HCRC Dialogue Structure Coding Manual*

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Abstract

Currently, many researchers are using coding of discourse and dialogue phenomena in collected corpora to study the dynamics of dialogue. This manual describes a coding system based on utterance function, game structure, and higher level transaction structure, which has been applied to a corpus of spontaneous task-oriented spoken dialogues.

1 Introduction

The current coding schemes have been applied to the HCRC Map Task Corpus (Anderson et al. 1991), which is a collection of 128 task-oriented dialogues involving approximately fifteen hours of speech. In the dialogues, two participants have slightly different versions of a simple map with approximately fifteen landmarks on it. One participant's map has a route printed on it; the task is for the other participant to duplicate the route. An example route giver map is given in figure 1. The trials balance the familiarity of the speakers — whether they were acquainted before the experiment — and whether eye contact was possible between the speakers or was blocked by a thin screen. There was also variation in matching between landmarks on the participants' maps, in opportunities for contrastive stress, and in phonological characteristics of landmark names. Some trials were videoed as well as being tape-recorded.

Three levels of dialogue structure have been devised for the Map Task Corpus, similar to the three middle levels of Sinclair and Coulthard's (1975) analysis of classroom discourse. At the highest level, dialogues are divided into *transactions*, which are subdialogues that accomplish one major step in the participants' plan for achieving the task. The size and shape of transactions is largely dependent on the task. In the map task, route givers typically divide the route into manageable segments. A typical transaction is a subdialogue which gets the route follower to draw one route segment on the map. Transactions are made up of *conversational games*, which are often also called dialogue games (Carlson 1983; Levin and Moore 1977; Power 1979), interactions (Houghton 1986), or exchanges (Sinclair and Coulthard 1975). All forms of conversational games embody the observation that, by and

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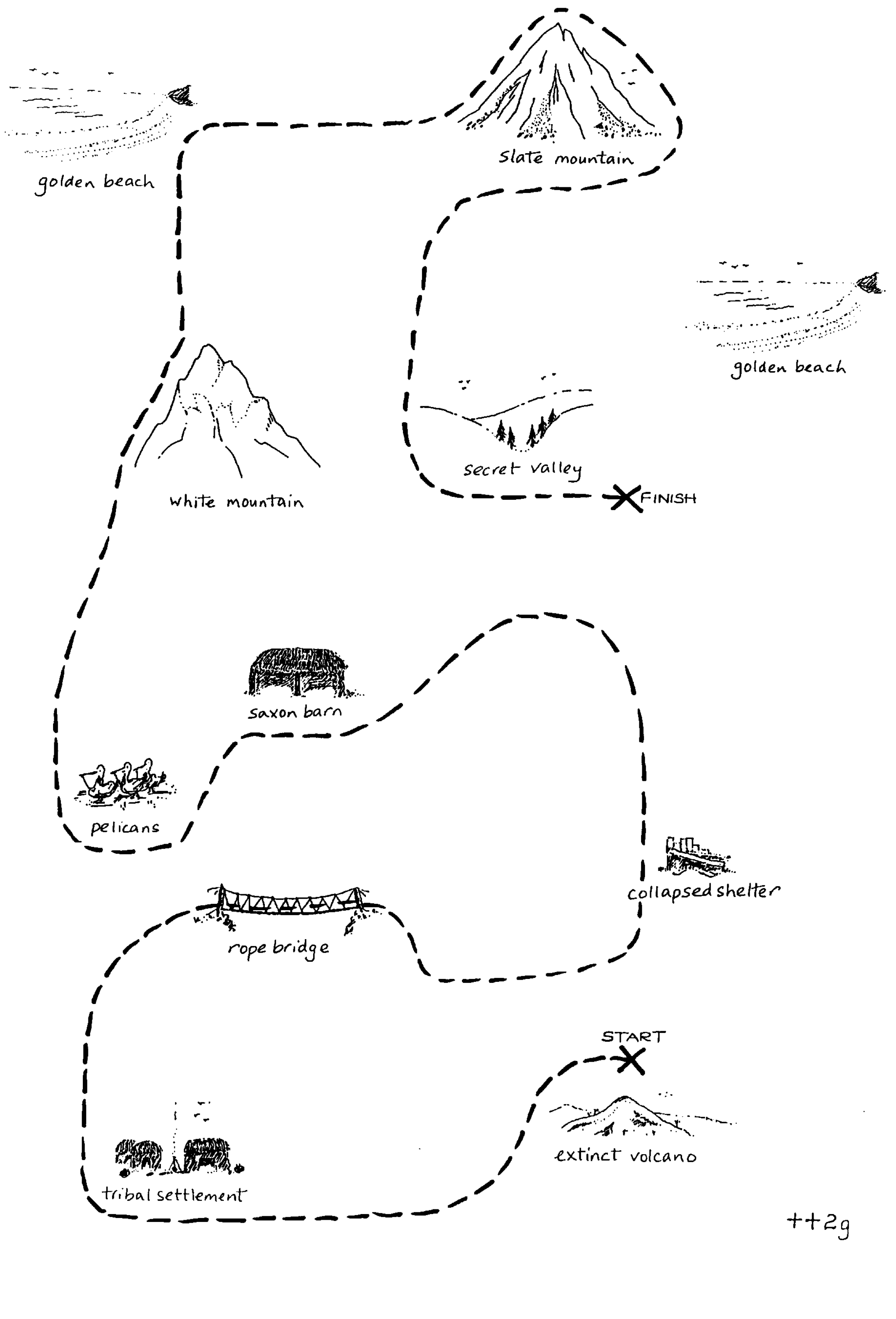

Figure 1: An example route giver's map.

large, questions are followed by answers, statements by acceptance or denial, and so on. Game analysis makes use of this regularity to differentiate between "initiations" which set up an expectation about what will follow, and "responses" which fulfill those expectations. In addition, games are often differentiated by the kind of purpose which they have, for example, getting information from the partner or providing information. A conversational game is a set of utterances starting with an initiation and encompassing all utterances up until the purpose of the game has been either fulfilled (e.g., the requested information has been transferred) or abandoned. Games can nest within each other if one game is initiated to serve the larger goal of a game which has already been initiated (for instance, if a question is on the floor but the hearer needs to ask a clarificatory question before answering). Games are themselves made up of *conversational moves*, which are simply different kinds of initiations and responses classified according to their purposes. All 128 map task dialogues have been game and move coded; to date only a small subset of the corpus has been transaction coded. An example of a dialogue coded for all three levels is given in section 5.

2 The Move Coding Scheme

The move coding analysis is the most substantial of the coding schemes. It was developed by extending the moves which make up Houghton's (1986) interaction frames to fit the kinds of interactions found in the map task dialogues. The distinctions used to classify moves are summarised in figure 2.

2.1 Initiating Moves

The coding scheme distinguishes the following move types, all of which set up the expectation of a response. Initiating moves often occur at the beginning of a game, where they introduce a new discourse purpose into the dialogue.

2.1.1 The INSTRUCT Move

An INSTRUCT move commands the partner to carry out any action other than the one implicit in queries (i.e., "tell me the answer to this question"). The instruction can be quite indirect, as in (4) below, as long as it is obvious that there is a specific action which the instructor intends to elicit (in this case, putting the pen down at the start). In the map task, this usually involves the route giver telling the route follower how to navigate part of the route. Participants can also give other INSTRUCT moves, such as telling the partner to go through something again but more slowly. In these and later examples, "G" denotes the instruction giver, the participant who knows the route, and "F", the instruction follower, the one who is being told the route. Editorial comments which help to establish the dialogue context are given in square brackets.

Example 1

G: Go right round, ehm, until you get to just above them.

Example 2

G: If you come in a wee bit so that you're about an inch away from both edges.

Example 3

G: And I want you to go towards the left-hand side of the page.

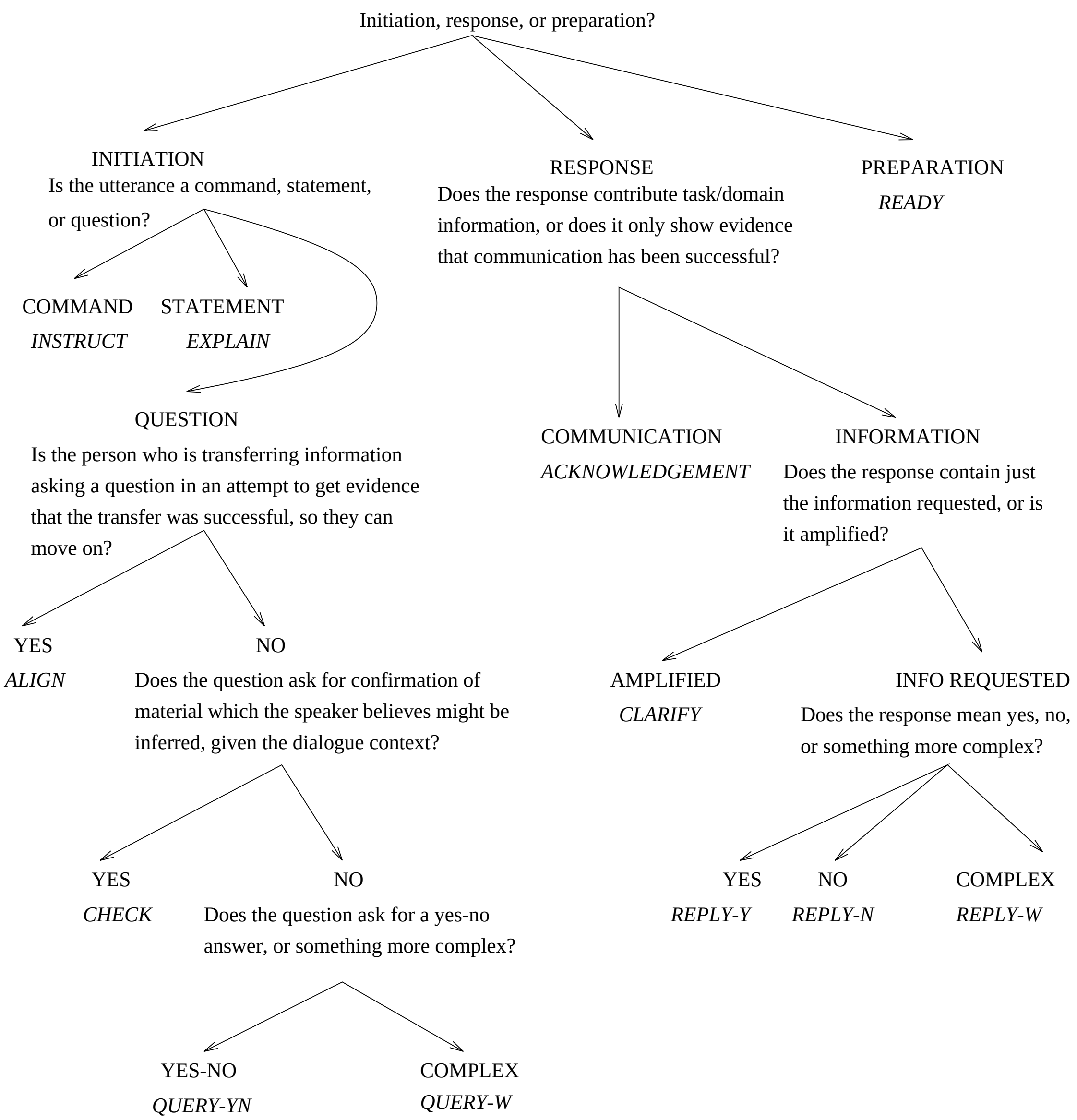

Figure 2: Conversational move categories.

Example 4

G: We're going to start above th... directly above the telephone kiosk.

Example 5

F: Say it... start again.

Example 6

F: Go. [as first move of dialogue]

2.1.2 The Explain Move

An EXPLAIN states information which has not been elicited by the partner. (If the information were elicited, the move would be a response, such as a reply to a question.) The information can be some fact about either the domain or the state of the plan or task.

Example 7

G: Where the dead tree is on the other side of the stream there's farmed land.

Example 8

G: I've got a great viewpoint away up in the top left-hand corner.

Example 9

F: I have to jump a stream.

Example 10

F: I'm in between the remote village and the pyramid.

Example 11

G: I do hope that's better than the last one was.

Example 12

F: Yeah, that's what I thought you were talking about.

2.1.3 The Check Move

A CHECK move requests the partner to confirm information that the checker has some reason to believe, but is not entirely sure about. Typically the information to be confirmed is something which the partner has tried to convey explicitly or something which the checker believes was meant to be inferred from what the partner has said. In principle, CHECK moves could cover past dialogue events (e.g., "I told you about the land mine, didn't I?") or any other information that the partner is in a position to confirm. However, CHECK moves are almost always about some information which the checker has been told. One exception in the map task occurs when a participant is explaining a route for the second time to a different route follower, and asks for confirmation that a feature occurs on the partner's map even though it has not yet been mentioned in the current dialogue.

Example 13

G: ... you go up to the top left-hand corner of the stile, but you're only, say about a centimetre from the edge, so that's your line.
F: OK, up to the top of the stile?

Example 14

G: Ehm, curve round slightly to your right.
F: To my right?
G: Yes.
F: As I look at it?

Example 15

G: Right, em, go to your right towards the carpenter's house.
F: Alright well I'll need to go below, I've got a blacksmith marked.
G: Right, well you do that.
F: Do you want it to go below the carpenter? [*]
G: No, I want you to go up the left hand side of it towards green bay and make it a slightly diagonal line, towards, em sloping to the right.
F: So you want me to go above the carpenter? [**]
G: Uh-huh.
F: Right.

Note that in example 15, the move marked * is not a CHECK because it asks for new information, but the move marked ** is a CHECK because F has inferred the information from G's prior contributions and wishes to have confirmation.

2.1.4 The Align Move

An ALIGN move checks the attention or agreement of the partner, or his readiness for the next move. At most points in task-oriented dialogue, there is some piece of information which one of the participants is trying to transfer to the other participant. The purpose of the most common type of ALIGN move is for the transferer to know that the information has been successfully transferred, so that they can close that part of the dialogue and move on. If the transferee has acknowledged the information clearly enough, an ALIGN move may not be necessary. If the transferer needs more evidence of success, then alignment can be achieved in two ways. If the transferer is sufficiently confident that the transfer has been successful, a question such as "OK?" suffices. Some participants ask for this kind of confirmation immediately after issuing an instruction, probably in order to force more explicit responses to what they say. Transferers who have less confidence about the transfer can ask for confirmation of some fact which the transferee should be able to infer from the transferred information, since this provides stronger evidence of success. Although ALIGN moves usually occur in the context of an unconfirmed information transfer, participants also use them at hiatuses in the dialogue to check that "everything is OK" (i.e., that the partner is ready to move on) without asking about anything in particular.

Example 16

G: OK? [after an instruction and an acknowledgement]

Example 17

G: You should be skipping the edge of the page by about half an inch, OK?

Example 18

G: Then move that point up half an inch so you've got a kind of diagonal line again.
F: Right.
G: <u>This is the left-hand edge of the page, yeah?</u>
F: Yeah, okay.

2.1.5 The QUERY-YN Move

A QUERY-YN asks the partner any question which takes a "yes" or "no" answer and does not count as a CHECK or an ALIGN. In the map task, these questions are most often about what the partner has on the map. They are also quite often questions which serve to focus the attention of the partner on a particular part of the map or which ask for domain or task information where the speaker does not think that information can be inferred from the dialogue context.

Example 19

G: <u>Do you have a stone circle at the bottom?</u>

Example 20

G: <u>I've mucked this up completely have I?</u>

Example 21

F: I've got Dutch Elm.
G: Dutch Elm. <u>Is it written underneath the tree?</u>

Example 22

G: <u>Have you got a haystack on your map?</u>
F: Yeah
G: Right just move straight down from there, then,
F: <u>Past the blacksmith?</u> [with no previous mention of blacksmith or any distance straight down]

Example 23

G: ... and then straight up so that you're... <u>see where your farmer's gate is?</u>

2.1.6 The QUERY-W Move

A QUERY-W is any query which is not covered by the other categories. Although most moves classified as QUERY-W are wh-questions, otherwise unclassifiable queries also go in this category. This includes questions which ask the partner to choose one alternative from a set, as long as the set is not "yes" and "no". Although technically the tree of coding distinctions allows for a CHECK or an ALIGN to take the form of a wh-question, this is unusual in English. In both ALIGN and CHECK moves, the speaker tends to have an answer in mind, and it is more natural to formulate them as yes-no questions. Therefore in English all wh-questions tend to be categorised as QUERY-W.

Example 24

G: Towards the chapel and then you've
F: <u>Towards what?</u>

Example 25

G: Right, okay. Just move round the crashed spaceship so that you've ... you reach the finish, which should be left ... just left of the ... the chestnut tree.
F: Left of the bottom or left of the top of the chestnut tree?

Example 26

F: No I've got a... I've got a trout farm over to the right underneath Indian Country here.
G: Mmhmm.
I want you to go three inches past that going south, in other words just to the level of that, I mean, not the trout farm.
F: To the level of what?

2.2 Response moves

The following moves are used within games after an initiation, and serve to fulfill the expectations set up within the game.

2.2.1 The Acknowledge Move

An ACKNOWLEDGE move is a verbal response which minimally shows that the speaker has heard the move to which it responds, and often also demonstrates that the move was understood and accepted. Verbal acknowledgements do not have to appear even after substantial explanations and instructions, since acknowledgement can be given non-verbally, especially in dialogue modalities with eye contact, and because the partner may not wait for one to occur. Clark and Schaefer (1989) give five kinds of evidence that an utterance has been accepted: continued attention, initiating a relevant utterance, verbally acknowledging the utterance, demonstrating an understanding of the utterance by paraphrasing it, and repeating part or all of the utterance verbatim. Of these kinds of evidence, only the last three count as ACKNOWLEDGE moves in this coding scheme; the first kind leaves no trace in a dialogue transcript to be coded, and the second involves making some other, more substantial dialogue move.

Example 27

G: Ehm, if you... you're heading southwards.
F: Mmhmm.

Example 28

G: Do you have a stone circle at the bottom?
F: No.
G: No, you don't.

2.2.2 The Reply-y Move

A REPLY-Y is any reply to any query with a yes-no surface form which means "yes", however that is expressed. Since REPLY-Y moves are elicited responses, they normally only appear after QUERY-YN, ALIGN, and CHECK moves.

Example 29

G: See the third seagull along?
F: Yeah.

Example 30

G: Do you have seven beeches?
F: I do.

Example 31

F: Green Bay?
G: Uh-huh.

Example 32

G: Do you want me to run by that one again?
F: Yeah, if you could.

2.2.3 The Reply-n Move

Similar to reply-y, a reply to a a query with a yes/no surface form which means "no" is a reply-n.

Example 33

G: Do you have the west lake, down to your left?
F: No.

Example 34

G: So you're at a point that's probably two or three inches away from both the top edge, and the left-hand side edge. Is that correct?
F: No, no at the moment.

One caveat about the meaning of the difference between reply-y and reply-n: there is a rare class of queries which include negation (e.g., "You don't have a swamp?"; "You're not anywhere near the coast?"). As for the other replies, whether the answer is coded as a reply-y or a reply-n depends on the surface form of the answer, even though in this case "yes" and "no" can mean the same thing.

2.2.4 The Reply-w Move

A reply-w is any reply to any type of query which doesn't simply mean "yes" or "no".

Example 35

G: And then below that, what've you got?
F: A forest stream.

Example 36

G: No, but right, first, before you come to the bakery do another wee lump
F: Why?
G: Because I say.

Example 37

F: Is this before or after the backward l s?
G: This is before it.

2.2.5 The CLARIFY Move

A CLARIFY move is a reply to some kind of question in which the speaker tells the partner something over and above what was strictly asked. If the new information is substantial enough, then the utterance is coded as two moves, a reply followed by an EXPLAIN, but in many cases, the information added is insubstantial enough that it would be inappropriate to code it as a separate move. Route givers tend to make CLARIFY moves when the route follower seems unsure of what to do, but there isn't a specific problem on the agenda (such as a landmark now known not to be shared).

Example 38

> *G: And then, have you got the pirate ship?*
> *F: Mmhmm.*
> *G: Just curve from the point, go right ... go down and curve into the right til you reach the tip of the pirate ship*
> *F: So across the bay?*
> *G: Yeah, <u>through the water.</u>*
> *F: So I just go straight down?*
> *G: Straight down, <u>and curve to the right, til you're in line with the pirate ship.</u>*

Example 39

> *[... instructions which keep them on land...]*
> *F: So I'm going over the bay?*
> *G: <u>Mm, no, you're still on land.</u>*

2.2.6 Summary

All of these response moves move forward towards the goal proposed by the initiating moves which they follow. It is also theoretically possible at any point in the dialogue to refuse to take on the proposed goal, either because the responder feels that there are better ways to serve some shared higher level dialogue goal or because the responder does not share the same goals as the initiator. Often refusal takes the form of ignoring the initiation and simply initiating some other move. However, it is also possible to make such refusals explicit; for instance, a participant could rebuff a question with "No, let's talk about...", an initiation with "What do you mean — that won't work!", or an explanation about the location of an object with "Is it?", said with an appropriately unbelieving intonation. One might consider these cases akin to ACKNOWLEDGE moves, but with a negative slant. These cases were sufficiently rare in the corpora used to develop the coding scheme that it was impractical to include a category for them. However, it is possible that in other languages or communicative settings this behaviour will be more prevalent. Grice and Savino (1995) found that such a category was necessary when coding Italian map task dialogues where speakers were very familiar with each other and called the category OBJECT.

2.3 The READY Move

In addition to the initiation and response moves, the coding scheme identifies READY moves as moves which occur after the close of a dialogue game and prepare the conversation for a new game to be initiated. Speakers often use utterances such as "OK" and "right" to serve this purpose. It is a moot point whether READY moves should form a distinct move class or should be treated as discourse markers attached to the subsequent moves, but the distinction is not a critical one, since either interpretation can be placed on the coding. It is often appropriate to consider READY moves as distinct, complete moves in order to emphasise the comparison with ACKNOWLEDGE moves, which are often just as short and even contain much the same words as READY moves.

Example 40

G: Okay. Now go straight down.

Example 41

G: Now I have banana tree instead.

Example 42

G: Right, if you move up very slightly to the right along to the right.

3 The Game Coding Scheme

Moves are the building blocks for conversational game structure, which reflects the goal structure of the dialogue. In the move coding, a set of initiating moves were differentiated, all of which signal some kind of purpose in the dialogue. For instance, instructions signal that the speaker intends the hearer to follow the command, queries signal that the speaker intends to acquire the information requested, and statements signal that the speaker intends the hearer to acquire the information given. A conversational game is a sequence of moves starting with an initiation and encompassing all moves up until that initiation's purpose is either fulfilled or abandoned.

There are two important components of any game coding scheme. The first is an identification of the game's purpose; in this case, the purpose is identified simply by the name of the game's initiating move. The second is some explanation of how games are related to each other. The simplest, paradigmatic relationships are implemented in computer-computer dialogue simulations, such as those of Power (1979), Houghton (1986), and Guinn (1994). In these simulations, once a game has been opened, the participants work on the goal of the game until they both believe that it has been achieved or that it should be abandoned. This may involve embedding new games with subservient purposes to the top level one being played (for instance, clarification subdialogues about some crucial missing information), but the embedding structure is always clear and mutually understood. Although some natural dialogue is this orderly, much of it is not; participants are free to initiate new games at any time (even while the partner is speaking), and these new games can introduce new purposes rather than serving some purpose which is already present in the dialogue. In addition, natural dialogue participants often fail to make clear to their partners what their goals are. This makes it very difficult to develop a reliable coding scheme for complete game structure.

The game coding scheme simplifies these issues to those aspects of embedded structure which are of the most interest. First, the beginning of new games is coded, naming the game's purpose according to the game's initiating move. Although all games beginning with an initiating move (possibly with a READY move prepended to it), not all initiating moves begin games, since some of the initiating moves serve to continue existing games or remind the partner of the main purpose of the current game again. Second, where games end or are abandoned is marked. Finally, games are marked as either occurring at top level or being embedded (at some unspecified depth) in the game structure, and thus being subservient to some top level purpose. The goal of these definitions is to give enough information to study relationships between game structure and other aspects of dialogue whilst keeping those relationships simple enough to code.

4 The Transaction Coding Scheme

Transaction coding gives the subdialogue structure of complete task-oriented dialogues, with each transaction being built up of several dialogue games and corresponding to one step of the task. In most map task dialogues, the participants break the route into manageable segments and deal with them one by one. Because transaction structure for map task dialogues is so closely linked to what the participants do with the maps, the maps are included in the analysis. The coding system has two components: (1) how route givers divide conveying the route into subtasks and what parts of the dialogue serve each of the subtasks, and (2) what actions the route follower takes and when. The coding system was devised to be usable by naive coders; the written instructions which are given to them are in appendix A.

The basic route giver coding identifies the start and end of each segment and the subdialogue which conveys that route segment. However, map task participants do not always proceed along the route in an orderly fashion; as confusions arise, they often have to return to parts of the route which were previously discussed and which one or both of them thought had been successfully completed. In addition, participants occasionally overview an upcoming segment in order to provide a basic context for their partners, without the expectation that their partners will be able to act upon their descriptions, as in the following transaction:

> G: And what we're basically going to be... where we're basically going to be going is towards.. I'll t-say this sort of globally
> F: Mmm-hmmm.
> G: then I'll do it more precisely. What we're basically doing is going, erm, south-east and then, erm, north-east, so you can imagine... a bit like a diamond shape if you like.
> F: Mmm.
> G: Southeast then northeast
> F: Mmm.
> G: and then northwest and then north, but the line's a lot more wavy than that. I'm just trying to give you some kind of overall picture.
> F: Mmm.
> G: It may not be very useful but.

They also sometimes engage in subdialogues which are not relevant to any segment of the route, sometimes about the experimental setup but often nothing at all to do with the task. Other types of subdialogues are possible (such as checking the placement of all map landmarks before describing any of the route, or concluding the dialogue by reviewing the entire route), but were not included in the coding scheme because of their rarity; each behaviour only occurred once or twice in the 128 dialogues of the Map Task Corpus. This gives four transaction types: 'normal', 'review', 'overview', and 'irrelevant'. Coding involves marking where in the dialogue transcripts a transaction starts and which of the four types it is, and for all but 'irrelevant' transactions, indicating the start and end point of the relevant route section using numbered crosses on a copy of the route giver's map. The ends of transactions were not explicitly coded because, generally speaking, transactions do not appear to nest; if a transaction is interrupted to, for instance, review a previous route segment, participants by and large restart the goal of the interrupted transaction afterwards. It is possible that transactions are simply too large for the participants to remember how to pick up where they left off. Note that it is possible for several transactions (even of the same type) to have the same starting point on the route.

The basic route follower coding identifies whether the follower action was drawing a segment of the route or crossing out a previously drawn segment, the start and end points of the relevant segment, indexed using numbered crosses on a copy of the route follower's map.

5 Example Dialogue Structure Coding

The following is an example of the three levels of dialogue structure coding. Transaction coding is represented on lines which begin with the unique identifiers *A and *B. Each *A line marks the beginning of a transaction and gives the coordinates of the start and end points of the route segment which the route giver is trying to convey by that transaction. (The coding scheme does not allow transactions to overlap, so marking the ends of transactions would be redundant.) Each *A line takes one of the following forms, where things which are underlined are literal:

For normal transactions: *A index point-one,point-two

For review transactions: *A index point-one,point-two r

For non-goal-directed segments: *A index irrelevant

Each index is a unique positive integer; the indices start at 1 at the beginning of each dialogue and increment. In this example, the points are represented as indices to points on the maps as given in figures 3 and 4.

*B lines are placed to the nearest turn where the route follower actually begins to draw the line on the map:

For drawing: *B point-one,point-two

For scribbling out: *B point-one,point-two scribble

Note that because often turns overlap and because drawing can begin between turns, placement of *B lines can only be approximate. Drawing *B lines give the points where the route follower started and ended the line, indexed on a hardcopy of the route giver's map. Erasing *B lines give the points describing the line which was scribbled out at that time.

Game coding is represented on *E and *End lines, representing the start and end of games, respectively; "em" stands for "embedded" and "aban" for "abandoned". "IG" and "IF" designate whether the instruction giver or instruction follower initiated the game. Move coding is represented on *M lines, with the name of the type of move given. An equals sign (=) between two move names means that the coder was unwilling to commit to one or the other and so was "hedging"; this was allowed but discouraged. Overlapped speech is notated loosely by placing angle brackets around the affected turns; where the overlap breaks up a single move, the move coding is given only once, attached to the larger half of the move. Any additional commentary from the coders is placed on *C lines.

```
*TA 1
*A 1 1,2
*E 1 IG instruct
Start at the extinct volcano,
*M instruct
and go down round the tribal settlement.
*M instruct
And then
*M instruct
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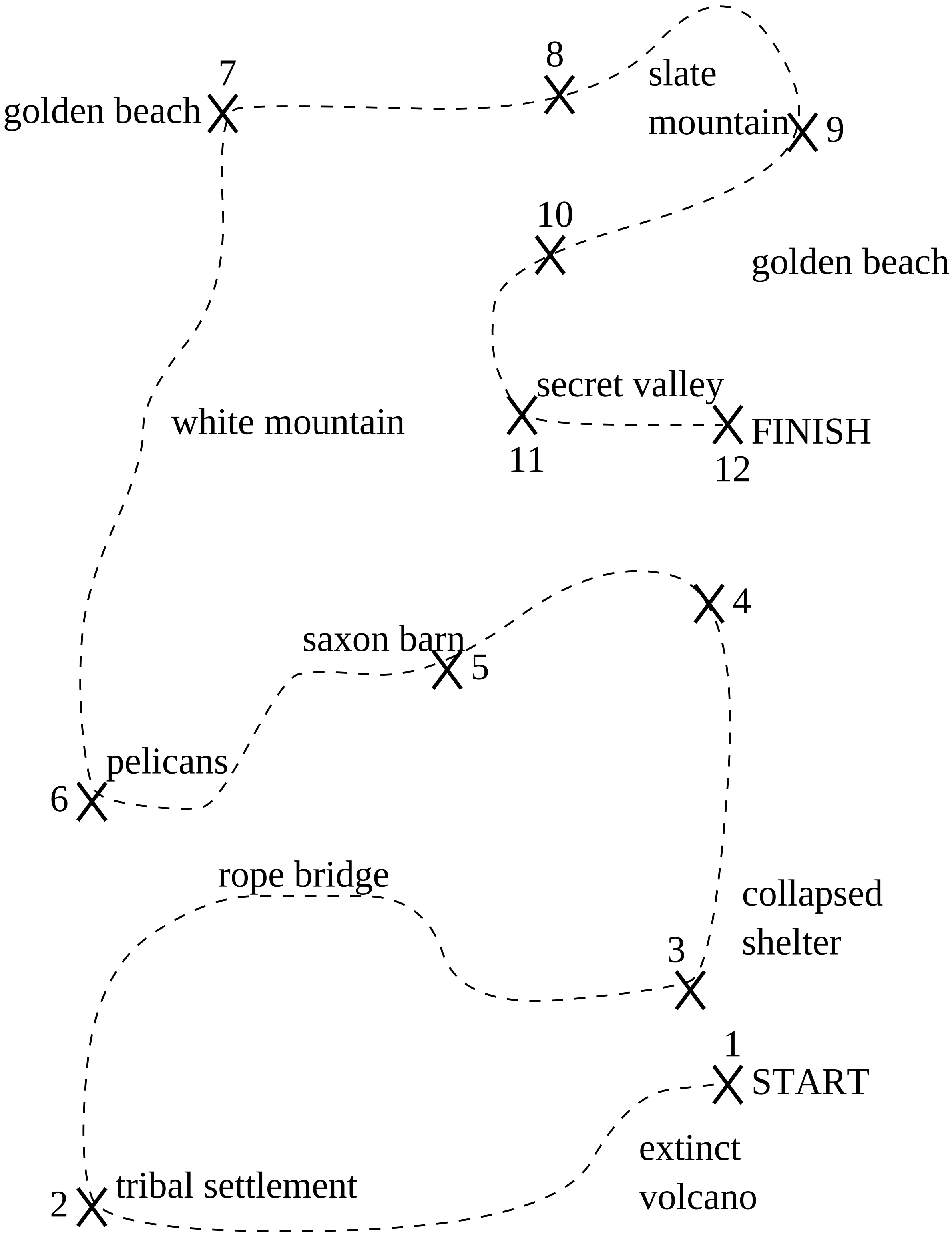


Figure 3: Route giver map for the coding example.

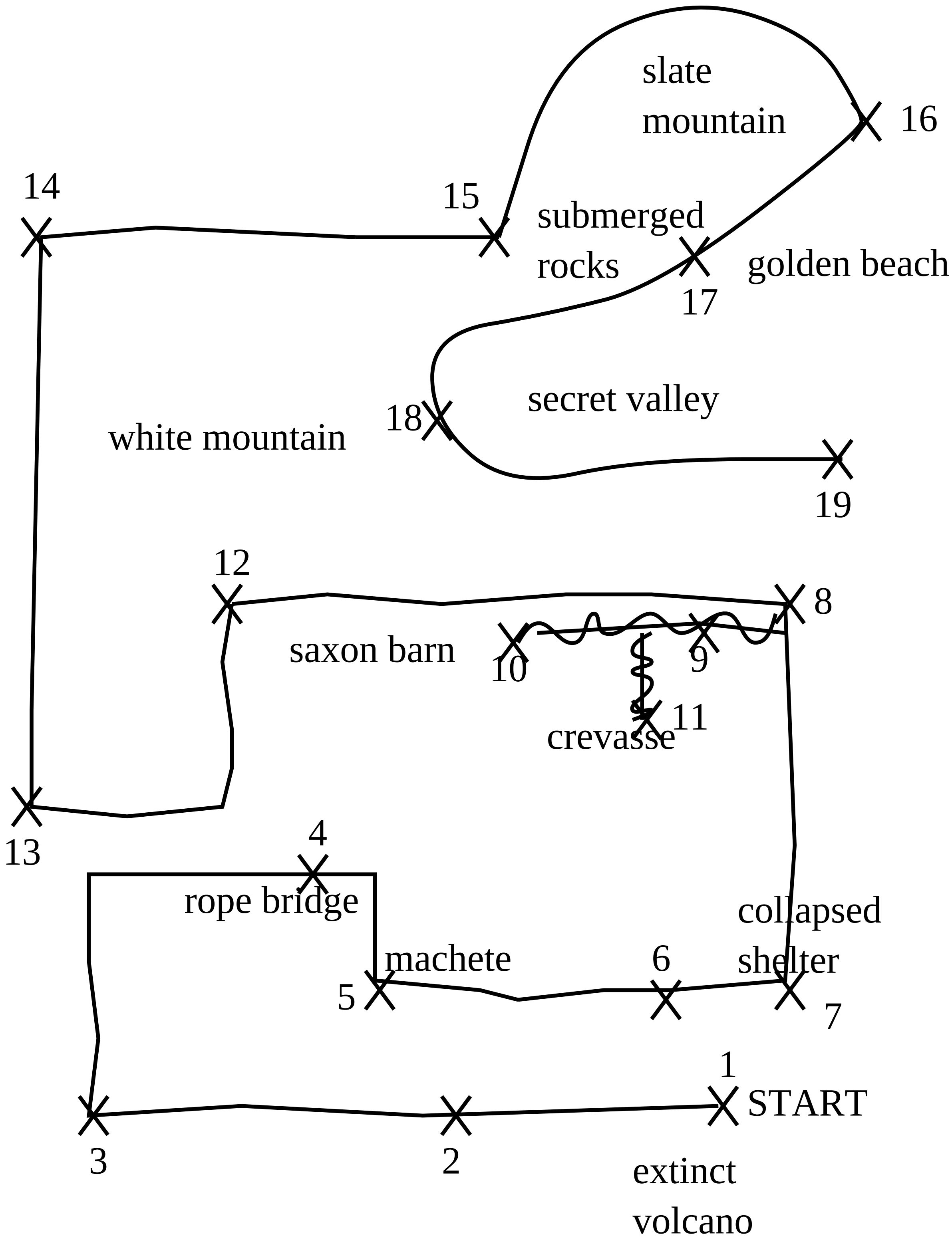


Figure 4: Route follower map for the coding example.

*TB 2
*E 2 IF query-w em
Whereabouts is the tribal settlement?
*M query-w

*TA 3
It's at the bottom.
It's to the left of the {a e} extinct volcano.
*M reply-w

*TB 4
*B 1,2
Right.
*M acknowledge
*End 2
*E 3 IF query-w em
How far?
*M query-w

*TA 5
{m Ehm}, at the opposite side.
*M clarify

*TB 6
To the opposite side.
*M acknowledge
*End 3
*E 4 IF query-w em
Is it underneath the rope bridge or to the {a lef}
*M query-w

*TA 7
It's underneath the rope bridge.
*M reply-y
*End 4
*End 1
*A 2 2,3
*B 2,3
*E 5 IG instruct
And then from the tribal settlement go straight up towards the rope bridge and over the rope bridge.
*B 3,4
Then down three steps and along to above the volcano.
*M instruct

*TB 8
*E 6 IF query-w em
{x Eh}, {a d} ... Is down three steps below or above the machete?
*M query-w

*TA 9
{x Ah}. The machete's not on my map.
*M reply-w = explain

```
*TB 10
{x Oh}.
*M acknowledge
*End 6

*TA 11
*B 4,5
Down three lines.
*M instruct

*TB 12
Right.
*M acknowledge

*TA 13
*B 5,6
And then along as far as the volcano but above it,
*M instruct
*B 6,7
and stop underneath the collapsed shelter but away from it a bit,
*M instruct

*TB 14
Right.
*M acknowledge
*End 5

*TA 15
*A 3 3,4
*E 7 IG instruct
And go up to about the middle of the map.
*M instruct

*TB 16
*B 7,8
The middle of the map.
*M acknowledge

*TA 17
And stop.
*M instruct

*TB 18
*E 8 IF check em
Just slightly above the crevasse?
*M check

*TA 19
That's not on my map either.
*M reply-w = explain
*End 8
*A 4 4,5
*B 8,9
{m Ehm}, go to your left again into about the middle.
```

```
*M instruct

*TB 20
*E 9 IF explain em
I think that would bring me over the crevasse.
*M explain

*TA 21
Well, it's not on my map.
*M explain

*TB 22
No?  {x Oh}.
*M acknowledge
*End 9

*TA 23
*B 9,10
Well.  Go a quarter of the way along the page
and down again.
*M instruct

*TB 24
*B 10,11
*E 10 IF explain em
That'll take me right into it.
*M explain

*TA 25
Well.
*M acknowledge
*End 10
Go right along instead then.
*M instruct

*TB 26
*E 11 IF check aban em
Along to the left?
*M check
*End 11

*TA 27
*E 12 IG query-yn em
Is the Saxon barn on your map?
*M query-yn

*TB 28
*B 8,12
Yes.
*M reply-y
*End 12

*TA 29
Well, go along to the Saxon barn,
```

```
*M instruct
*End 7
*A 5 5,6
*E 13 IG instruct
and down past the pelicans.
*M instruct

*TB 30
*E 14 IF explain em
*B 9,11 scribble
*C scribbles out entire T-shaped mistake involving 9,10,11
Not marked on my map.
*M explain
*End 14

*TA 31
{m Ehm}, go down from the Saxon barn, {m ehm},
*M instruct

*TB 32
*E 15 IF query-w em
< To the /

*TA 33
{a T}

*TB 34
left or right of it? >
*M query-w

*TA 35
Straight down to the left.
*M clarify

*TB 36
Left of it, right.
*M acknowledge
*End 15

*TA 37
And just above the rope bridge
and then along to your left again.
*M instruct

*TB 38
*B 12,13
Okay.
*M acknowledge
*End 13

*TA 39
*A 6 6,7
*E 16 IG instruct
And from there go straight up to the top of the map
```

to the golden beach at the top left-hand corner,
passing the white mountain.
*M instruct

*TB 40
*E 17 IF explain em
{u But} golden beach is in the top right-hand corner.
*M explain
*TA 41
< Left-hand corner, sorry.
{x Oh}.
*M acknowledge
*E 18 IG explain em
There's /

*TB 42
But there's a

*TA 43
two golden beaches on this map as well. >
*M explain
*End 18
*End 17

*TB 44
*E 19 IF check em
Right, above the white mountain?
*M check

*TA 45
*B 13,14
{g Mmhmm}.
*M reply-y
*End 19
And then stop.
*M instruct
*End 16
*A 7 7,8
*E 20 IG instruct
Then turn to your right,
*M instruct

*TB 46
Right.
*M acknowledge

*TA 47
and go along to the middle of the map.
*M instruct

*TB 48
*E 21 IF check em
{a B} ... {x Eh}, underneath slate mountain?
*M check

```
*TA 49
No.
*M reply-n
Just to the {a e} ... the end of slate mountain.
*M clarify

*TB 50
*B 14,15
Right.
*M acknowledge
*End 21
*End 20

*TA 51
*A 8 8,9
*B 15,16
*E 22 IG instruct
Then go over slate mountain,
*M instruct

*TB 52
Right.
*M acknowledge

*TA 53
*A 9 9,10
And turn to your left, into the middle of the map.
That'd be your right, I suppose.
*M instruct

*TB 54
*E 23 IF check em
To my right.
Now very close to the right of the page.
*M check

*TA 55
No.
*M reply-n
Left then.
*M clarify
*End 23
*End 22

*TB 56
*E 24 IF query-w
Then whereabouts?
*M query-w

*TA 57
Into the middle.
*M clarify
*End 24
```

```
*A 10 10,11
*B 16,17
*E 25 IG instruct
Then stop and go straight down at the side of the secret valley.
*M instruct

*TB 58
*E 26 IF query-w em
Left or right side?
*M query-w

*TA 59
Left.
*M clarify

*TB 60
*B 17,18
Left side.
Right, okay.
*M acknowledge
*End 26

*TA 61
*B 18,19
And go along underneath the secret valley
and finish.
*M instruct

*TB 62
Right.
*M acknowledge
*End 25
```

A Transaction Coding Instructions for Naive Coders

In the HCRC Map Task Dialogues, two subjects are each given similar maps like the ones shown here, one of which has a route drawn on it. They can't see each others' maps, although sometimes they can see each others' faces. The instruction-giver has the map with the route on it, and has to describe the route to the instruction-follower, who draws it on his own map.

The instruction-giver usually seems to divide the route up into pieces in her head, and describe each one in turn. Our aim is to identify the beginning and end of each of these pieces and to mark which sections of the dialogue go with which pieces of the route. In order to do this successfully, we must show that people who have never worked with the Map Task before but who are given instructions will all come to similar conclusions about the start and end point of each of these sections. We will give you four maps and whole dialogues, and ask you to divide them into sections according to the instructions below.

Here is an example from the middle of a dialogue of one piece of route:

GIVER:

Have you got a white mountain?

FOLLOWER:

Uh-huh.

GIVER:

Go straight up from there, ehm, slightly curving a bit round the white mountain.

FOLLOWER:

Over the top of it, uh-huh?

GIVER:

No.

Don't go over it. Stop when you're parallel to the top of the white mountain.

FOLLOWER:

Okay. Mmhmm.

If both participants start to speak at the same time, this is marked with < at the beginning of the overlapping section and > at the end, with / marking a sentence which is carried over to the next turn. For example:

GIVER:

< Okay, I want you /

FOLLOWER:

Just below there.

GIVER:
to get to the concealed hideout. >

MARKING THE MAP

When you have worked out where the start and end points of a piece are, mark them each with a cross on the map. If you are not certain exactly where to put a cross, put it in the middle of the section where you think it might be.

Sometimes the participants think that they have completed a section but discover later that something has gone wrong, and go back to try again. This will lead to them describing the same part of the route two or more times. They may not divide the route in exactly the same way the second time they go over it, so you may have to add extra crosses.

When you have identified all the crosses, number them in order from the beginning of the route to the end.

MARKING THE TRANSCRIPT

The transcripts consist of lines of text separated by completely blank lines; please write only in the blank lines, and do not make any marks in the middle of a line of text.
Each time the participants start working on a different piece of the route, write on the transcripts just before the first thing that is said as part of the discussion:

    start (start point, end point)

where start point and end point are the numbers of the crosses you have marked on the map which correspond to that particular piece of route.

You can decide where sections start and end on the transcript before you mark the map, or do both as you go along, and leave the numbering until the end, when you are sure you have decided on all the points on the map.

If it's the first time that the participants are working on that part of the route, write "normal" after the numbers

    eg start (1,2) normal

If they are reviewing a part of the route that they've already talked about, write "review" after the numbers

    eg start (5,6) review

If they are discussing something which will be dealt with later, but which the instruction-follower is not meant to draw now, write "overview" after the numbers

```
        eg start (3,5) overview
```

Sometimes one of the pair will make a comment about something which is not relevant to getting around the route, on a subject like the weather, the shape of the room, or the pen they are using. In this case, mark the beginning of the section

```
        "start irrelevant"
```

and the end of it

```
         "end irrelevant".
```

If they are in the middle of a discussion of a part of the route when they talk about the irrelevant topic, and they continue this discussion afterwards as if nothing had happened, there is no need to start a new numbered segment. So you could end up with something like

```
start (2,3) normal

GIVER:
        talk talk
FOLLOWER:
        talk talk


start irrelevant

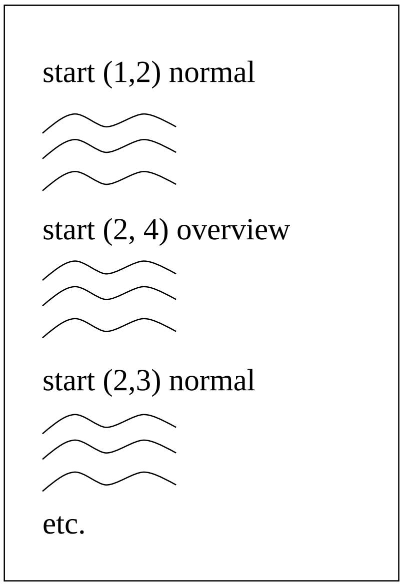
GIVER:
        irrelevant talk
FOLLOWER:
        irrelevant talk

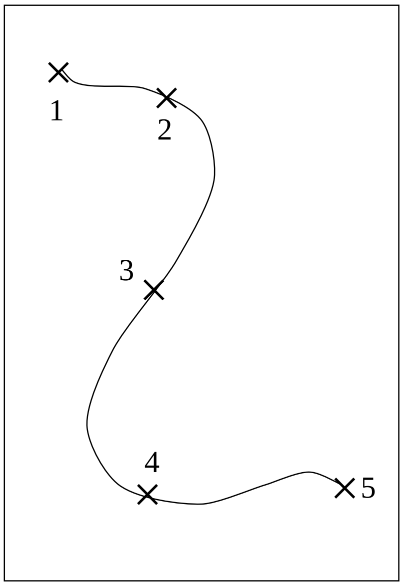
end irrelevant

GIVER:
        talk talk
FOLLOWER
        talk talk

start (3,4) normal
```

So you will end up with the transcript and map looking something like this:





When you have finished reading the instructions, we will give you part of a dialogue to mark, so that you can come back to us with any questions before we send you away with the four whole dialogues. The same two people were not involved in all four dialogues you will be given; four people each had a turn at being instruction-giver and instruction-follower.

The whole dialogues will be numbered 1 to 4; please do them in this order.

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