## Chapter 2

## PROBLEMS IN CLASSROOM DISCOURSE RESEARCH

In Chapter 1, I showed we need a general, comprehensive definition of the illocutionary act from which definitions of particular acts can be derived systematically. This lack has caused large areas in the domain of acts to be ignored or treated inadequately, both in research on language learning processes and in activities that directly condition language teaching, such as course design and student evaluation.

I also indicated that the problem of defining the illocutionary act in the way necessary for EFL work is intimately associated to the problems of identifying its nature and establishing how it relates to sentences and propositions. Besides, I claimed that a key step in the solution of these problems would be to sharply distinguish illocutionary acts from dissertation acts.

In order to show the enquiry has to be led in the direction of this distinction and to raise the types of questions that shall have to be answered, I will, in the present chapter, consider the kinds of technical tasks and methodological difficulties with which the analyst of classroom discourse is faced. I will do so mainly in reference to a particular classroom experiment reported in Long et al 1976. The discussion will be introduced by a brief note about the development of classroom interaction research before the experiment. Other complementary observations, on certain related points made by various authors at the time of the experiment or since then, will be presented afterwards. Finally, the topics signalled will be related to syllabus design and the conception of teaching activities.

#### Classroom research

In the mid 1960's, classroom observation was introduced in language teaching research, mainly by a small number of teacher trainers interested in adapting Flanders's 1960 interaction analysis system<sup>1</sup> for its use in the language classroom (see eg Moskowitz 1967 or Rothfarb 1970), as is shown in Allwright's comprehensive assessment of the fields development (Allwright 1988: 85).

The first descriptive schemes consisted of single short lists of categories exclusive of each other. A list would typically include one category for interventions that initiate a series or cycle of exchanges and another for interventions that follow up other interventions. In one scheme, Bellack's, these are called 'soliciting' and 'responding', respectively (Bellack et al 1966). Examples of these are the utterances numbered, for present purposes, as (1) and (2), which are taken from the experiment corpus referred to.

- (1) Teacher: Do you know anything about elephants?
- (2) Student: They are big.

Lists could also include a category for interventions that set the scene and open or close interactions. In the same scheme, this is called 'structuring'. An example of it is:

(3) Teacher: Today we are going to discuss whether man is completely different from other animals or not.

Often a scheme would group aside comments together with non-verbal reactions. For Bellack et al, these are 'reacting'. An example is the laughter that followed (2) in the corpus transcription (not included in the fragment above).

The application of those early systems made applied linguists realize some important biases of the methods that were being followed by language teachers. Thus, for example, they could see that students had very few opportunities to practise the production of questions or the comprehension of answers. This revealed that the study of classroom interaction could not only contribute to un-

derstanding learning, but might well be absolutely necessary for developing a sound knowledge of teaching.

The systems were, indeed, so important in the constitution of classroom research as a field of applied linguistics that, as will be evident below, traces of them are still present in other systems. But they had severe limitations. Some of these can easily be seen in the examples given above. Different kinds of reactions were not distinguished and, therefore, their potential value as linguistic input (or output) could not even be considered. Likewise, the conflating of opening and closing interventions could not allow a researcher to even raise the question of whether students could understand or perform openings. In more general terms, the schemes provided impressions of the classroom's atmosphere and some data that seemed to indicate the type of skewed tendencies mentioned (in relation to questions and answers); but they did not really record linguistic activity, which should be the object of study for a language classroom analyst.

In the mid 70's, often under the influence of functional linguistics, which in some cases was rather indirect, coding systems became a little more sensitive to language use. Thus, Barnes and Todd (1975), for example, grouped categories under the headings 'social skills' and 'logical processes'.

# The Xochimilco study

It is in this context that the study mentioned earlier was conducted. It was carried out out during the final months of 1975 and the early months of 1976 at the Xochimilco campus of the Universidad Autónoma Metropolitana (Autonomous Metropolitan University), in Mexico City. Its initial aim was to compare the quantity and quality of student language production in two kinds of situations: when the whole class works at the same pace under the teacher's direction and when the students work in small groups at their own speed. But soon a second focus of attention developed: how to describe teacher's and student's utterances. In fact, this question became at least as important as the first aim. It is for this reason, and because I have direct knowledge of the study, that I wish to concentrate on it here.

At first, two existing coding systems were applied to data gathered under experimental conditions. These were Bellack's, which has already been mentioned, and Moskowitz's, which is another single list system and consists of seven categories for designating teacher behaviour, two for student behaviour, and three for silence, confusion and laughter (Moskowitz 1967). Although their use yielded interesting results<sup>4</sup>, it was found that they did not capture the variety of acts students were performing, and a brief examination of the transcriptions indicated that it was precisely here that important differences between the two classroom situations might lie. Therefore, the team decided to construct a new coding scheme, which was called Embryonic Category System (ECS), in order to show the intention of stimulating its growth. As will be evident, the work had a strong speech act orientation.

Unlike Bellack's or Moskowitz's schemes, the ECS had three lists of categories: 'pedagogical moves', 'social skills' and 'rhetorical acts' (Long et al 1976: 144-145). The first heading grouped 17 categories, including, for example, 'student focuses discussion' and 'student asks for clarification'. The second heading comprised 13 categories, among which were 'student competes for the floor' and 'student invites participation by other students'. The last heading had 14 categories, which include 'student hypothesizes' and 'student classifies'.

The following excerpt exemplifies the application of the system. It is taken from the transcript of a discussion on the differences between man and animals produced by a pair of students in the absence of a teacher.

241 S9: Um. Yes./Because um the animals don't um um the animals um don't change the environment of the earth um...

P14/P10,R3

The figure on the left (241) numbers the intervention within the sequence transcribed. The next label (S9) identifies the student speaking. The codes at the right below the intervention belong to the ECS. Here, the comma is used to indicate that P10 and R3 occurred simultaneously and the diagonal to show that P14 occurred previously.

The results<sup>5</sup> obtained from the application of the ECS showed important differences between the two classroom situations, and thus indicate it was a good idea to compare them in terms of the numbers and kinds of acts performed. They also indicate the distinctions presupposed by grouping acts in separate lists are crucial.

The value of a system like the ECS, in turn, shows that the kinds of analysis problems which are faced when using it merit special attention. We now turn to these.

## The issue of multiple coding

The comma and diagonal conventions exemplified in the coding of intervention 241 reflect the following methodological decisions: an intervention may consist of one or several utterances; for every utterance at least one coding category must be applied; more than one category can be used to code an utterance if, and only if, they belong in different lists. These decisions, in turn, imply a position with respect to the problem that utterances in free-flowing talk often seem to realize more than one kind of act at the same time.

The problem is of considerable importance: if an utterance realizes two acts, and only one category could be applied to it, then either of the two acts may be coded. Inconsistencies of that sort are found, for example, in the application, by Sinclair and Coulthard, of a coding system<sup>6</sup> (1975) which was to become the pivot for the development of an important approach to the study of spoken discourse in general (Coulthard and Montgomery (1981). Let us take, for instance, two very similar utterances, which are identified here as (4) and (5).

- (4) You're shouting out though.
- (5) Somebody's shouting out at the back.

(In Sinclair and Coulthard 1975: 93-94)

The authors considered 4 as a comment, while 5 was taken to be a directive. According to Edmondson (1981: 68-69), the divergence of identification arises

because Sinclair and Coulthard's categories are defined mainly in terms of structural positions. (5) is the head of an opening move, but (4) is the post-head element in a follow up move. The fact that both acts count as a request to stop shouting (Edmondson 1981: 69) cannot therefore be captured by the analysis. It might be convenient to recall, as an aside note, that in Chapter 1 we saw a prior reason for having structure-independent definitions of basic categories: to allow for empirical verification of which positions the categories actually occupy.

Now, recognizing Edmondson's point would not completely solve Sinclair and Coulthard's inconsistency. Defining 'directive' in such a way that it can be applied to (4) independently of its position (which is the solution suggested by Edmondson) does not automatically make the definition of 'comment' inapplicable to the same utterance. Moreover, the proposal requires answers to two further questions: why keep the definition of 'comment' in structure-dependent terms and make that of 'directive' structure-independent? Why, indeed, not treat both (4) and (5) as comments, rather than both as directives? What is being asked can perhaps be approached from a slightly different angle: is it not that each utterance is simultaneously a comment and a directive?

In other words, the coding inconsistency seems to reveal that discourse develops in two parallel dimensions, and that comments belong in one and directives in the other. Sinclair and Coulthard's approach could, then, have two problems: defining acts in terms of structural positions and dealing with two dimensions as if they were only one.

What is being focused on is the number of basic units of analysis. Sinclair and Coulthard's system has only one unit, namely, the act; the ECS has three: the pedagogical move, the social skill, and the rhetorical act. How many units are needed?

Let us suppose we used a scheme with two units, developed eg after Barnes and Todd's distinction between social skills and logical processes. Let us further suppose that there really were three parallel dimensions in classroom discourse. What would the consequence of our system choice be? We would, of course, have the same kinds of inconsistencies we have noted above, but their effects would be multiplied. We would sometimes record a third type act as a first type act and others as a second type act; and we would sometimes miss it altogether.

And what would the consequence of the opposite mistake be? What would happen if we adopted a three unit system and there were only two dimensions? We would then count more acts than we really had. This, I now believe, was an unfortunate source of error in the Xochimilco study. 'Student uses evidence to challenge an assertion', which belongs in the pedagogical acts list, for example, sometimes was the second count of an act which should have been registered only as 'student contradicts', a category in the social skills list.

Having either less or more basic units in a system than there are dimensions in discourse will, then, distort any statistics we obtain from its application, because it will produce inconsistent identification of the categories instantiated.

#### Related issues

The question about the number of basic acts is related to the issue of determining which acts are mutually exclusive. As has been made explicit above, we want it to be possible for acts in one list to occur simultaneously with acts in another. By the same token, we want only one act from any one list to occur at a given moment.

There are good methodological reasons for linking the number of basic acts to exclusion principles. The categories of a coding system must be precisely relatable to their exponents. This requirement, which is part of a very influential statement by Sinclair and Coulthard (1975: 15-16) on the criteria a coding system must satisfy<sup>8</sup>, should not need any further substantiation. If it is not observed, codings are subject to the kinds of objections I raised in Chapter 1.

Now, if categories within a single dimension are not mutually exclusive, then they cannot be precisely relatable to their exponents, as I have shown with the help of various examples. Conversely, if two categories are not mutually exclusive, then they must belong in different dimensions. Hence, one question it is advisable to ask when devising a system is: which categories are mutually exclusive?

But the number question is also related to an ontological issue: determining the nature of the acts our categories represent. The names of the lists in the ECS, or those in Barnes and Todd's scheme, reflect an intention to group together acts which have some basic point in common. In accordance with this intention, the ECS lists 'student hypothesizes' and 'student makes an observation' under the same heading, namely 'rhetorical acts'; likewise, it lists 'student initiates discussion' and 'student focuses discussion' together, under 'pedagogical moves'.

The intention is, of course, sound. An ontologically valid taxonomy is necessary before we can make meaningful generalizations. It does not make much sense, for example, to predicate anything about Bellack's 'reacting' acts, because they mix incomparable entities, like laughter and aside comments.

Moreover, a proper taxonomy would allow us to make linguistically interesting observations, because they would reflect significant choices. To illustrate the point negatively, let us take two categories from the ECS. 'Student makes explicit reference to other's contribution' and 'student encourages other' are both listed under 'social skills', as if they represented alternative options for the speaker.

Although the merits of ontologically valid taxonomies are clear, and perhaps obvious, these are not easy to devise. To show the problem, let us consider two more pairs of categories from the ECS. Are 'student jokes' and 'student avoids discussion', both listed under social skills, really comparable? Are 'student initiates discussion' and 'student concludes', a pedagogical move and a rhetorical act in the system, basically different? It would be impossible to answer such questions now. We need to know what the point of social skills is, what rhetorical acts are by nature, what pedagogical moves could in essence be. But that knowledge is at present unavailable.

A question we should ask before devising a coding system is, then: what is the nature of our basic categories? And if the units in case are acts, the question would take this form: what is the point of our basic acts?

The act question requires that two other units be considered: the sentence and the proposition. Although these are not explicitly given the status of basic units in coding schemes such as Sinclair and Coulthard's model or the ECS, they must be taken into account in any discussion that attempts an answer. The very notion of act cannot take more than a vague shape if it is not opposed to that of sentence. This is, indeed, what Austin does at several points of the work that in-

augurated speech act theory (1962); see, for example, page 20, or note 1 on page 6. This is also what Searle (1969: 24) and Widdowson (1978: 22-23) do, more clearly and succinctly. The point is that, as Sinclair and Coulthard (1975: 28-30) show, using different terminology, sentences of the same kind, eg interrogative sentences, can be used to realize different acts, eg an order or an offer of help, as in (6) and (7), which are fabricated.

- (6) Boss: can you come here?
- (7) Boy scout: can you manage?

In other words, there is no one to one correspondence between types of sentences and types of acts. It is this lack of correspondence which gives sense to the distinction and makes it necessary. But, if the opposition between sentences and acts makes sense, it must be because they are alike in some respect. And their sameness lies precisely in their both being units of discourse. As Widdowson (1978-23) points out, they both are used in reports, ie in answers to questions like 'What did he say?'

A question we would, then, do well to keep in mind when devising a basic framework for understanding discourse is the following: how do sentences and acts stand in relation to each other? This will be specifically addressed in Part II of the thesis.

From a conceptual point of view, it is as necessary to include the proposition as the sentence. By a proposition is meant the association of a referent and a predicate. Thus if my uncle's name is José, both (8) and (9) (which are fabricated) express the same proposition.

- (8) My uncle is eating.
- (9) José is eating.

In fact, as Strawson (1950) showed, there is no one to one correspondence between sentences and propositions, and therefore, the meaning of a sentence cannot be equated to a proposition. We thus see how the notion of sentence is brought into sharp focus when it is opposed to that of proposition. Likewise, the contrast between propositions and acts enlightens the latter, as can be seen in Searle 1969: 24 or in Widdowson 1978: 23, from which the following possible reports are taken:

She promised that her husband would return the parcel tomorrow.

She mentioned in passing that her husband would return the parcel tomorrow.

Here, we have the same proposition: that her husband would return the parcel. But we also have different acts: 'promise' and 'mention', in Widdowson's terms. Thus, we see that an act should not be confused with the so called content of an utterance, and that in its description we must specify who is committed to what kinds of things because of the utterance. This will be kept in mind throughout the thesis and developed properly in Chapter 8.

One reason I see, from the coding problems perspective, for considering sentences and propositions alongside acts is that categories often are, inadvertedly, compounds of features belonging to the three units. Let us consider some categories in the ECS. 'Student reformulates previous own or other's assertion' is used to code utterances such as the second one in the following pair taken from the Xochimilco corpus (final part of intervention 150 and intervention 151):

- (10) Student 4: for man if man transforms the conditions
- (11) Student 5: well man can transform nature

Clearly, the point is that (11) and (10) express the same proposition with different sentences. This must definitely be captured, but using the said category to do so may be misleading in two ways. On the one hand, an assertion is an act, rather than a sentence. On the other hand, while (11) is truly an assertion, (10) is a hypothesis. In other words, the fact that the reformulation involves changes from an affirmative to a conditional sentence and from an act of asserting to an act of hypothesizing are lost in the coding.

Those types of changes need not be of concern to any given investigation, of course. But if they were, we would do better to simply register (11) as expressing

the same proposition as (10). The point is that, in any case, an awareness of the act, the sentence and the proposition as different units of discourse would result in much better descriptions of our data.

Other two categories in the ECS are 'student asks for information' and 'student asks for information about the target language'. They are supposed to be the labels of different acts (in the pedagogical moves list). That is, they are supposed to be co-hyponyms, in the same way that 'student asks for clarification' and 'student clarifies' oppose each other. But, if we consider the two categories from the point of view of a framework that includes propositions, we will then see that they are both the same act, viz a request, but the propositional arguments involved belong in different semantic spheres. Putting it in another way, if we were to use hybrid categories consciously, 'student asks for information' should be a superordinate and 'student asks for information about the target language' should be one of its hyponyms.

## Speech acts and language teaching

In this light, it can be useful to make two points more directly related to teaching. As is well known, one central concern of communicative approaches has been to devise syllabi in terms of speech acts (often referred to as 'functions'). However, the results often exhibit the same types of problems that have been considered here.

It is not uncommon for the organization of a syllabus to suggest given speech acts have common features when they do not actually share any. This occurs, for instance, when a lesson's objective is really to teach sentences with the verb 'to be' and the lesson is labelled "Introductions and descriptions". Among other problems, this confuses the equative and the ascriptive uses of the verb.

Another undesirable effect of syllabi constructed on the basis of current views can be to direct students' attention to the linguistic realization of proposition features while they are apparently being shown the way speech acts link in coherent discourse. This happens, for example, with lessons on giving directions, which are often supposed to teach the student how to request information and

how to answer requests, but in fact are only devoted to place names or space prepositions.

What is perhaps more important, as the nature of acts is not well understood, there is no guarantee that the aims of the discourses they constitute will be well conceived or evaluated. Using Barnes and Todd's terms, if we expect our students to show their social skills while performing a given activity, but this really demands more attention to logical processes, we can mistakenly conclude that the students are not profiting from the lesson.

This kind of misjudgement is shown, eg, in comments by Ellis (1984: 107-109) about an episode involving a beginner student. The teacher's goal was to familiarize the pupils with the Green Cross Code. After explaining the basic regulations, and apparently because questioning was unsuccessful, she invites Anan to mime how to cross the road. Ellis's transcription of the episode shows Anan understood the explanation perfectly well:

12. T. Yes, but why can't you see?

(The Portuguese boy is expected to imagine chairs representing cars.)

P. Two cars. 14. T. There's two cars.

15. Right.

13.

16. So what do you do?

17. What do you do?

18. P. Walk.

19. T. Walk, yes.

(Ellis 1984: 108)

We can see he was able not only to apply in his miming the knowledge he had acquired, but also to give reasons based on it. Although his verbal answers were one word utterances, they count as descriptions of the situation features that are relevant with respect to the code. Yet, Ellis's opinion is very negative. He thinks the teacher has not been able to communicate the content she is interested in because of her "dominating, interrogating style".

It is not very difficult to explain why I and Ellis see something different in his transcription. In another lesson which is highly regarded by him (1984: 112-113) nothing half as complex as understanding the Green Cross Code is required. Here the propositional density is very low, the vocabulary is very limited and most of the students utterances are mere repetitions. However, the episode could be described as a rich social interaction. It involves the teacher negotiating a change of activity, ordering certain actions, and offering and giving kitchen utensils. Moreover, the students agree, comply, request and receive. It is this which calls Ellis's attention. And it is this which the first episode does not have.

In short, in both cases Ellis observes one dimension of discourse and is unaware of the other. It is, of course, possible to make the converse mistake, ie to see only explanations, descriptions and reasons, and disregard requests, offerings and agreements. In fact, this is a major problem when teaching and exposition are conceived as synonymous.

It is important, then, to understand the nature of acts, so that different dimensions of discourse can be recognized and teaching can be adequately focused.

# Summary of basic questions

In this chapter, I have discussed some methodological decisions required by classroom interaction research, which are exemplified by the diagonal and comma conventions in the coding scheme developed at Xochimilco. I have shown that such decisions embody basic theoretical positions, eg about the sameness in nature of the acts in a list.

This discussion indicates that empirically based analyses of classroom interaction might be essential to understand learning and teaching. But it also demonstrates the need to deal with a question prior to analysis: how to describe teacher's and student's utterances.

My aim has been to raise the questions we must answer before we can devise adequate schemes: How many basic kinds of acts are there? What is the nature of each? How do acts, sentences and propositions relate to each other?

It is unfortunate that those questions have not been discussed sufficiently, because their answers determine the kind of analysis that can be produced and condition the degree of validity that can be attained. The lack of good answers results, for example, in unreliable frequency counts. It also causes us to inadvertedly mix simple and compound categories. And it means teaching can easily be misguided.

The following chapter will point to some answers to these questions. It will also pose some complementary problems. This will lead to a direct confrontation, in the second part of the thesis, of the basic issues involved.

#### Chapter 2 notes

- As Chaudron (1988: 14-15) points out, under the influence of sociological investigations of group processes, Flanders (1960) developed a system to register the "social meanings" of classroom interactions and the classroom "climate", using labels such as 'direct' or 'indirect'.
- The members of the Xochimilco research team were Michael Long, Leslie Adams, Marilyn McLean and Fernando Castaños.
- It is of interest to note that other researchers had in the past also found the descriptive problem occupying a great part of their attention (see Jarvis 1968, Nearhoof 1969, or Wragg 1970).
- 4. Thanks to the application of Bellack's and Moskovitz's systems, it was shown that some of the effects that tended to be attributed to classroom organization might actually be due to the type of task or the teaching style (Long et al 1976). Although perhaps this was not made sufficiently explicit, it means the latter variables were as worth investigating as the former.
- 5. The analysis made possible by the ECS shows, first, that the total number of acts performed by students in the small group condition was significantly greater (p.01) than the number performed by students in the lockstep condition. Furthermore, the quantitative difference was significant for each of the three major act classes established (p.01, p.05 and p.05 respectively). Secondly, the variety within two classes of acts, pedagogical moves and social skills, was also significantly greater (both at the p.01 level) for the small group situation. However, there was as much variety of rhetorical acts in the lockstep situation as in the pair work.
- 6. Sinclair and Coulthard's 1975 system is an attempt to model the structure of discourse. Its categories are treated as names for constituents of larger units, and these form a hierarchy of five 'ranks': 'lesson', 'transaction', 'exchange', 'move' and 'act'.
- 7. The observation about pedagogical moves duplicating acts in the social skills list of the ECS does not imply a rejection in principle of multiple coding; it merely points to a danger that has to be avoided -by properly establishing the number of lists and carefully defining the acts in each list.
- According to Sinclair and Coulthard (1975: 15-16), the categories in a coding system must be comprehensive, unequivocal and finite in number. In addition, there must be at least one impossible sequence of categories in the type of discourse they describe.