(9.74%)	11/230(4.78%)	18/161(11.18%)
2.2.8.3 implied	3/349(0.86%)	2/230(0.87%)	1/161(0.62%)
2.2.9 inversion	3/349(0.86%)		
2.2.10 repeat			
2.2.11 insertion or revision	13/349(0.29%)	2/230(0.87%)	
2.2.12 ungrammatical			
3. Semantic ambiguity			
3.1 polysemy			
3.1.1 internal polysemy	42/349(12.03%)	36/230(15.65%)	22/161(13.66%)
3.1.2 external polysemy	14/349(4.01%)	10/230(4.35%)	9/161(5.59%)
3.2 substitution	8/349(2.29%)	6/230(2.60%)	7/161(4.34%)
4. Logico-semantic ambiguity	18/349(5.16%)	25/230(10.89%)	4/161(2.48%)
5. Discourse ambiguity			
5.1 speaker's intention	52/349(14.90%)	38/230(16.52%)	24/161(14.90%)
5.2 real world	9/349(2.58%)	3/230(1.30%)	12/161(7.45%)

Table 5: Ambiguity distribution in non-processed data(2)

[[その場所から][旅行案内所を後ろに見て][左側にまっすぐ進んでください]]

- ambiguity between a relative clause and an independent clause: *ref. e.g.2*
- modification ambiguity of complex sentences at the turn level:

*e.g.*

[一つ前が京阪三条駅という][よく似た名前ですので]  
[間違えないようにお願いします]

- role ambiguity of grammatical constituents due to an inversion of a noun phrase

*e.g.*

I : もう一度言っていただけますか、その名前

- categorical ambiguity between a clause and a conjunction:

*e.g.*

そうしましたら[えー] タクシー乗り場にいらっしゃることなので

- complex verb ambiguity:

*e.g.*

[教えてもらえる]  
[教えて][もらえる]

Outline of disambiguation process for a Japanese utterance is displayed below:

e.g. 分かりました御宿泊は女性の方お一人でよろしいでしょうか

```
(ambiguity BB.TEL.1871-2.2.2
  ((scope ‘‘分かりました御宿泊は女性の方お一人でよろしいでしょうか’’)
   (status expert-system)
   (type-structure (((分かりました御宿泊は)
                     (女性の方お一人でよろしいでしょうか)))
                    (((分かりました)(御宿泊は、女性の方
                     お一人でよろしいでしょうか))))
   (multimodal prosody)))
```

The example contains an ambiguity of whether a clause, “分かりました” is a relative clause which modifies the noun phrase “御宿泊”, or a propositional clause which is independent of next utterance of the turn. For disambiguation experiments, the utterance, first was parsed on a MT system called Ariane-G5, which was developed at GETA [2]. LIDIA-II accepts output from the generator of Ariane-G5. Internal representation generated is as follows:

```
(defvar h
'((1 ((NIL ‘‘PHINT’’ (K PHINT CAT V MODE IND TEMPS PRES PERS 3))
      ((NIL ‘‘GN’’ (K GN FS SUJ RL ARGO CAT (N PREP) NBR SIN))
       ((NIL ‘‘PHREL’’ (K PHREL RS QUAL CAT V TEMPS PAS PERS 1))
        (('‘分かりました’’ ‘‘分かりました’’
         (FS COV CAT V TEMPS PAS PERS 1))))
       (('‘御宿泊’’ ‘‘御宿泊’’ (FS GOV CAT N SUBN NC NUM SIN)))
       (('‘は’’ ‘‘は’’ (FS REG CAT PREP))))
      ((NIL ‘‘GN’’ (K GN FS ATSUBJ RL TRLO CAT (N PREP) NBR SIN))
       (('‘女性の方’’ ‘‘女性’’ (FS GOV CAT N SUBN NC)))
       (('‘お一人’’ ‘‘お一人’’ (FS DES CAT CARD))))
      ((NIL ‘‘NV’’ (K NV))
       (('‘でよろしいでしょう’’ ‘‘でよろしいでしょう’’
        (FS GOV CAT V MOD IND TEMPS PRES PERS 3))))
      (('‘か’’ ‘‘か’’ (CAT PONC INT 1))))
(2 ((NIL ‘‘PHINT’’ (K PHINT CAT V MODE TEMPS PRES PERS 3))
   ((NIL ‘‘GADV’’ (K GADV FS CIRC))
    (('‘分かりました’’ ‘‘分かりました’’
     (FS COV CAT V TEMPS PAS PERS 1))))
   ((NIL ‘‘GN’’ (K GN FS SUJ RL ARGO CAT (N PREP) NBR SIN))
    (('‘御宿泊’’ ‘‘御宿泊’’ (FS GOV CAT N SUBN NC NUM SIN)))
    (('‘は’’ ‘‘は’’ (FS REG CAT PREP))))
   ((NIL ‘‘GN’’ (K GN FS ATSUBJ RL TRLO CAT (N PREP) NBR SIN))
```

```

((('女性の方' '女性' (FS GOV CAT N SUBN NC)))
 (('お一人' 'お一人' (FS DES CAT CARD)))
(NIL 'NV' (K NV))
 (('でよろしいでしょう' 'でよろしいでしょう'
 (FS GOV CAT V MOD IND TEMPS PRES PERS 3)))
 (('か' 'か' (CAT PONC INT 1))))))

```

#### Internal representation of ambiguities for an utterance

In this representation, the ambiguity is indicated by 1 and 2. In 1, “分かりました” is specified as “PHREL”, which denotes a relative clause”. In contrast, in 2, it is specified as “GADV”, which denotes an adverbial clause.

Second, the internal representations are rewritten into tree structures. In order to ask to users which interpretation is correct among proposed interpretations, there are question dialogues which are associated with a set of ambiguity patterns. The set of ambiguity patterns basically came from the ambiguity classification list, and its notations are also tree structures. Thus, trees to trees pattern matching operations are made, and a successfully-matching tree finally denotes question dialogues. For disambiguation of syntactic ambiguities, following question dialogues are output on the screen [11].

あなたが伝えたい意味はどちらですか 番号で答えて下さい:

- 1.((分かりました御宿泊は)(女性の方お一人でよろしいでしょうか))
- 2.((分かりました)(御宿泊は女性の方お一人でよろしいでしょうか))

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## Appendix 1

### Papers written

Two papers were submitted to COLING-96 as the research results:

1. Theory and Practice of Ambiguity Labelling with a view to Interactive Disambiguation in Text and Speech MT by Christian Boitet and Mutsuko Tomokiyo
2. Disambiguation experiments for Japanese, English and French on LIDIA-II by Hervé Blanchon, J.Phillipe Guilbaud, Laurel Fais and Mutsuko Tomokiyo

## Appendix 2

### Meetings, Seminars and Conferences

The followings are workshops, seminars and meetings we participated during two month stay at GETA.

- Workshops:

- CSSP, 12-14 October 1995 in Paris, organized by CNRS-URA  
Subject: Linguistics  
Participants: M.Tomokiyo



- Morphology, 9 November 1995 in Archamps, organized by CNRS-CLIPS  
Subject: Morphology in Machine Translation  
Participants: Ch.Boitet, N.Nedobejkine, M.Tomokiyo
- Seminars:  
Digital library, 24 November 1995 in Grenoble, organized by CNRS-CLIPS  
Lecture: Pr.Dr.Makoto Nagao  
Participants: All researchers of CLIPS & GETA  
Subject: Digital library
- Meetings:
  - MIDDIM meeting 1, 9 October 1995  
Participants: C.Boitet, N.Nedobejkine, H. Blanchon, M. Tomokiyo  
Subject: Discussion about research contents and time schedule for two month stay of Tomokiyo
  - MIDDIM Meeting 2, 10 November 1995  
Participants: C.Boitet, N.Nedobejkine, M.Axtmeyer, J-P. Guilbaud, M.Tomokiyo  
Subject: Progress reports
  - MIDDIM Meetin 3, 15 December 1995  
Participants: Ch. Boitet, M. Axtmeyer, H. Blanchon, M.Tomokiyo  
Subject: Research results

Appendix 3
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## Manual labelling of Ambiguities

Manual labelling of ambiguities for BB.TEL.ORTH.TR was conducted by a speech analyzer which was supposed to produce syntactico-semantic, pragmatic ambiguities and ambiguities concerning to real world. Labelled ambiguity scope ranges at the level of the turn and the utterance.

A : はい、国際交流センターです

I : [ah] International Conference Center

```
(ambiguity BB.TEL.1-3.1.1 ((scope ‘‘はい’’)
                          (status expert-system)
                          (type-lex (肯定応答 注目表示))
                          (importance crucial)))
```

```
(ambiguity BB.TEL.2-5.1 ((scope ‘‘はい’’)
                          (status expert-system)
                          (type-CA (YES Acknowledge))
                          (importance important)
                          (discourse CA-sequences)))
```

```
(ambiguity BB.TEL.21-2.2.8.1 ((scope ‘‘国際交流センターです’’)
                              (status expert-system)
                              (type-topic (‘‘こちら’’ ‘‘それ’’ ‘‘これ’’))
                              (importance not-important)))
```

C : Hello I'm at Kyoto Station and I'd like to go to thi International Conference Center

I : [あの一] もしもし、今、京都駅にいるんですけども

```
(ambiguity BB.TEL.3-4 ((scope ‘‘んですけども’’)
                       (status expert-system)
                       (type-logicosem (conjunctive politeness))
                       (importance crucial)
                       (multimodal pause-duration)))
```

```
(ambiguity BB.TEL.31-2.2.2 ((scope ‘‘もしもし、今、京都駅にいるんですけども’’)
                              (status expert-system)
                              (type-structure ( (もしもし)(今、京都駅にいるんですけども)) ( (もしもし、今)(京都駅にいるんですけども)) ))
                              (importance crucial)))
```

A : I; はい;I

(ambiguity BB.TEL.4-3.1.1 ((scope ‘‘はい’’)  
 (status expert-system)  
 (type-lex (肯定応答 注目表示))  
 (importance crucial)))

(ambiguity BB.TEL.5-5.1 ((scope ‘‘はい’’)  
 (status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance important)  
 (discourse CA-sequences)))

I : A; [あの]; A そちらの国際交流会館に行きたいんですが

(ambiguity BB.TEL.6-4 ((scope ‘‘たいんですが’’)  
 (status expert-system)  
 (type-logicosem (conjunctive politeness))  
 (importance crucial)  
 (multimodal pause-duration)))

(ambiguity BB.TEL.61-2.2.7.1 ((scope ‘‘そちら’’)  
 (status expert-system)  
 (type-deictic (hearer others))  
 (importance important)))

(ambiguity BB.TEL.62-2.2.3 ((scope ‘‘そちら’’)  
 (status expert-system)  
 (type-generic (1/2 certain))  
 (importance important)))

(ambiguity BB.TEL.7-5.1 ((scope ‘‘たいんですが’’)  
 (status expert-system)  
 (type-CA (Action-request Inform))  
 (importance important)))

A : はい、 [えー] (きょ) 京都駅のどちらにいらっしゃいますか

I : Yes which part of Kyoto Station you are in right now

(ambiguity BB.TEL.8-3.1.1 ((scope ‘‘はい’’)  
 (status expert-system)  
 (type-lex (肯定応答 注目表示))  
 (importance crucial)))

- (ambiguity BB.TEL.9-5.1 ((scope ‘はい’)  
 (status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance important)  
 (discourse CA-sequences)))
- (ambiguity BB.TEL.10-2.2.8.1 ((scope ‘いらっしゃい’)  
 (status expert-system)  
 (type-topic ("you" 3rd-person))  
 (importance not-important)))
- (ambiguity BB.TEL.11-3.1.2 ((scope ‘どちら’)  
 (status user)  
 (type-English (where which part))  
 (type-Francais (où quel côté))  
 (importance crucial)  
 (multimodal interactive-with-user)))
- (ambiguity BB.TEL.12-3.1.2 ((scope ‘いらっしゃい’)  
 (status user)  
 (type-English (go be come))  
 (type-Francais (aller être venir))  
 (importance crucial)  
 (multimodal interactive-with-user)))
- (ambiguity BB.TEL.121-3.2 ((scope ‘いらっしゃい’)  
 (status user)  
 (type-substitution (‘いる’ ‘行く’ ‘来る’))  
 (importance crucial)  
 (multimodal interactive-with-user)))
- C : I'm in front of the [ah] taxi [um] taxi stop  
 I : 今、[あの] タクシー乗り場の前にいます
- (ambiguity BB.TEL.13-2.2.8.1 ((scope ‘います’)  
 (status expert-system)  
 (type-topic ("I " 3rd-person "you"))  
 (importance not-important)))
- (ambiguity BB.TEL.131-2.2.2 ((scope ‘今タクシー乗り場の前にいます’)  
 (status expert-system)  
 (type-structure (((今)(タクシー乗り場の前にいます))  
 (今)(タクシー乗り場の前にいます)(です))))))

(importance not-important)))

A : [えー] タクシー乗り場は、[あー] 北と南にあるんですけども、[えー][そうですね] タクシー乗り場近くに、京都タワーが見えますか！大きな[えー] タワーなんですけれども

I : OK there are two taxi stops there are one in north one in south but

C : {I;[uhuh];I}

I : {C;[ah];C} Do you see a Kyoto tower in front of you

(ambiguity BB.TEL.14-4 ((scope ‘‘けれども’’)  
 (status expert-system)  
 (type-logicosem (conjunctive politeness))  
 (importance crucial)  
 (multimodal pause-duration)))

(ambiguity BB.TEL.15-5.1 ((scope ‘‘そうですね’’)  
 (status expert-system)  
 (type-CA (Inform Temporizer))  
 (importance important)  
 (multimodal prosody)))

(ambiguity BB.TEL.141-4 ((scope ‘‘けれども’’)  
 (status expert-system)  
 (type-logicosem (conjunctive politeness))  
 (importance crucial)  
 (multimodal pause-duration)))

(ambiguity BB.TEL.142-2.2.2 ((scope ‘‘タクシー乗り場は、[あー] 北と南にあるんですけども、[えー][そうですね] タクシー乗り場近くに、京都タワーが見えますか)  
 (status expert-system)  
 (type-segmentation (((タクシー乗り場は北と南にあるんですけども)(そうですね) (タクシー乗り場は... 京都タワーが見えますか)))  
 (importance crucial)  
 (multimodal speech-pause or end-of-turn)))

(ambiguity BB.TEL.143- 2.2.11 ((scope ‘‘北と南にあるんですけども、[えー][そうですね] タクシー乗り場近くに、京都タワーが見えますか’’)  
 (status expert-system)  
 (type-insertion ((北と南にあるんですけども、  
 そうですね) (そうですね)))  
 (importance crucial)  
 (multimodal speech-pause or end-of-turn)))

(ambiguity BB.TEL.16-2.2.8.2 ((scope ‘‘大きな[えー] タワーなんですけれども’’)  
 (status expert-system)

(type-information-known (''京都タワー'' others))  
 (importance not-important)))

(ambiguity BB.TEL.161-4 ((scope ''けれども''))  
 (status expert-system)  
 (type-logicosem (attenuation conjunctive))  
 (importance important)  
 (multimodal pause-duration)))

C : Yes I do

I : 見えます

(ambiguity BB.TEL.18-2.2.8.2 ((scope ''見えます''))  
 (status expert-system)  
 (type-information-known (''京都タワーが'' others))  
 (importance crucial)))

(ambiguity BB.TEL.19-3.1.2 ((scope ''見えます''))  
 (status expert-system)  
 (type-English (''can see'' ''look like''))  
 (type-Francais (''pouvoir voir'' ''on dirait que''))  
 (importance crucial)))

(ambiguity BB.TEL.191-3.1.1 ((scope ''見えます''))  
 (status expert-system)  
 (type-lex (目にうつる 見ることができる))  
 (importance crucial)))

A : はい、分かりました！そちらの方が北の乗り場になります

I : All right that means you're at thi north taxi stop

C : OK

(ambiguity BB.TEL.20-3.1.1 ((scope ''はい''))  
 (status expert-system)  
 (type-lex (肯定応答 注目表示))  
 (importance crucial)))

(ambiguity BB.TEL.21-5.1 ((scope ''はい''))  
 (status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance important)  
 (discourse CA-sequences)))

- (ambiguity BB.TEL.22-2.2.3 ((scope ‘‘そちらの方’’)  
 (status expert-system)  
 (type-generic (1/2 certain))  
 (importance negligible)))
- (ambiguity BB.TEL.221- 2.2.7.1 ((scope ‘‘そちら’’)  
 (status user)  
 (type-deictic (hearer-side others))  
 (importance crucial)  
 (multimodal interactive-with-user)))
- (ambiguity BB.TEL.222-4 ((scope ‘‘方’’)  
 (status expert-system)  
 (type-logicosem (choice attenuation))  
 (importance crucial)))
- (ambiguity BB.TEL.23-3.1.1 ((scope ‘‘なり’’)  
 (status expert-system)  
 (type-lex (時間の経過で何かになる 情報の所在を強調  
 する))  
 (importance crucial)))
- (ambiguity BB.TEL.231-3.1.2 ((scope ‘‘なり’’)  
 (status expert-system)  
 (type-English (become be))  
 (type-Francais (devenir je dis que...))  
 (importance crucial)))
- (ambiguity BB.TEL.232-2.2.2 ((scope ‘‘分かりましたそちらの方が北の乗り場にな  
 ります’’)  
 (status expert-system)  
 (type-structure (((分かりました)(そちらの方が北  
 の乗り場になります)) ((分かりましたそちらの方が)(北の乗り場になります))))  
 (importance crucial)  
 (multimodal pause-duration)))

A : [えー] こちらまで来られるということなんですけれども、[おー] タクシーに乗る  
 方法と、バス、に乗る方法があります |[えー] タクシーの方が、時間は早い、  
 とは思いますが、どちらの方になさいますか

I : All right there are two ways to come here either by bus or by taxi (a)  
 I am sure the taxi will be quicker but which way would you like to take

(ambiguity BB.TEL.24-3.1.1 ((scope ‘‘来られる’’)  
 (status expert-system)  
 (type-lex (可能 尊敬))  
 (importance crucial)))

(ambiguity BB.TEL.243-3.1.2 ((scope ‘‘来られる’’)  
 (status expert-system)  
 (type-English (can would))  
 (type-Francais (pouvoir voudriez))  
 (importance crucial)))

(ambiguity BB.TEL.241- 2.2.7.1 ((scope ‘‘こちら’’)  
 (status user)  
 (type-deictic (speaker-side others))  
 (importance crucial)  
 (multitimoal interactive-with-user)))

(ambiguity BB.TEL.242- 2.2.3 ((scope ‘‘こちら’’)  
 (status expert-system)  
 (type-specific (1/2 certain))  
 (importance negligible)))

(ambiguity BB.TEL.244-3.1.1 ((scope ‘‘ということな’’)  
 (status expert-system)  
 (type-lex (伝聞 事柄))  
 (importance negligible)))

(ambiguity BB.TEL.245-3.1.2 ((scope ‘‘ということな’’)  
 (status expert-system)  
 (type-English ("I heard" "concerning"))  
 (type-Francais ("On m'a dit que" "concernant"))  
 (importance crucial)))

A : [えー] こちらまで来られるということなんですけれども、  
 [おー] タクシーに乗る方法と、バス、に乗る方法があります！[えー]  
 タクシーの方が、時間は早い、とは思いますが、どちらの方になさいますか

I : All right there are two ways to come here either by bus or by taxi  
 (a) I am sure the taxi will be quicker but which way would you like  
 to take

(ambiguity BB.TEL.246-2.1 ((scope ‘‘こちらまで来られるということ’’)  
 (status expert-system)  
 (type-segmentation (((こちらまで来られるという)(こ  
 となんですけれども)) ((こちらまで来られるということ)(なんですけれども))))  
 (importance crucial)))



```

(ambiguity BB.TEL.247-2.2.2
  ((scope ‘‘こちらまで来られるということなんですけれども、[おー] タクシーに乗る方
  法と、バス、に乗る方法があります’’))
  (status expert-system)
  (type-structure (((こちらまで来られるとこちらまで来られるということなんですけ
  れども。)(タクシーに乗る方法と、バス、に乗る方法があります))
  ((こちらまで来られるということなんですけれども、 タクシーに乗る方法と、バス、に
  乗る方法があります))))
  (importance crucial)
  (multimodal pause-duration)))

(ambiguity BB.TEL.248-2.2.2 ((scope ‘‘タクシーの方が、時間は早い、とは思いますが
  が、どちらの方になさいますか’’))
  (status expert-system)
  (type-structure (((タクシーの方が、時間は早い、
  とは思いますが)(どちらの方になさいますか)) ((タクシーの方が、時間は早い、と思い
  ますが。)(どちらの方になさいます))))
  (importance crucial)
  (multimodal pause-duration)))

(ambiguity BB.TEL.25-2.2.8.1 ((scope ‘‘来られる’’))
  (status expert-system)
  (type-subject ("you" 3rd person))
  (importance crucial)))

(ambiguity BB.TEL.26-2.2.8.2 ((scope ‘‘時間は早い’’))
  (status user)
  (type-information-known (‘‘こちらまで来られる’’
  others))
  (importance crucial)
  (multimodal interactive-with-user)))

(ambiguity BB.TEL.261-4 ((scope ‘‘とは思いますが’’))
  (status expert-system)
  (type-logicosem (conjunctive attenuation))
  (importance crucial)))

(ambiguity BB.TEL.262-2.2.7.1 ((scope ‘‘どちら’’))
  (status user)
  (type-references (‘‘タクシーに乗る方法とバスに
  乗る方法’’ something))
  (importance not-important)
  (multimodal interactive-with-user)))

```

- (ambiguity BB.TEL.27-2.2.8.1 ((scope ‘なさい’)  
(status expert-system)  
(type-subject ("you" 3rd person))  
(importance crucial)))
- (ambiguity BB.TEL.28-3.2 ((scope ‘なさい’)  
(status expert-system)  
(type-substitution (‘選ぶ’ others))  
(importance crucial)))
- (ambiguity BB.TEL.280-3.1.2 ((scope ‘なさい’)  
(status user)  
(type-English ("do" "choose" others))  
(type-Francais ("faire" choisir" rest))  
(importance crucial)  
(multimodal interactive-with-user)))
- (ambiguity BB.TEL.281-4 ((scope ‘方’)  
(status expert-system)  
(type-logicosem (choice attenuation))  
(importance crucial)))
- (ambiguity BB.TEL.282-2.2.3 ((scope ‘方’)  
(status expert-system)  
(type-generic (1/2 certain))  
(importance negligible)))
- (ambiguity BB.TEL.283-4 ((scope ‘方’)  
(status expert-system)  
(type-logicosem (choice attenuation))  
(importance crucial)))
- (ambiguity BB.TEL.284-2.2.3 ((scope ‘方’)  
(status expert-system)  
(type-generic (1/2 certain))  
(importance negligible)))
- C : Is it cheaper to go by bus  
I : [あのー] バスに乗った方が安いでしょうか
- (ambiguity BB.TEL.29-2.2.8.3 ((scope ‘方が安い’)  
(status user)  
(type-implied (‘タクシーに乗るよりも’ others))  
(importance crucial)))

((multitimoal interactive-with-user)))

(ambiguity BB.TEL.291-4 ((scope ‘方’)  
 (status expert-system)  
 (type-logicosem (choice attenuation))  
 (importance crucial)))

(ambiguity BB.TEL.292-2.2.3 ((scope ‘方’)  
 (status expert-system)  
 (type-generic (1/2 certain))  
 (importance negligible)))

A : はい、[え] もうそれは全然安いです

I : Yes of course much more

(ambiguity BB.TEL.30-2.2.7.1 ((scope ‘それ’)  
 (status user)  
 (type-reference (‘バスの料金’ others))  
 (importance crucial)  
 (multitimoal interactive-with-user)))

(ambiguity BB.TEL.300-2.1 ((scope ‘もうそれは’)  
 (status expert-system)  
 (type-segmentation (‘もうそれは’  
 ‘それは全然安い’))  
 (importance crucial)))

(ambiguity BB.TEL.301-3.1.1 ((scope ‘はい’)  
 (status expert-system)  
 (type-lex (肯定応答 注目表示))  
 (importance crucial)))

(ambiguity BB.TEL.302-5.1 ((scope ‘はい’)  
 (status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance important)  
 (discourse CA-sequences)))

C : OK then I would like to go by bus and train is it

I : じゃあ[あの]バスに乗って

(ambiguity BB.TEL.31-2.2.8.1 ((scope ‘乗って’)  
 (status expert-system))

(type-subject ("I" "you" one))  
 (importance crucial))

(ambiguity BB.TEL.312-5.1 ((scope ‘乗って’)  
 (status expert-system)  
 (type-subject (Action-request Inform))  
 (importance crucial)  
 (multitimoal prosody)))

(ambiguity BB.TEL.311-2.2.7.3 ((scope ‘じゃあ’)  
 (status expert-system)  
 (type-deictic (previous utterances others  
 nothing))  
 (importance negligible)))

A : {I; はい;I}

(ambiguity BB.TEL.32-3.1.1 ((scope ‘はい’)  
 (status expert-system)  
 (type-lex (肯定応答 注目表示))  
 (importance crucial)))

(ambiguity BB.TEL.33-5.1 ((scope ‘はい’)  
 (status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance important)  
 (discourse CA-sequences)))

I : {A; [あの];A} 電車にも確か乗り換えるんですよ

(ambiguity BB.TEL.34-2.2.8.1 ((scope ‘乗り換える’)  
 (status expert-system)  
 (type-subject ("I" "you" one))  
 (importance crucial)))

(ambiguity BB.TEL.341-2.2.8.3 ((scope ‘電車にも’)  
 (status user)  
 (type-implied (‘バスと’ others))  
 (importance important)  
 (multitimoal interactive-with-user)))

(ambiguity BB.TEL.342-2.2.2 ((scope ‘電車にも確か乗り換えるんですよ’)  
 (status expert-system)  
 (type-structure (((確か)(電車にも)) ((確か)  
 (乗り換えるんですよ))))  
 (importance crucial))

(multitimoal prosody)))

A : はい、[えー] そうですね、[えー] あと、もし、[あーの] 散歩してもよろしい  
お時間があるようでしたら、バスに乗るだけであとは[あー](ご) 十分ぐらい  
歩いて、[えー] こちらに着きます

I : Yes you're right you will have to change to a train but if you would  
like to enjoy walking around then I recommend [ah] walking which  
would take about ten minutes

(ambiguity BB.TEL.35-3.1.1 ((scope "はい")  
(status expert-system)  
(type-lex (肯定応答 注目表示))  
(importance crucial)))

(ambiguity BB.TEL.36-5.1 ((scope "はい")  
(status expert-system)  
(type-CA (YES Acknowledge))  
(importance important)  
(discourse CA-sequences)))

(ambiguity BB.TEL.37-5.1 ((scope "そうですね")  
(status expert-system)  
(type-CA (YES Acknowledge Temporizer))  
(importance important)  
(discourse CA-sequences)))

(ambiguity BB.TEL.371-2.2.7.3 ((scope "そう")  
(status expert-system)  
(type-reference (previous utterances  
others nothing))  
(importance negligible)  
(discourse CA-sequences)))

(ambiguity BB.TEL.372-2.2.8.3 ((scope "あと")  
(status expert-system)  
(type-implied (previous-discussion others))  
(importance negligible)))

(ambiguity BB.TEL.38-4 ((scope "ある")  
(status expert-system)  
(type-logicosem ("you" "I" one something))  
(importance crucial)))

(ambiguity BB.TEL.39-2.2.8.1 ((scope "乗る")

- (status expert-system)  
 (type-subject ("you" "I" one))  
 (importance crucial)))
- (ambiguity BB.TEL.40-2.2.8.1 ((scope ‘歩い’)  
 (status expert-system)  
 (type-subject ("you" "I" one))  
 (importance crucial)))
- (ambiguity BB.TEL.41-2.2.8.1 ((scope ‘着き’)  
 (status expert-system)  
 (type-subject ("you" "I" one))  
 (importance crucial)))
- (ambiguity BB.TEL.411-2.2.2 ((scope ‘はい そうですね’)  
 (status expert-system)  
 (type-structure (((はい)(そうですね)) ((はい。)(そ  
 うですね))))  
 (importance important)  
 (multimodal pause-duration)))
- (ambiguity BB.TEL.412-2.2.2 ((scope ‘散歩してもよろしいお時間があるよう  
 でしたら、バスに乗るだけであとは十分ぐらい歩いて’)  
 (status expert-system)  
 (type-structure (((散歩してもよろしいお時間があ  
 るようでしたら、バスに乗るだけで)(あとは十分ぐらい歩いて)) ((散歩してもよろしいお  
 時間があるようでしたら)(バスに乗るだけであとは十分ぐらい歩いて))))  
 (importance crucial)))
- C : [oh] That sounds fine  
 I : それで [あの一](い)[あの一] なかなかよさそうです
- (ambiguity BB.TEL.42-3.1.1 ((scope ‘それで’)  
 (status expert-system)  
 (type-lex (‘それが’ ‘だから’))  
 (importance crucial)))
- (ambiguity BB.TEL.43-3.1.2 ((scope ‘それで’)  
 (status expert-system)  
 (type-English ("it" "so"))  
 (type-Francais ("ce" "donc"))  
 (importance crucial)  
 (multimodal prosody)))

A : はい、分かりました！[え] そうでしたら、[えー] タクシー乗り場、  
にいらっしゃるといことなので、[えー]、京都タワー、に向かって

I : All right so you are now [ah] at the taxi stop so please move  
to the direction of thi Kyoto tower

(ambiguity BB.TEL.44-3.1.1 ((scope ‘はい’)  
(status expert-system)  
(type-lex (肯定応答 注目表示))  
(importance crucial)))

(ambiguity BB.TEL.45-5.1 ((scope ‘はい’)  
(status expert-system)  
(type-CA (YES Acknowledge))  
(importance important)  
(discourse CA-sequences)))

(ambiguity BB.TEL.451-1.1 ((scope ‘そうでしたら’)  
(status expert-system)  
(type-category (conjunctive adverbial clause))  
(importance important) ))

(ambiguity BB.TEL.452-2.2.7.3 ((scope ‘そう’)  
(status expert-system)  
(type-reference (previous sentence nothing))  
(importance not-important) ))

(ambiguity BB.TEL.46-3.1.2 ((scope ‘いらっしゃる’)  
(status user)  
(type-English (go be come))  
(type-Francais (aller être venir))  
(importance crucial)  
(multimodal interactive-with-user)))

(ambiguity BB.TEL.47-3.2 ((scope ‘いらっしゃる’)  
(status user)  
(type-substitution (‘いる’ ‘行く’ ‘来る’))  
(importance crucial)  
(multimodal interactive-with-user)))

(ambiguity BB.TEL.48-2.2.8.1 ((scope ‘いらっしゃる’)  
(status expert-system)  
(type-subject ("you" "3rd person" one)))

(importance crucial))

(ambiguity BB.TEL.481-4 ((scope ‘‘ので’’)  
 (status expert-system)  
 (type-logicosem (reason no-indication))  
 (importance crucial)))

(ambiguity BB.TEL.482-2.2.2 ((scope ‘‘そうしましたらタクシー乗り場にいらっしゃるといことなので京都タワーに向かって’’)  
 (status expert-system)  
 (type-structure (((そうしそうしましたら)  
 (タクシー乗り場にいらっしゃるといことなので京都タワー、に向かって))  
 ((そうしましたらタクシー乗り場にいらっしゃるといことなので)(京都タワーに向かって))))))  
 (importance crucial)))

C : OK

A : [えー、そうだな] 後ろに、旅行案内所 <annaijo> が見えますか

I : [ah] Can you see the travel information center behind you

(ambiguity BB.TEL.49-5.1 ((scope ‘‘そうだな’’)  
 (status expert-system)  
 (type-CA (Temporizer Confirmation-question))  
 (importance important)  
 (discourse CA-sequences)))

(ambiguity BB.TEL.50-2.2.8.2 ((scope ‘‘後ろに’’)  
 (status expert-system)  
 (type-information-known (‘‘あなたの’’  
 ‘‘何かの’’ ‘‘誰かの’’))  
 (importance crucial) ))

C : Yes I can

I : [あの] 見えます

(ambiguity BB.TEL.51-2.2.8.2 ((scope ‘‘見え’’)  
 (status expert-system)  
 (type-information-known (‘‘旅行案内所’’ others))  
 (importance crucial)))

A : はい、[えー] その場所から、[あー、そうですね] 旅行案内所を、  
 後ろに見て、左側にまっすぐ進んでください



I : So having thi information center behind you

C : [uhuh]

I : Move to your left hand side

(ambiguity BB.TEL.52-3.1.1 ((scope ‘はい’)  
 (status expert-system)  
 (type-lex (肯定応答 注目表示))  
 (importance crucial)))

(ambiguity BB.TEL.53-5.1 ((scope ‘はい’)  
 (status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance important)  
 (discourse CA-sequences)))

(ambiguity BB.TEL.54-2.2.7.2 ((scope ‘その’)  
 (status expert-system)  
 (type-deictic (previous utterances others nothing))  
 (importance not-important)))

(ambiguity BB.TEL.541-5.1 ((scope ‘そうですね’)  
 (status expert-system)  
 (type-CA (Temporizer Confirmation-question))  
 (importance important)  
 (discourse CA-sequences)))

(ambiguity BB.TEL.542-2.2.2 ((scope ‘その場所から、[あー、そうですね] 旅行案内所を、後ろに見て、左側にまっすぐ進んでください’)  
 (status expert-system)  
 (type-structure(((その場所から)(旅行案内所を、後ろに見て)) ((その場所から)(左側にまっすぐ進んでください))))  
 (importance crucial)))

C : OK

A : バス乗り場が、右、に見えますか

I : Then [ah] you will see the bus stop on your right hand side can you see that

(ambiguity BB.TEL.56-2.2.8.2 ((scope ‘右’)  
 (status expert-system)  
 (type-information-known (‘あなたの’ others))  
 (importance crucial)))

C : Yes I can

I : はい、見えます

(ambiguity BB.TEL.57-3.1.1 ((scope ‘‘はい’’)  
 (status expert-system)  
 (type-lex (肯定応答 注目表示))  
 (importance crucial)))

(ambiguity BB.TEL.58-5.1 ((scope ‘‘はい’’)  
 (status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance important)  
 (discourse CA-sequences)))

(ambiguity BB.TEL.59-2.2.8.2 ((scope ‘‘見え’’)  
 (status expert-system)  
 (type-information-known (‘‘バス乗り場’’ others))  
 (importance crucial)))

(ambiguity BB.TEL.591-3.1.1 ((scope ‘‘見え’’)  
 (status expert-system)  
 (type-lex (‘‘見ることができる’’ ‘‘外見から推測で  
 きる’’))  
 (importance crucial)))

(ambiguity BB.TEL.592-3.1.2 ((scope ‘‘見え’’)  
 (status expert-system)  
 (type-English ("can see" "look like"))  
 (type-Francais ("se voir" "avoir l'air"))  
 (importance crucial)))

A : はい、そちらの、五番のバスに、お乗りください

I : So when you get there please get on the bus number five

(ambiguity BB.TEL.60-3.1.1 ((scope ‘‘はい’’)  
 (status expert-system)  
 (type-lex (肯定応答 注目表示))  
 (importance crucial)))

(ambiguity BB.TEL.61-5.1 ((scope ‘‘はい’’)  
 (status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance important)  
 (discourse CA-sequences)))

(ambiguity BB.TEL.62-2.2.7.1 ((scope ‘‘そちら’’)  
 (status user)  
 (type-deictic (previous utterances nothing others))  
 (importance crucial)  
 (multimodal interactive-with-user)))

(ambiguity BB.TEL.621-2.2.2 ((scope ‘‘そちらの、五番のバス’’)  
 (status expert-system)  
 (type-structure (((そちらの、五番の)(バス))  
 ((そちらの)(五番のバス))))  
 (importance crucial)))

C : OK  
 I : はい

(ambiguity BB.TEL.63-3.1.1 ((scope ‘‘はい’’)  
 (status expert-system)  
 (type-lex (肯定応答 注目表示))  
 (importance crucial)))

(ambiguity BB.TEL.64-5.1 ((scope ‘‘はい’’)  
 (status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance important)  
 (discourse CA-sequences)))

A : はい、[えー] その五番のバスに乗って [えー]、約三十分ぐらいしますと  
 I : If you are on the bus number five for about thirty minutes

(ambiguity BB.TEL.65-3.1.1 ((scope ‘‘はい’’)  
 (status expert-system)  
 (type-lex (肯定応答 注目表示))  
 (importance crucial)))

(ambiguity BB.TEL.66-5.1 ((scope ‘‘はい’’)  
 (status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance important)))

(ambiguity BB.TEL.67-2.2.8.1 ((scope ‘‘乗っ’’)  
 (status expert-system)  
 (type-subject ("you" "I" one))  
 (importance crucial)))

(ambiguity BB.TEL.671-2.2.7.2 ((scope ‘その’)  
 (status expert-system)  
 (type-deictic (previous utterances nothing  
 others))  
 (importance not-important)))

(ambiguity BB.TEL.672-3.1.1 ((scope ‘します’)  
 (status expert-system)  
 (type-lex (‘行為する’ ‘経過する’))  
 (importance important)))

(ambiguity BB.TEL.673-3.1.2 ((scope ‘します’)  
 (status expert-system)  
 (type-English ("do" "pass"))  
 (type-Francais ("faire" "passer"))  
 (importance important)))

A : [えー] 東山三条駅というところに着きます

I : You will get to thi Higashiyama Sanjo Station

(ambiguity BB.TEL.68-2.2.8.1 ((scope ‘着き’)  
 (status expert-system)  
 (type-subject ("you" "I" "one" others))  
 (importance crucial)))

(ambiguity BB.TEL.681-2.2.2 ((scope ‘東山三条駅というところに着きます’)  
 (status expert-system)  
 (type-segmentation (((東山三条駅という  
 (ところに着きます)) ((東山三条駅というところに)(着きます))))  
 (importance crucial)  
 (multimodal pause-duration)))

C : [ah] Can you repeat that one more time

I : もう一度言 <yu>っていただけますか、その名前

(ambiguity BB.TEL.69-2.2.8.1 ((scope ‘言っ’)  
 (status expert-system)  
 (type-subject ("you" one))  
 (importance crucial)))

(ambiguity BB.TEL.691-3.1.2 ((scope ‘言っ’)  
 (status expert-system)  
 (type-English ("say" "pronounce"))  
 (type-Francais ("dire" "prononcer"))

(importance crucial)))

(ambiguity BB.TEL.70-2.2.7.2 ((scope ‘その’)  
 (status user)  
 (type-reference ((‘東山三条’ others)))  
 (importance crucial)  
 (multimodal interactive-with-user)))

(ambiguity BB.TEL.71-2.2.9 ((scope ‘その名前’)  
 (status expert-system)  
 (type-inversion (‘その名前を’ ‘その名前X’))  
 (importance crucial)))

N.B.X=particle

A : [えー、そうか] すいません、もう一度言いなおします | [えー、そうか] ややこしいんだ

[えー] ゆっくり言いますね

I : All right all right I know it's very complicated /laugh/ so I will say that {A;slowly;A}

(ambiguity BB.TEL.72-5.1 ((scope ‘すいません’)  
 (status expert-system)  
 (type-CA (Alert Apology))  
 (importance important)  
 (discourse CA-sequences)))

(ambiguity BB.TEL.721-2.2.2 ((scope ‘ [えー、そうか] すいません、もう一度言いなおします | [えー、そうか] ややこしいんだ [えー] ゆっくり言いますね ’))

(status expert-system)

(type-structure ((([えー、そうか] すいません、)

(もう一度言いなおします | [えー、そうか] ややこしいんだ [えー] ゆっくり言いますね))

((([えー、そうか] すいません、)(もう一度言いなおします))([えー、そうか] ややこしいんだ [えー] ゆっくり言いますね)))

(importance not-important)))

(ambiguity BB.TEL.73-2.2.8.1 ((scope ‘言いなおし’)  
 (status expert-system)  
 (type-subject ("I" "one"))  
 (importance crucial)))

(ambiguity BB.TEL.74-5.1 ((scope ‘そうか’)  
 (status expert-system)  
 (type-CA (Yn-question Confirmation-to-self))  
 (importance important))

(discourse CA-sequences)))

(ambiguity BB.TEL.741-5.1 ((scope ‘‘そうか’’)  
 (status expert-system)  
 (type-CA (Yn-question Confirmation-to-self))  
 (importance important)  
 (discourse CA-sequences)))

(ambiguity BB.TEL.75-2.2.8.1 ((scope ‘‘ややこしいんだ’’)  
 (status expert-system)  
 (type-subject (‘‘その名前が’’ others))  
 (importance important)))

(ambiguity BB.TEL.751-5.1 ((scope ‘‘ややこしいんだ’’)  
 (status expert-system)  
 (type-CA (Inform Expressive))  
 (importance important)))

(ambiguity BB.TEL.76-2.2.8.1 ((scope ‘‘言い’’)  
 (status expert-system)  
 (type-subject ("I" "you" one))  
 (importance crucial)))

(ambiguity BB.TEL.77-5.1 ((scope "言いますね")  
 (status expert-system)  
 (type-CA (Inform Confirmation-question))  
 (importance important)  
 (discourse CA-sequence)))

A : {I;(バス);I} バスストップの駅名は

I : [ah] The name of the bus stop is

(ambiguity BB.TEL.78-5.1 ((scope "バスストップの駅名は")  
 (status expert-system)  
 (type-CA (Inform Wh-question))  
 (importance crucial)  
 (multimodal prosody)))

A : 東山三条

I : Higashiyama Sanjo

(ambiguity BB.TEL.79-5.1 ((scope "東山三条")  
 (status expert-system)  
 (type-CA (Inform Yn-question))  
 (importance important)))

(multimodal prosody)))

(ambiguity BB.TEL.791-2.2.12 ((scope "東山三条")  
 (status expert-system)  
 (type-frag "東山三条")  
 (importance crucial)))

C : OK is that the last stop

I : それは、終点です

(ambiguity BB.TEL.80-2.2.7.1 ((scope "それ")  
 (status expert-system)  
 (type-reference ("東山三条" others))  
 (importance crucial)))

(ambiguity BB.TEL.801-5.1 ((scope "それは、終点です")  
 (status expert-system)  
 (type-CA (Yn-question Inform))  
 (importance crucial)  
 (multimodal prosody)))

A : いえ、[えー] 途中の駅です

I : No it's the middle stop

(ambiguity BB.TEL.81-2.2.8.2 ((scope "です")  
 (status expert-system)  
 (type-information-known ("東山三条"  
 "終点" others))  
 (importance not-important)))

C : [oh] OK

A : 分かりますか

I : [ah] Do you think you can go there

(ambiguity BB.TEL.82-2.2.8.1 ((scope "分かり")  
 (status expert-system)  
 (type-subject ("you" "3rd person" ))  
 (importance crucial)))

(ambiguity BB.TEL.820-2.2.8.2 ((scope "分かり")  
 (status expert-system)  
 (type-information-known ("途中の駅" others))  
 (importance crucial)))

(ambiguity BB.TEL.821-5.1 ((scope "分かりますか")  
 (status expert-system)  
 (type-CA (Yn-question Do-you-understand-question))  
 (importance important)))

C : You say Higashiyama Sanjo  
 I : 東山三条っておっしゃいましたか

(ambiguity BB.TEL.83-2.2.8.1 ((scope "東山三条っておっしゃいましたか")  
 (status expert-system)  
 (type-subject ("you" "3rd person" ))  
 (importance crucial)))

A : はい、そうです  
 I : That's correct

(ambiguity BB.TEL.90-3.1.1 ((scope "はい")  
 (status expert-system)  
 (type-lex (肯定応答 注目表示))  
 (importance crucial)))

(ambiguity BB.TEL.91-5.1 ((scope "はい")  
 (status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance important)  
 (discourse CA-sequences)))

(ambiguity BB.TEL.84-2.2.7.3 ((scope "そう")  
 (status expert-system)  
 (type-reference ("おっしゃい" "東山三条って  
 おっしゃいました" "東山三条" ))  
 (importance not-important)))

C : {A;OK;A}

A : {C;[えー] その;C} 一つ前が京阪三条駅という、よく似た名前ですので、間違えないようにお願いします

I : [ah] Don't get confused because the stop before this one is named Keihan Sanjo is very similar

(ambiguity BB.TEL.85-2.2.7.2 ((scope "その")  
 (status expert-system)  
 (type-reference ("東山三条" others))  
 (discourse CA-sequence)))



(ambiguity BB.TEL.86-2.2.2 ((scope "という")  
 (status expert-system)  
 (type-structure (((京阪三条駅という)(よく似た名前)  
 ((京阪三条駅という)。 (よく似た名前ですので、間違えないようにお願いします))))  
 (importance crucial)))

(ambiguity BB.TEL.861-1.1 ((scope "一つ前が京阪三条駅という")  
 (status expert-system)  
 (type-category (clause adjectival-clause))  
 (importance important)))

C : [oh] {I;OK;I}

I : {C;sounds;C} similar

C : Keihan Sanjo then Higashiyama Sanjo

I : つまり京阪三条があって、その次に東山三条ですね

(ambiguity BB.TEL.87-5.2 ((scope "その次")  
 (status expert-system)  
 (type-situation ("駅の順" others))  
 (importance crucial)  
 (multimodal show a map)))

(ambiguity BB.TEL.871-2.2.7.2 ((scope "その")  
 (status expert-system)  
 (type-situation ("京阪三条" others))  
 (importance crucial)  
 (multimodal show a map)))

A : そうです

I : That's correct

(ambiguity BB.TEL.88-2.2.7.3 ((scope "そう")  
 (status expert-system)  
 (type-reference ("京阪三条があって、その次に東  
 山三条です" "京阪三条" "東山三条"))  
 (importance crucial)))

C : OK I think I can get it

I : [あの一] だいじょうぶだと思います

(ambiguity BB.TEL.89-2.2.8.2 ((scope "だいじょうぶだ")  
 (status user)  
 (type-information-known nothing)  
 (importance crucial)))

(multimodal interactive-with-user)))

A : はい、[えー]そして[えー]東山三条駅で降りられて

I : Now you get off at Higashiyama Sanjo Station

(ambiguity BB.TEL.92-3.1.1 ((scope "はい")  
 (status expert-system)  
 (type-lex (肯定応答 注目表示))  
 (importance crucial)))

(ambiguity BB.TEL.93-5.1 ((scope "はい")  
 (status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance important)  
 (discourse CA-sequences)))

(ambiguity BB.TEL.931-2.2.8.1 ((scope "降りられ")  
 (status expert-system)  
 (type-subject ("you" 3rd person))  
 (importance crucial)))

(ambiguity BB.TEL.932-4 ((scope "られ")  
 (status expert-system)  
 (type-logicosem (尊敬 可能))  
 (importance crucial)))

(ambiguity BB.TEL.933-3.1.1 ((scope "られ")  
 (status expert-system)  
 (type-lex (尊敬 可能))  
 (importance crucial)))

(ambiguity BB.TEL.934-3.1.2 ((scope "られ")  
 (status expert-system)  
 (type-English (can would))  
 (type-Francais (pouvoir voudriez))  
 (importance crucial)))

C : OK

A : ! [umhum] !

I : ! [umhum] /laugh/ !

A : [えー、そうだな] 東側とか、東西南北は (分かります) 分かるかな、  
 その位置について

I : [ah] Do you know {A;which way is;A} east and west

A : {I; わかんないですね;I}

C : [um] {I;No;I}

I : {C;Maybe;C} you're not familiar

- (ambiguity BB.TEL.94-5.1 ((scope "そうだな")  
(status expert-system)  
(type-CA (Temporizer Confirmation-question  
Confirmation-question-to-self))  
(importance important)  
(discourse CA-sequences)))
- (ambiguity BB.TEL.95-5.1 ((scope "かな")  
(status expert-system)  
(type-CA (Yn-question Confirmation-question))  
(importance important)  
(discourse CA-sequences)))
- (ambiguity BB.TEL.96-2.2.8.1 ((scope "分かる")  
(status expert-system)  
(type-subject ("you" "I" "3rd person"))  
(importance crucial)))
- (ambiguity BB.TEL.97-2.2.9 ((scope "その位置について")  
(status expert-system)  
(type-inversion ("その位置について分かる"))  
(importance crucial)))
- (ambiguity BB.TEL.98-2.2.2 ((scope "その位置について")  
(status expert-system)  
(type-structure ("その位置について分かる" "そ  
の位置についてわかんないですね"))  
(importance crucial)  
(multimpdal end-of-turn)))
- (ambiguity BB.TEL.99-2.2.8.1 ((scope "わかんないですね")  
(status expert-system)  
(type-subject ("I" "you" others))  
(importance crucial)))
- (ambiguity BB.TEL.100-5.1 ((scope "わかんないですね")  
(status expert-system)  
(type-CA (Inform Confirmation-question))  
(importance important)  
(discourse CA-sequences)))

C : Could you give me a landmark

I : 何か [あの] 目印になるものを教えていただければ分かると思うんです  
 {A; が; A}

(ambiguity BB.TEL.101-2.2.8.1 ((scope "教え")  
 (status expert-system)  
 (type-subject ("you" 3rd-person))  
 (importance crucial)))

(ambiguity BB.TEL.102-2.2.8.1 ((scope "分かる")  
 (status expert-system)  
 (type-subject ("you" 3rd-person))  
 (importance crucial)))

(ambiguity BB.TEL.1021-1.1 ((scope "何か")  
 (status expert-system)  
 (type-category (後置詞句 名詞句 連体詞句))  
 (importance important)))

(ambiguity BB.TEL.1022-2.2.1 ((scope "何か")  
 (status expert-system)  
 (type-apposition ("目印になるもの" others))  
 (importance crucial)))

A : {I; はい; I}、分かりました | そうでしたら、(バスが)[あー](バスにおりおり)[えー] バスを降りられた時に、バスの進行方向に向かって

I : All right so when you get off the bus and look towards the direction the bus is heading for

(ambiguity BB.TEL.103-3.1.1 ((scope "はい")  
 (status expert-system)  
 (type-lex (肯定応答 注目表示))  
 (importance crucial)))

(ambiguity BB.TEL.104-5.1 ((scope "はい")  
 (status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance important)  
 (discourse CA-sequences)))

(ambiguity BB.TEL.105-2.2.8.1 ((scope "降り")  
 (status expert-system)  
 (type-subject ("you" 3rd-person))  
 (importance crucial)))

(ambiguity BB.TEL.106-4 ((scope "られ")  
 (status expert-system)  
 (type-logicosem ("尊敬" "可能"))

(importance crucial)))

(ambiguity BB.TEL.1061-3.1.1 ((scope "られ")  
 (status expert-system)  
 (type-lex (尊敬 可能))  
 (importance crucial)))

(ambiguity BB.TEL.1062-3.1.2 ((scope "られ")  
 (status expert-system)  
 (type-English (can would))  
 (type-Francais (pouvoir voudriez))  
 (importance crucial)))

(ambiguity BB.TEL.107-2.2.8.1 ((scope "向かつ")  
 (status expert-system)  
 (type-subject ("you" 3rd-person))  
 (importance crucial)))

(ambiguity BB.TEL.301-1.1 ((scope "そうしましたら")  
 (status expert-system)  
 (type-category (conjunctive 節))  
 (importance important)))

(ambiguity BB.TEL.302-2.2.2 ((scope "そうしましたら、(バスが)[あー]  
 (バスにおりおり)[えー]バスを降りられた時に、バスの進行方向に向かって")  
 (status expert-system)  
 (type-structure ("((そうしましたら)(バスを降  
 りられた時に、バスの進行方向に向かって))" "((そうしましたらバスを降り  
 られた時に、)(バスの進行方向に向かって))"))  
 (importance crucial)))

(ambiguity BB.TEL.303-2.2.7.3 ((scope "そう")  
 (status expert-system)  
 (type-deictic (previous utterances  
 others nothing))  
 (importance crucial)))

C : OK

A : 約五分ぐらい歩きますと

I : And walk to that direction for about five {C;minutes;C}

(ambiguity BB.TEL.108-2.2.8.1 ((scope "歩き")  
 (status expert-system)  
 (type-subject ("you" "one" "I"))  
 (importance crucial)))

C : {I;OK;I}

A : [そうだな] 大きなホテルが見えてきます

I : Then you will see a big hotel {C,A;in front;C,A}

(ambiguity BB.TEL.109-5.1 ((scope "そうだな")  
 (status expert-system)  
 (type-CA (Temporizer Confirmation-  
 question-to-self Yn-question))  
 (importance important)  
 (discourse CA-sequences)))

(ambiguity BB.TEL.1091-2.1 ((scope "見えてきます")  
 (status expert-system)  
 (type-segmentation ("((見えて)(きます))"  
 "((見え)(てきます))"))  
 (importance crucial)))

C : {I,A;[uhuh];I,A}

A : {I,C;右;I,C} 側です

I : [oh] no sorry on your right hand side

(ambiguity BB.TEL.110-5.2 ((scope "右側")  
 (status user)  
 (type-situation (right side of what))  
 (importance negligible)  
 (multimodal show-a-map)))

C : OK

A : [えー](それ) そのホテルが見えましたら、[あ] 逆の、左側に交差点があり  
 ますので、左側に曲がってください

I : [ah] When you see that hotel you will see a intersection and  
 please turn to the left

(ambiguity BB.TEL.111-2.2.7.2 ((scope "その")  
 (status user)  
 (type-reference ("右側" "大きな"))  
 (importance crucial)  
 (multimodal show-a-map)))

(ambiguity BB.TEL.112-5.2 ((scope "逆")  
 (status user)  
 (type-situation (opposite of what))  
 (importance crucial)  
 (multimodal show-a-map)))

(ambiguity BB.TEL.1121-2.2.1 ((scope "逆")

```
(status user)
(type-apposition ("左側に " others))
(importance crucial)
(multimodal show-a-map)))
```

```
(ambiguity BB.TEL.113-5.2 ((scope "左側")
(status user)
(type-situation (left side of what))
(importance crucial)
(multimodal show-a-map)))
```

```
(ambiguity BB.TEL.1141-2.2.2 ((scope "そのホテルが見えましたら、 [あ] 逆の、左
側に交差点がありますので、左側に曲がってください")
(status expert-system)
(type-structure (((そのホテルが見えましたら、)
([あ] 逆の、左側に交差点がありますので、))(左側に曲がってください)
((そのホテルが見えましたら、)([あ] 逆の、左側に交差点がありますので、
左側に曲がってください))))))
(importance crucial)))
```

C : OK

A : [えー] そうしまして、だいたい [いー] 三分ほどで、こちらに着きます

I : And just a three minutes walk you will arrive here at thi  
conference center

```
(ambiguity BB.TEL.114-2.2.8.1 ((scope "着き")
(status expert-system)
(type-subject ("you" "one"))
(importance crucial)))
```

```
(ambiguity BB.TEL.115-2.2.7.1 ((scope "こちら")
(status user)
(type-deictic ("speaker's side" "somewhere"))
(importance crucial)
(multimodal show-a-map)))
```

```
(ambiguity BB.TEL.302-1.1 ((scope "そうしまして")
(status expert-system)
(type-category (conjunctive 節))
(importance crucial)))
```

```
(ambiguity BB.TEL.3022-2.2.7.3 ((scope "そう")(status expert-system)
(type-reference (previous utterances
others nothing))
(importance crucial)))
```

(ambiguity BB.TEL.3021-2.2.2 ((scope "だいたい [いー] 三分ほどで、  
 こちらに着きます")  
 (status expert-system)  
 (type-structure ("(((だいたい)([いー] 三分ほ  
 どで、))(こちらに着きます))" "((だいたい)(([いー] 三分ほどで、こちらに  
 着きます))))"))  
 (importance crucial)  
 (multimodal prosody)))

C : OK

A : [えー]、交流センターに着くまでに [いー] 右側に南禅寺というお寺が見え  
 ますので

I : [ah] Right before you arrive there on your right hand side you  
 will see the temple named Nanzenji

(ambiguity BB.TEL.116-2.2.8.1 ((scope "着く")  
 (status expert-system)  
 (type-subject ("you" "one"))  
 (importance crucial)))

(ambiguity BB.TEL.117-5.2. ((scope "右側")  
 (status expert-system)  
 (type-situation ("right side of what"))  
 (importance crucial)  
 (multimodal show a map)))

(ambiguity BB.TEL.118-2.2.2 ((scope "という")  
 (status expert-system)  
 (type-structure (((南禅寺という)(お寺))  
 ((南禅寺という)。(お寺が見えますので))))  
 (importance crucial)))

(ambiguity BB.TEL.1181-1.1 ((scope "交流センターに着くまでに [いー]  
 右側に南禅寺という")  
 (status expert-system)  
 (type-category (せつ れんたいしゅうしょくせつ))  
 (importance crucial)))

(ambiguity BB.TEL.1182-4 ((scope "ので")  
 (status expert-system)  
 (type-logicosem (reason attenuation)))  
 (importance crucial)))





A : はい、[えー]もし分からなければまたお電話ください

I : [ah] If you really get lost please give me a call again

(ambiguity BB.TEL.123-2.2.8.1 ((scope "分から")  
 (status expert-system)  
 (type-subject ("you" "I"))  
 (importance crucial)))

(ambiguity BB.TEL.1241-3.1.1 ((scope "はい")  
 (status expert-system)  
 (type-lex (肯定応答 注目表示))  
 (importance crucial)))

(ambiguity BB.TEL.1252-5.1 ((scope "はい")  
 (status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance important)  
 (discourse CA-sequences)))

C : OK and one more thing I would like to make a reservation

I : [あ]分かりました！もう一つお願いしたいんですけども

A : {I; はい; I}

I : {A; 予; A} 約をしたいんです

(ambiguity BB.TEL.124-3.1.1 ((scope "はい")  
 (status expert-system)  
 (type-lex (肯定応答 注目表示))  
 (importance crucial)))

(ambiguity BB.TEL.125-5.1 ((scope "はい")  
 (status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance important)  
 (discourse CA-sequences)))

(ambiguity BB.TEL.1253-2.2.8.1 ((scope "分かり")  
 (status expert-system)  
 (type-subject ("you" "I" "one"))  
 (importance crucial)))

(ambiguity BB.TEL.1254-2.2.9 ((scope "分かりましたもう一つ")  
 (status expert-system)  
 (type-inversion ("もう一つ分かりました"  
 nothing)))

(importance crucial)))

(ambiguity BB.TEL.126-5.2 ((scope "予約")  
 (status user)  
 (type-situation (which reservation))  
 (importance not-important)  
 (multimodal interactive-with-user)))

A : はい

C : {A;I'd like;A}

A : {C;それは;C} なんの予約ですか

I : [ah] Reservation for what

(ambiguity BB.TEL.127-3.1.1 ((scope "はい")  
 (status expert-system)  
 (type-lex (肯定応答 注目表示))  
 (importance crucial)))

(ambiguity BB.TEL.128-5.1 ((scope "はい")  
 (status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance important)  
 (discourse CA-sequences)))

(ambiguity BB.TEL.129-2.2.7.1 ((scope "それは")  
 (status expert-system)  
 (type-reference ("予約" others))  
 (importance not-important)))

C : I'd like to get a hotel

I : [あの] ホテルの、予約です

(ambiguity BB.TEL.130-2.2.8.2 ((scope "です")  
 (status expert-system)  
 (type-information-known ("それは" others))  
 (importance crucial)))

A : はい、分かりました |(ほ) ホテルはいくつかあるんですけども、[えー]  
 国際交流センターに近いところがよろしいでしょうか

I : All right [ah] there are many hotels but would you like to have  
 the hotel which is close to thi International Conference Center

(ambiguity BB.TEL.1311-3.1.1 ((scope "はい")  
 (status expert-system)  
 (type-lex (肯定応答 注目表示))  
 (importance crucial)))

(ambiguity BB.TEL.132-5.1 ((scope "はい")  
 (status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance important)  
 (discourse CA-sequences)))

(ambiguity BB.TEL.1331-2.2.2 ((scope "分かりました (ほ) ホテルはいくつかあるん  
 ですけども ")

(status expert-system)  
 (type-structure (((分かりました (ほ) ホテルは)  
 (いくつかあるんですけども)) ((分かりました。)(ホテルはいくつかあ  
 るんですけども))))  
 (importance crucial)  
 (multimodal prosody)))

(ambiguity BB.TEL.1332-1.1 ((scope "分かりました (ほ) ホテルは")  
 (status expert-system)  
 (type-category (noun-phrase nothing))  
 (importance crucial)  
 (multimodal prosody)))

(ambiguity BB.TEL.133-5.1 ((scope "分かりました")  
 (status expert-system)  
 (type-CA (Inform Acknowledge))  
 (importance important)  
 (discourse CA-sequences)))

C : If there is a cheap one

I : もし安いのがあればそれで、いいんですが

(ambiguity BB.TEL.134-2.2.7.1 ((scope "の")  
 (status expert-system)  
 (type-reference ("ホテル" others))  
 (importance crucial)))

(ambiguity BB.TEL.135-2.2.7.1 ((scope "それ")  
 (status expert-system)  
 (type-reference ("の" "ホテル" others))  
 (importance crucial)))

A : [ふんふんふんふん][えー] 国際交流センターから歩いて五分のところに先  
 ほど、説明しました都ホテルというのがあります

I : [ah] About five minutes walk from thi International Conference  
 Center [ah] there is a big hotel which I just explained before



[あ] 少し格式のある、日本の伝統のある [う]、ホテルですので、)  
 ([え] お値段の方が少し高くなります)) ((ただこちらのほうは、)  
 ([あ] 少し格式のある、日本の伝統のある [う]、ホテルですので、 [え]  
 お値段の方が少し高くなります))))

(importance crucial)  
 (multimodal prosody))

(ambiguity BB.TEL.1392-2.2.2 ((scope "少し格式のある、日本の伝統のある [う]、  
 ホテルです")

(status expert-system)  
 (type-structure (((((少し格式のある、日本の  
 伝統の))(ある、))(ホテルです)) ((少し格式のある、)  
 (日本の伝統のある)) (ホテルです))))

(importance crucial)  
 (multimodal prosody))

(ambiguity BB.TEL.1393-2.2.3 ((scope "こちらのほう")

(status expert-system)  
 (type-generic (1/2 certain))  
 (importance crucial))

(ambiguity BB.TEL.1394-2.2.3 ((scope "お値段の方")

(status expert-system)  
 (type-generic (1/2 certain))  
 (importance crucial))

(ambiguity BB.TEL.1395-4 ((scope "こちらのほう")

(status expert-system)  
 (type-logicosem (choice attenuation))  
 (importance crucial))

(ambiguity BB.TEL.1396-4 ((scope "お値段の方")

(status expert-system)  
 (type-logicosem (choice attenuation))  
 (importance crucial))

C : {A3; [umhuh]; A3}

A : {C3; そのほか; C3} に

I : And besides this hotel

(ambiguity BB.TEL.140-2.2.7.2 ((scope "その")

(status expert-system)  
 (type-reference ("少し格式のある、日本の伝統  
 のある [う]、ホテル" other))  
 (importance crucial))

A : 先ほどバスの名前で言いました京阪三条駅

I : [ah] There is one at thi Keihan Sanjo Station

(ambiguity BB.TEL.141-2.2.2 ((scope "言いました")  
 (status expert-system)  
 (type-structure ("言いました京阪三条駅"  
 "バスの名前で言いました"))  
 (importance crucial)  
 (multimodal pause-duration)))

(ambiguity BB.TEL.1411-1.1 ((scope "先ほどバスの名前で言いました")  
 (status expert-system)  
 (type-category (clause nothing))  
 (importance crucial)  
 (multimodal pause-duration)))

A : から歩いて五分のところに、京都ロイヤルホテルというのがあります

I : [ah] There is one at thi Keihan Sanjo Station

(ambiguity BB.TEL.1412-2.2.8.1 ((scope "歩いて")  
 (status expert-system)  
 (type-subject ("you" "I" "one"))  
 (importance crucial)))

(ambiguity BB.TEL.1413-2.2.2 ((scope "京阪三条駅から歩いて五分のところに")  
 (status expert-system)  
 (type-structure ("((京阪三条駅から)(歩いて  
 五分のところに))" "((国際交流センターから歩いて)(五分のところに))"))  
 (importance crucial)))

(ambiguity BB.TEL.1414-1.1 ((scope "歩いて")  
 (status expert-system)  
 (type-category (adverbial-phrase adjectival-  
 phrase verbal-clause))  
 (importance crucial)))

C : OK

A : 都ホテルが一泊二万円

I : [ah] For example to stay at Miyako Hotel [ah] the rate for one  
 night is twenty thousand yen

A : で、ロイヤルホテルでしたら一万三千円です

I : But on thi other hand the Royal Hotel costs thirteen thousand yen

(ambiguity BB.TEL.142-5.2 ((scope "都ホテルが一泊二万円で、ロイヤルホテルでしたら一万三千円です")

(status user)  
 (type-situation (((都ホテルが)(一泊二万円で、  
 ロイヤルホテルでしたら一万三千円です)) ((都ホテルが一泊二万円で、)  
 (ロイヤルホテルでしたら一万三千円です))) )  
 (importance crucial)  
 (multimodal interactive-with-user)))

C : OK I think I'll stay at the Royal Hotel then

I : [あー] じゃあロイヤルホテルの方に泊まろうと思います

(ambiguity BB.TEL.143-2.2.7.3 ((scope "じゃあ")

(status expert-system)  
 (type-deictic (previous utterance others))  
 (importance crucial)))

(ambiguity BB.TEL.1431-2.2.3 ((scope "方")

(status expert-system)  
 (type-generic (1/2 certain))  
 (importance crucial)))

(ambiguity BB.TEL.1432-4 ((scope "方")

(status expert-system)  
 (type-logicosem (attenuation choice))  
 (importance crucial)))

A : はい、分かりました

I : All right

(ambiguity BB.TEL.144-3.1.1 ((scope "はい")

(status expert-system)  
 (type-lex (肯定応答 注目表示))  
 (importance crucial)))

(ambiguity BB.TEL.145-5.1 ((scope "はい")

(status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance important)  
 (multimodal CA-sequences)))

A : [えー] それではお名前からお願いします

I : Then could you please give me your name

(ambiguity BB.TEL.146-3.2 ((scope "お願いします")



(status expert-system)  
 (type-substitution ("言う" others))  
 (importance crucial))

(ambiguity BB.TEL.146-2.2.7.1 ((scope "それ")  
 (status expert-system)  
 (type-deictic (previous utterances  
 others nothing ))  
 (importance negligible)))

C : OK Betty Blocksom

I : [えー] ベティー・ブロックソンと申します

(ambiguity BB.TEL.147-2.2.8.2 ((scope "と申します")  
 (status expert-system)  
 (type-information-known ("名前" "I" others))  
 (importance crucial)))

A : [えー] スペルをお願いします

I : Can you spell

(ambiguity BB.TEL.148-2.2.8.2 ((scope "スペルを")  
 (status expert-system)  
 (type-information-known ("名前の" others))  
 (importance crucial)))

(ambiguity BB.TEL.149-3.2 ((scope "お願いします")  
 (status expert-system)  
 (type-substitution ("言う" others))  
 (importance crucial)))

C : B E T T Y

I : [えー] ビーイーティーティーワイ

(ambiguity BB.TEL.150-2.2.8.2 ((scope "ビーイーティーティーワイ")  
 (status expert-system)  
 (type-information-known ("スペルは" others))  
 (importance crucial)))

(ambiguity BB.TEL.1501-2.2.8.1 ((scope "ビーイーティーティーワイ")  
 (status expert-system)  
 (type-vp ("です" others))  
 (importance crucial)))

A : ビーイーティーティーワイ

C : B L O

I : ビーエルオー

(ambiguity BB.TEL.151-2.2.8.2 ((scope "ビーイーティーティーワイ")  
 (status expert-system)  
 (type-information-known ("スペルは" others))  
 (importance crucial)))

(ambiguity BB.TEL.1511-2.2.8.1 ((scope "ビーイーティーティーワイ")  
 (status expert-system)  
 (type-vp ("です" others))  
 (importance crucial)))

(ambiguity BB.TEL.152-2.2.8.2 ((scope "ビーエルオー")  
 (status expert-system)  
 (type-information-known ("スペルは" others))  
 (importance crucial)))

(ambiguity BB.TEL.1521-2.2.8.1 ((scope "ビーエルオー")  
 (status expert-system)  
 (type-vp ("です" others))  
 (importance crucial)))

A : ビーエルオー

I : B {C;L O;C}

C : {I;C K;I}

I : シーケー

A : シーケー

(ambiguity BB.TEL.153-2.2.8.2 ((scope "ビーエルオー")  
 (status expert-system)  
 (type-information-known ("スペルは" others))  
 (importance crucial)))

(ambiguity BB.TEL.1531-2.2.8.1 ((scope "ビーエルオー")  
 (status expert-system)  
 (type-vp ("です" others))  
 (importance crucial)))

(ambiguity BB.TEL.154-2.2.8.2 ((scope "シーケー")  
 (status expert-system)  
 (type-information-known ("スペルは" others))  
 (importance crucial)))

(ambiguity BB.TEL.1541-2.2.8.1 ((scope "シーケー")

```
(status expert-system)
(type-vp ("です" others))
(importance crucial)))
```

```
(ambiguity BB.TEL.155-2.2.8.2 ((scope "シーケー")
(status expert-system)
(type-information-known ("スペルは" others))
(importance crucial)))
```

```
(ambiguity BB.TEL.1550-2.2.8.1((scope "シーケー")
(status expert-system)
(type-vp ("です" others))
(importance crucial)))
```

C : S O M

I : エスオーエム

```
(ambiguity BB.TEL.156-2.2.8.2 ((scope "エスオーエム")
(status user)
(type-information-known ("スペルは" others))
(importance crucial)
(multimodal writing-on-the-screen)))
```

```
(ambiguity BB.TEL.1561-2.2.8.1 ((scope "エスオーエム")
(status expert-system)
(type-vp ("です" others))
(importance crucial)))
```

A : エスオーエム、ベティー・ブロックソンさんですね

I : So you are Betty Blocksom {C;right;C}

```
(ambiguity BB.TEL.157-2.2.8.2 ((scope "エスオーエム、ベティー・ブロックソンさんですね")
```

```
(status expert-system)
(type-information-known ("名前は" others))
(importance crucial)))
```

```
(ambiguity BB.TEL.1571-2.1 ((scope "エスオーエム、ベティー・ブロックソン")
(status user)
(type-segmentation ("(エスオーエム、ベティー・
ブロックソン)" "((エスオーエム、)((ベティー・ブロックソン)))
(importance crucial)
(multimodal writing-on-the-screen)))
```

(ambiguity BB.TEL.159-5.1 ((scope "ですね")  
 (status expert-system)  
 (type-CA (Inform Confirmation-question))  
 (importance important)))

C : {I;That's;I} right

I : そのとおりです

(ambiguity BB.TEL.160-2.2.7.2 ((scope "その")  
 (status expert-system)  
 (type-reference (previous utterance others))  
 (importance crucial)))

A : はい、[えーと] それでは、勤務先のお電話番号をお願いします

I : Then could you give me your telephone number [ah] the number  
 of thi office where you work

(ambiguity BB.TEL.161-3.2 ((scope "お願いします")  
 (status expert-system)  
 (type-substitution ("言う" others))  
 (importance crucial)))

(ambiguity BB.TEL.1611-2.2.7.1 ((scope "それ")  
 (status expert-system)  
 (type-deictic (previous utterances  
 others nothing))  
 (importance negligible)))

(ambiguity BB.TEL.1612-3.1.1 ((scope "はい")  
 (status expert-system)  
 (type-lex (肯定応答 注目表示))  
 (importance crucial)))

(ambiguity BB.TEL.1613-5.1 ((scope "はい")  
 (status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance important)  
 (discourse CA-sequences)))

C : OK o seven five

I : 分かりました |[えー] 零 <zero> 七五の

A : 零 <zero> 七五

(ambiguity BB.TEL.162-1.1 ((scope "零 <zero> 七五の")

(status expert-system)  
 (type-category (電話番号 日時 区画番地))  
 (importance crucial)))

(ambiguity BB.TEL.163-1.1 ((scope "零<zero>七五")  
 (status expert-system)  
 (type-category (電話番号 日時 区画番地))  
 (importance crucial)))

C : Three nine two  
 I : 三九二  
 A : 三九二  
 I : Three nine two

(ambiguity BB.TEL.164-1.1 ((scope "三九二")  
 (status expert-system)  
 (type-category (電話番号 日時 区画番地))  
 (importance crucial)))

(ambiguity BB.TEL.165-1.1 ((scope "三九二")  
 (status expert-system)  
 (type-category (電話番号 日時 区画番地))  
 (importance crucial)))

C : Seven one eight six  
 I : [えー] 七一八六  
 A : 七一八六  
 I : Seven one eight six  
 C : [umhum]

(ambiguity BB.TEL.166-1.1 ((scope "七一八六")  
 (status expert-system)  
 (type-category (電話番号 日時 区画番地))  
 (importance crucial)))

(ambiguity BB.TEL.167-1.1 ((scope "七一八六")  
 (status expert-system)  
 (type-category (電話番号 日時 区画番地))  
 (importance crucial)))

A : はい、[えー] それでは [あー][えっと] いつからいつまでお泊まりでしょうか

I : All right so when would you like to stay

(ambiguity BB.TEL.168-3.1.1 ((scope "はい")  
 (status expert-system)  
 (type-lex (肯定応答 注目表示))  
 (importance crucial)))

(ambiguity BB.TEL.169-5.1 ((scope "はい")  
 (status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance important)  
 (discourse CA-sequences)))

(ambiguity BB.TEL.1691-2.2.7.1 ((scope "それ")  
 (status expert-system)  
 (type-deictic (previous utterances others  
 nothing))  
 (importance negligible)))

(ambiguity BB.TEL.1692-2.2.2 ((scope "いつからいつまでお泊まりでしょう")  
 (status expert-system)  
 (type-structure ("((いつから)(いつまでお泊まり  
 でしょう))" "((いつからいつまで)(お泊まりでしょう))"))  
 (importance negligible)))

C : OK June tenth

I : [えー] 六月の十日 <touka> から

A : 六月の <touka> から

I : From June tenth

(ambiguity BB.TEL.170-2.2.8.2 ((scope "六月の十日から")  
 (status expert-system)  
 (type-information-known ("泊は " others))  
 (importance crucial)))

C : To June eighteenth

I : [えー] 六月の十八日までです

(ambiguity BB.TEL.172-2.2.8.2 ((scope "六月の十八日までです")  
 (status expert-system)  
 (type-information-known ("泊まりは " others))  
 (importance crucial)))

(ambiguity BB.TEL.1721- 2.2.2 ((scope "六月の十日から六月の十八日までです")

(status expert-system)  
 (type-structure ("(((六月の)十日から六月の  
 十八日まで))(です))" "(((六月の十日から)六月の十八日まで))(です))")  
 (importance crucial)))

(ambiguity BB.TEL.1722-1.1 ((scope "六月の十日から")  
 (status expert-system)  
 (type-category (adjectival-phrase  
 adverbial-phrase))  
 (importance crucial)))

A : 六月の、十八日までですね

C : [umhum]

I : Until June eight{C;teenth;C}

(ambiguity BB.TEL.173-2.2.8.2 ((scope "六月の、十八日までですね")  
 (status expert-system)  
 (type-information-known ("泊まりは" others))  
 (importance crucial)))

(ambiguity BB.TEL.174-5.1 ((scope "六月の、十八日までですね")  
 (status expert-system)  
 (type-CA (Inform Confirmation-question))  
 (importance important)  
 (discourse CA-sequences)))

C : {I;[umhum];I} That's right

I : そのとおりです

(ambiguity BB.TEL.175-2.2.7.2 ((scope "その")  
 (status expert-system)  
 (type-reference (previous utterance others))  
 (importance crucial)  
 (discourse CA-sequences)))

A : はい、[えー] それでは六月の十日 <touka> は何時頃、ホテルに入られま  
 すでしょうか

I : All right then on the June tenth [ah] what time do you expect  
 to check in

(ambiguity BB.TEL.176-3.1.1 ((scope "はい")  
 (status expert-system)  
 (type-lex (肯定応答 注目表示))  
 (importance crucial)))

- (ambiguity BB.TEL.177-5.1 ((scope "はい")  
 (status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance important)  
 (discourse CA-sequences)))
- (ambiguity BB.TEL.1771-2.2.7.1 ((scope "それ")  
 (status expert-system)  
 (type-deictic (previous utterances  
 others nothing))  
 (importance negligible)))
- (ambiguity BB.TEL.178-2.2.8.1 ((scope "入ら")  
 (status expert-system)  
 (type-subject ("you" "3rd person"))  
 (importance crucial) ))
- (ambiguity BB.TEL.1781-3.1.1 ((scope "入られ")  
 (status expert-system)  
 (type-lex (尊敬 可能))  
 (importance crucial)))
- (ambiguity BB.TEL.1782-3.1.2 ((scope "入られ")  
 (status expert-system)  
 (type-English (would can could))  
 (type-Francais (pouvoir voudriez pourriez))  
 (importance crucial)))
- C : About one  
 I : [え] 一時頃だと思います
- (ambiguity BB.TEL.179-2.2.8.2 ((scope "一時頃だと思います")  
 (status expert-system)  
 (type-information-known ("ホテルに入るのは"  
 others))  
 (importance crucial)))
- (ambiguity BB.TEL.1791-5.2 ((scope "一時頃")  
 (status user)  
 (type-situation (p.m a.m))  
 (importance crucial)  
 (multimodal interactive-with-user)))
- A : 午後一時ですね  
 I : One o'clock in thi afternoon {C;right;C}



(ambiguity BB.TEL.180-2.2.8.2 ((scope "午後一時ですね")  
 (status expert-system)  
 (type-information-known ("ホテルに入るのは"  
 others)))  
 (importance crucial)))

(ambiguity BB.TEL.181-5.1 ((scope "午後一時ですね")  
 (status expert-system)  
 (type-CA (Inform Confirmation-question))  
 (importance important)))

C : {I;That's;I} right  
 I : そのとおりです

(ambiguity BB.TEL.182-2.2.7.2 ((scope "その")  
 (status expert-system)  
 (type-reference (previous utterance others))  
 (importance crucial)))

A : 十八日お帰りは何時頃でしょうか  
 I : And what time you will be leaving on thi eighteenth

(ambiguity BB.TEL.183-5.2 ((scope "お帰り")  
 (status user)  
 (type-situation ("ホテルへの戻" "ホテルからの出発  
 ")))  
 (importance crucial)  
 (multimodal interactive-with-user)))

(ambiguity BB.TEL.1831-2.2.8.1 ((scope "十八日")  
 (status expert-system)  
 (type-particle ("の" "に" others))  
 (importance not-important)))

(ambiguity BB.TEL.1832-2.2.2 ((scope "十八日お帰りは何時頃でしょうか")  
 (status expert-system)  
 (type-structure ("((十八日お帰りは)(何時頃で  
 しょうか))" "((十八日)(お帰りは何時頃で  
 しょうか))"))  
 (importance not-important)))

C : About ten in the morning  
 I : [えー]、朝の十時頃を考えてます

(ambiguity BB.TEL.184-2.2.8.2 ((scope "朝の十時頃を考えてます")  
 (status expert-system)  
 (type-information-known ("ホテルへの戻"  
 "ホテルからの出発" others))  
 (importance crucial)))

A : はい、分かりました御宿泊は女性のかたお一人でよろしいでしょうか

I : All right so there will be just one person one lady

(ambiguity BB.TEL.185-3.1.1 ((scope "はい")  
 (status expert-system)  
 (type-lex (肯定応答 注目表示))  
 (importance crucial)))

(ambiguity BB.TEL.186-5.1 ((scope "はい")  
 (status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance important)  
 (discourse CA-sequences)))

(ambiguity BB.TEL.187-3.2 ((scope "でよろしい")  
 (status expert-system)  
 (type-substitution ("良い" "うまくいく"))  
 (importance crucial)))

(ambiguity BB.TEL.1871-2.2.2 ((scope "分かりました御宿泊は女性のかたお一人  
 でよろしいでしょうか")  
 (status expert-system)  
 (type-structure ("(分かりました)。(御宿泊は  
 女性のかたお一人でよろしいでしょうか)" "((分かりました)(御宿泊は))(女  
 性のかたお一人でよろしいでしょうか)))  
 (importance crucial)  
 (multimodal prosody) ))

(ambiguity BB.TEL.1872-1.1 ((scope "分かりました")  
 (status expert-system)  
 (type-category (independent-clause  
 relative-clause))  
 (importance crucial)  
 (multimodal prosody)))

(ambiguity BB.TEL.1872-2.2.5 ((scope "女性のかたお一人でよろしいでしょうか")  
 (status expert-system)  
 (type-qscope ("お一人で" "お一人でよろしい"))

(importance crucial)))

C : [umhum] That's right

I : (その)、そうです

(ambiguity BB.TEL.188-2.2.7.3 ((scope "そう")  
 (status expert-system)  
 (type-reference ("女性のかたお一人" others))  
 (importance crucial)  
 (discourse CA-sequences)))

A : 恐れ入りますが、年齢の方をお願いいたします

I : [ah] I'm afraid to ask this but [ah] could you give me [ah] (how)  
 how old are you

(ambiguity BB.TEL.189-2.2.8.2 ((scope "年齢")  
 (status user)  
 (type-information-known ("女性の" others))  
 (importance crucial)  
 (multimodal interactive-with-user)))

(ambiguity BB.TEL.190-3.2 ((scope "お願いいたします")  
 (status expert-system)  
 (type-substitution ("言う" others))  
 (importance crucial)))

(ambiguity BB.TEL.1901-2.2.3 ((scope "方")  
 (status expert-system)  
 (type-generic (1/2 certain ))  
 (importance crucial)))

(ambiguity BB.TEL.1902-3.1.1 ((scope "方")  
 (status expert-system)  
 (type-lex (choice attenuation ))  
 (importance crucial)))

C : Twenty-two

I : 二十二歳です

(ambiguity BB.TEL.191-2.2.8.2 ((scope "二十二歳です")  
 (status expert-system)  
 (type-information-known ("年齢" others))  
 (importance crucial)

A : はい、分かりました | シングルルームを一部屋でよろしいですか

I : So one single room is that all right

(ambiguity BB.TEL.192-3.1.1 ((scope "はい")  
 (status expert-system)  
 (type-lex (肯定応答 注目表示))  
 (importance crucial)))

(ambiguity BB.TEL.193-5.1 ((scope "はい")  
 (status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance important)  
 (discourse CA-sequences)))

(ambiguity BB.TEL.194-2.2.8.2 ((scope "シングルルームを一部屋")  
 (status expert-system)  
 (type-information-known "予約する")  
 (importance crucial)))

(ambiguity BB.TEL.1941-3.2 ((scope "よろしい")  
 (status expert-system)  
 (type-substitution ("良い" "うまいく") )  
 (importance crucial)))

(ambiguity BB.TEL.1942-2.2.2 ((scope "分かりましたシングルルームを  
 一部屋でよろしいですか")  
 (status expert-system)  
 (type-structure ("((分かりました)。 (シングル  
 ルームを一部屋でよろしいですか))" "(分かりましたシングルルームを)  
 (一部屋でよろしいですか))" "(分かりましたシングルルームを一部屋で)  
 (よろしいですか))")  
 (importance crucial)  
 (multimodal prosody)))

(ambiguity BB.TEL.1943-1.1 ((scope "分かりました")  
 (status expert-system)  
 (type-category (independent-clause  
 relative-clause))  
 (importance crucial)))

(ambiguity BB.TEL.1944-2.2.5 ((scope "シングルルームを一部屋でよろしいです")  
 (status expert-system)  
 (type-qscheme "一部屋で" "一部屋でよろしい")  
 (importance crucial)))

C : That's fine

I : [あの] それで結構です

```
(ambiguity BB.TEL.195-2.2.7.1 ((scope "それ ")
                                (status expert-system)
                                (type-reference ( "シングルルームを一部屋 "
                                                others))
                                (importance crucial)))
```

A : はい、分かりました！[え] そのほかにお食事の件なんですけれども

I : And besides that we have to decide about the meals

```
(ambiguity BB.TEL.196-3.1.1 ((scope "はい ")
                               (status expert-system)
                               (type-lex (肯定応答 注目表示))
                               (importance crucial)))
```

```
(ambiguity BB.TEL.197-5.1 ((scope "はい ")
                             (status expert-system)
                             (type-CA (YES Acknowledge))
                             (importance important)
                             (discourse CA-sequences)))
```

```
(ambiguity BB.TEL.198-2.2.7.2 ((scope "その ")
                                 (status expert-system)
                                 (type-deictic (これまで述べたこと others))
                                 (importance crucial)))
```

```
(ambiguity BB.TEL.199-5.1 ((scope "んですけども ")
                             (status expert-system)
                             (type-CA (Inform Topic ))
                             (importance important)
                             (discourse CA-sequences)))
```

A : [えー] 朝食のみのものと、それから[えー] 朝食と夕食と両方付いているものがありますが、どちらになさいますか

I : [ah] The hotel has a set with breakfast included or breakfast and dinner included which would you like to have

```
(ambiguity BB.TEL.200-2.2.8.2 ((scope "ありますが ")
                                (status expert-system)
                                (type-information-known ("お食事 " others))
                                (importance crucial)))
```

```
(ambiguity BB.TEL.201-3.2 ((scope "なさい ")
```

```
(status expert-system)
(type-substitution ("選ぶ" others))
(importance crucial))
```

```
(ambiguity BB.TEL.2011-2.2.2 ((scope "朝食と夕食と両方")
(status expert-system)
(type-structure ("((朝食と)(夕食と両方))"
"((朝食と夕食と)(両方))"))
(importance crucial)))
```

```
(ambiguity BB.TEL.2012-1.1 ((scope "夕食と")
(status expert-system)
(type-category (adverbial-phrase nominal-phrase))
(importance crucial)))
```

```
(ambiguity BB.TEL.2013-2.2.2 ((scope "そのほかにお食事の件なんです
けれども朝食のみのものと、それから朝食と夕食と両方付いているものがあ
りますが、どちらになさいますか")
(status expert-system)
(type-structure ("((そのほかにお食事の件な
んですけれども)(朝食のみのものと、それから朝食と夕食と両方付いている
ものがありますが、)(どちらになさいますか))) " "(((そのほかにお食事の件
なんですけれども)(朝食のみのものと、それから朝食と夕食と両方付いている
ものがありますが))、(どちらになさいますか))"))
(importance crucial)))
```

```
(ambiguity BB.TEL.2014-4 ((scope "ですけれども")
(status expert-system)
(type-logicosem (conjunctive attenuation))
(importance crucial)
(multimodal pause-duration)))
```

```
(ambiguity BB.TEL.2015-4 ((scope "ありますが")
(status expert-system)
(type-logicosem (conjunctive attenuation))
(importance crucial)
(multimodal pause-duration)))
```

C : [ah] Just the breakfast please

I : 朝食だけで結構です

```
(ambiguity BB.TEL.202-2.2.8.2 ((scope "朝食だけで結構です")
(status expert-system)
(type-information-known ("お食事は" others))
(importance crucial)))
```

A : はい、分かりました | [え] そうでしたら、 [えー] 六月十日 <touka> から十八日まで、 [えー] 京都ロイヤルホテルの宿泊でよろしいですね  
 I : All right all right so you will bw staying from the tenth of June until thi eighteenth of June that's the Kyoto Royal Hotel is that right

(ambiguity BB.TEL.203-3.1.1 ((scope "はい")  
 (status expert-system)  
 (type-lex (肯定応答 注目表示))  
 (importance crucial)))

(ambiguity BB.TEL.204-5.1 ((scope "はい")  
 (status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance important)  
 (discourse CA-sequences)))

(ambiguity BB.TEL.205-1.1 ((scope "そうでしたら")  
 (status expert-system)  
 (type-category (conjunctive clause))  
 (importance crucial)  
 (discourse CA-sequences)))

(ambiguity BB.TEL.206-2.2.8.2 ((scope "六月十日から十八日まで、京都ロイヤル  
 ホテルの宿泊でよろしいですね")  
 (status expert-system)  
 (type-information-known ("予約は" others))  
 (importance crucial)))

(ambiguity BB.TEL.2061-2.2.8.1 ((scope "六月十日から十八日まで")  
 (status expert-system)  
 (type-vp ("で" others))  
 (importance crucial)))

(ambiguity BB.TEL.2062-2.2.2 ((scope "六月十日から十八日まで、京都ロイヤル  
 ホテルの宿泊でよろしいですね")  
 (status expert-system)  
 (type-structure (((六月十日から十八日まで、)  
 (京都ロイヤルホテルの宿泊で))(よろしいですね) ((六月十日から十八日まで、)  
 (京都ロイヤルホテルの宿泊でよろしいですね))))  
 (importance crucial)))

C : OK

I : そうです

(ambiguity BB.TEL.207-2.2.7.3 ((scope "そう")  
 (status expert-system)  
 (type-reference (previous utterance others))  
 (importance crucial)  
 (discourse CA-sequences)))

A : はい、分かりました

(ambiguity BB.TEL.208-3.1.1 ((scope "はい")  
 (status expert-system)  
 (type-lex (肯定応答 注目表示))  
 (importance crucial)))

(ambiguity BB.TEL.209-5.1 ((scope "はい")  
 (status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance important)  
 (discourse CA-sequences)))

I : All right

C : Thank you very much

I : ありがとうございます

A : はい、ありがとうございます

I : Thank you very much

(ambiguity BB.TEL.210-3.1.1 ((scope "はい")  
 (status expert-system)  
 (type-lex (肯定応答 注目表示))  
 (importance crucial)))

(ambiguity BB.TEL.211-5.1 ((scope "はい")  
 (status expert-system)  
 (type-CA (YES Acknowledge))  
 (importance important)  
 (discourse CA-sequences)))

C : Good-bye

I : どうも失礼いたします

A : さよなら

I : Good-bye



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