Chapter 3

THE STUDY OF DISSERTATION ACTS IN THE CONTEXT OF ACADEMIC LANGUAGE RESEARCH

This chapter has two purposes. The first one is to expose the problems that researchers have had defining dissertation acts, ie acts like classification and identification, which have been of particular interest to analysts of academic discourse. The second purpose is to examine a definition of definitions.

The two purposes are interrelated. An initial consideration of the problems will indicate what should be aimed at when attempting to define an operation such as definition. The discussion of its definition will, in turn, provide a framework to state the main problems precisely and will also point to a possible solution.

The argumentation will lead us to appreciate the need to establish certain distinctions before devising schemes to code academic discourse. It will show, for example, that the origin of some problems is the confusion of acts and act relations, namely, of categories such as 'observation', on the one hand, and 'exemplification', on the other.

The discussion will also raise the question of whether dissertation acts are illocutionary acts or not. At this point, the elements in the definition of definitions will be contrasted to the standard characterizations of illocutionary acts.

The chapter will, thus, contribute to indicate the topics that ought to be dealt with when attempting to establish the nature of acts. It is, therefore, complementary to Chapter 1.

An additional outcome of the deliberation is the identification of new research themes, the main ones being text constellations and delayed comprehension, whose understanding could improve the teaching of English for Academic Purposes significantly.

ESP research: early developments

Scholars interested in the teaching of English as a second or foreign language have distinguished academic English from general English at least since the forties.

In this decade, Michael West began recording the differences in the frequency of occurrence which the most common English words have in scientific prose and in texts written for a wide public.

With time, researchers interested in this kind of work divided scientific texts by area and also studied history and law texts. Later on, they counted not only words, but grammatical structures as well. The aim was to identify the most basic and most important linguistic elements for all learners.

In the sixties, the aims were inverted: instead of concentrating on the characterization of a word or structure by recording the domains in which it appeared, the emphasis was placed on the description of a variety of English by identifying its frequent words or structures. Rather than identifying common core English, statistical studies now had the purpose of establishing specialized Englishes. This trend, which developed until the mid seventies, repeated the history of basic English corpora delimitation; initially, the aim was to describe broad varieties -eg 'technical English' - and, with time, the object of study was more narrowly defined -eg, as 'medical English'.

Among the works produced during the first part of the period, the following can be mentioned: "A list of professional words commonly used in technology and engineering" (Sarma 1966); "English words and structures in Science and Maths" (Owens 1970); "Some measurable characteristics of modern scientific prose" (Barber 1962). It can also be said that A course in basic scientific English, by J. Ewer and G. Latorre (1969), perhaps the best known English for Specific Purposes textbook of the time, was based on frequency counts of both the lexis and the structures of scientific English (see Ewer and Latorre 1967).

In the second part, publications included: "A study of engineering English vocabulary" (Puangmali 1976); Some syntactic properties of English law language (Gustaffson 1975); "Introduction to a paper on the language of administration and public relations" (Hughes 1974). Again, research in this current was sometimes conducted specifically to provide a basis for materials development; a good example is an analysis of the vocabulary and structures in a large corpus of texts for medical students performed by M. Horzella et al (1977).

One would have thought that a central concern in the following years could have been to combine the interest in comparing the language of different disciplines, implicit in the studies of the fifties, with the interest in describing in detail aspects of the language of one discipline, shown in the early and mid seventies. Surely, this would not have been too ambitious an objective, given the increase in the number of applied linguists and the progress in computational hard- and software. However, interest in frequency studies decayed very considerably for a number of years.

Later work

Probably nowadays the two most important schools of thought in specialized language research and teaching for specific purposes design are those represented by Trimble 1985 and Swales 1990. The former is often referred to as grammatico-rhetorical approach or University of Washington EST Program. The latter is identified with genre analysis.

As shown below, both, the grammatico-rhetorical approach and the genre analysis schools, declare that the relationship between discourse purpose and dissertation act sequencing is one of their central concerns, although dissertation acts are not referred to with the phrase "dissertation act" — in fact, the word "act" is not used at all by Trimble or Swales —.

For Trimble: "Rhetoric is the process a writer uses to produce a desired piece of text. This process is basically one of choosing and organizing information for a specific set of purposes and a specific set of readers" (1985: 10). The rhetorical process is modelled as a chart with four levels (1985:11). The first level consists of objectives, which are exemplified by "detailing an experiment" and

"presenting new theory". The second level comprises general functions that develop the objectives, and include, eg "reporting past research" or "stating the problem". The third level is one of specific functions that develop the general ones, and it covers "definition" and "classification", among other acts.

For Swales: "A genre comprises a class of communicative events, the members of which share some communicative purposes ... Communicative purpose is both a privileged criterion and one that operates to keep the scope of a genre as here conceived on comparable rhetorical action" (1990: 58). Actually, this author has two kinds of purposes in mind. As they are not explicitly distinguished, it might be convenient to call them 'cognitive' and 'social'. The first, which are somewhat akin to Trimble's objectives, are what the following remarks are about:

The [oral] presentation may report on work in progress or offer a preliminary trial of new ideas.

(Swales 1990: 178)

...in certain genres ... the writer has the right to withdraw from the contract to consider the reader because of an overriding imperative to be 'true' to the complexity of subject matter or to the subtlety of thought and imagination...

(Swales 1990: 63)

What I am calling social objectives can roughly be conceived as relating to the addressor's identity and position in a research community. A conceptualization of this sort is behind the following statements:

The first significant point to emerge is that the public story as told in the drafts is a reversed, rather than revised, version of what actually took place within the confines of the laboratory.

(Swales 1990: 118)

... we are far away from a world in which power, allegiance and self-esteem play no part, however much they may seem absent from the frigid surface of [research articles] discourse.

(Swales 1990: 125)

Swales's concern for relating purposes and acts can be seen in his main model, which is called "Create a Research Space (CARS)" and, like Trimble's process chart, is hierarchically organized. Its version for article introductions consists of moves like "establishing a territory" and "establishing a niche", and these are constituted by steps like "making topic generalization" and "counterclaiming" (Swales 1990: 141).

Studies stemming from the Washington Program, developing in the genre analysis school or having a combined origin in both traditions have carefully yielded some interesting results on several topics¹. However, in Trimble 1985 there is no observation on the relationships between purpose and particular functions, one of the tradition's supposedly central concerns. In Swales 1990 there is little on the relationships between social purposes and steps, most of it contained in the CARS model, and nothing on the relationships between cognitive purposes and steps. In fact, after the quoted declarations, the word "purpose" disappears from both texts, and is not found in their indexes.

I think the problem is not lack of awareness about purposes. Swales, in particular, distinguishes genres like abstracts, theses, monographs, and presentations, implicitly but clearly, on the basis of cognitive purpose, as the fragment on presentations quoted above shows. The problem is, very probably, the link between purpose and functions or steps. And this, in turn, is almost surely the consequence of unclear notions about functions and steps as dissertation acts.

Trimble's and Swales's notions are vague and, inadvertently, mix acts with elements of propositions, as well as features of larger and more complex discourse units. Trimble, for example, has "physical description" and "visual-verbal relationships" alongside "instructions" and "classification" (1985: 11), whereas Swales has "making topic generalization" together with "reviewing items of previous research" (1990: 140).

The problem is revealed in the conspicuous lack of explicit allusions to acts. This is probably a conscious decision, given that there is an obvious influence of speech act theory and speech act theory based discourse analysis in both cases, manifest among other traces² in the use of terms like 'presupposition' (Trimble) and oppositions like 'cohesion and coherence' (Swales). It is difficult to hypothesize why 'act' has been avoided, but the reason could well be a distrust of speech act coding.

The distrust of specialized discourse coding would be understandable. As I will show below, when it was used extensively it was at least as unreliable as coding of classroom discourse has been. And scholars in the grammatico-rhetorical and the genre traditions might have wished to avoid the problems unreliabitity implies. There is some (negative) evidence for this, in Trimble's and Swales's texts³, in that they present no analysis of all the functions or steps in a discourse fragment, nor give any indication as to how this could be carried out.

But the rationality of the distrust does not remove the limitation. Not being able to identify all the acts in a discourse implies not being able to verify, falsify, or even conceive, findings like the following⁴:

Sequences of descriptive observation, descriptive generalization and definition are far more frequent in introductory mechanics texts than in texts for intermediate students. This is consistent with their aims. The former are designed to present the basic principles of physics and establish a link between them and the world. The latter have the objective of developing sophisticated tools and techniques.

This is the type of conclusions which would be expected from investigations based on the assumption that purpose and rhetorical action are related. But this type of conclusions requires that categories like "descriptive observation" or "definition" have a clear meaning, and neither the grammatico-rhetorical nor the genre schools can provide such a meaning. Descriptive observation and definition are speech acts, and both schools have avoided the notion of speech act.

The point is that if we are interested in the relationship between discourse organization and discourse purpose (or any other aspect of discourse) we will at some moment have to define the basic units that are organized.

Act definitions: the missing link

What happened between the earlier developments and the later work in specialized language research? For a time, speech acts became the centre of attention.

In 1975, a very influential article by Henry Widdowson put in doubt the usefulness of quantitative information on the occurrence of elements of the language system. (He still questions⁵ the claims of analyses supposedly based only on quantitative data, which have increased again in recent years.) He proposed that the aim of research about technical and scientific English was the qualitative explanation of how the linguistic elements are used in discourse (Widdowson 1975: 4). One of his main points was that "the description of discourse and the interpretative strategies of language users ... should not be distinct" (Widdowson 1975: 9).

For many the proposal meant research ought to concentrate on two problems I would, a posteriori and using my terminology, formulate as follows: 1) the relationships between dissertation acts and sentences (or aspects of sentences); and 2) the combination of acts in discourse. This was due mainly to the impact of a previous article by the same author which states that:

There seems no reason why (scientific varieties of English) should not, in course of time, be represented as types of discourse consisting of certain combinations of such acts as definition, classification, generalization, qualification, and so on.

(Widdowson 1973: 98)

The potential for studies focusing on acts seemed to be enormous. There was also much hope that in a relatively short period of time they would yield important descriptions of academic English. This hope seemed to be well founded, because results started to appear, specially in connection to question 1, even if not always by applied linguists who, like Widdowson, wished to relate their views directly to speech act theory. For example, Selinker and Trimble (1976) showed that in scientific reports the past and the present tenses tended to be used to express, respectively, particular observations.

As a consequence of the insight an awareness of acts provided, very few applied linguists today would consider that the frequency distribution of any linguistic element constitutes relevant information on its own; to be significant it must be accompanied by a characterization of the element's use, as is shown, eg in studies by Pettinari (1983) or Salager (1986). Nevertheless, the actual study of acts in academic discourse did not progress. I am covinced that the cause was a lack of adequate definitions for the acts.

To see the problem, let us consider two examples of definitions used in the mid-seventies:

SPECIFIC. Gives more specific information about something that was stated in a general way.

EXPLANATION. Previously stated information is explained in a more abstract manner (for example: relating information to a general principle) or more concrete manner.

(Meyer 1975; quoted by Widdowson and Urquhart 1976: 25)

When working with categories of this sort, it is possible for a researcher to achieve a high degree of consistency, say between two codings of the same text, provided that they are done within a short period of time. But if the system is used again after a few months the basis for the agreement is forgotten. I have experienced this in my own research and I have wittnessed it in the work of others.

What happens is that, at a certain point, one may distinguish clearly items that are 'more specific' from items that are 'more concrete'; but if that is done only on an intuitive basis, then, at another point, the classifications could easily be reversed. Thus, an utterance which may have been identified as the realization of SPECIFIC might later be coded as EXPLANATION.

The lack of precision is largely a consequence of the way categories were often set up: starting with a list of category names taken from what might be called 'everyday academic metalanguage', and then providing lexicographic definitions for them. As is generally the case with everyday words, those terms stand for amorphous configurations of elements. Furthermore, they are used on different occasions to refer to different sub-configurations of elements. That is,

they are not only amorphous, but variable as well. The result is, naturally, a 'system' that does not meet the requirements of exhaustiveness and mutual exclusiveness one would demand from the sort of classification it is supposed to be.

The difficulties that arise when one starts with names and then provides definitions of categories is also noted in Mitchell 1980, a systematization of requests and offers. The author says there is no reason to suppose that a set of lexemes from English, or any other language, has divided the semantic field of speech acts in the most convenient way for applied linguists. To start with, sometimes the performative and the reporting verbs do not even come in corresponding pairs.

To put it shortly, the analyst who uses everyday terms as categories and does not define them technically is at the mercy of their everyday variability. What we want is a set of features which can be varied systematically, so that each variation gives us the definition of a different category, and so that, therefore, we obtain a proper classification system.

I believe that to look for such features it is a good strategy to consider in more depth attempts to define one discourse operation which has been regarded as an act and which has received great attention: definition. This will be done in relation to a proposal which, I think, has considerable explanatory power.

Defining definitions

Between 1977 and 1988, I carried out several studies on definitions, some of which are published (eg Castaños 1982). In this period of time, I had the fortune of discussing the theme with four applied linguists who have contributed to its understanding, Larry Selinker, Louis Trimble, Henry Widdowson and John Swales, as well as with many teachers, students and colleagues. I have summarized what I learnt as follows:

What academic writers usually regard as definitions are utterances which combine elements I and II in the following list with one or more of the remaining elements.

I. The force of the utterance is that of assertion (as opposed to suspended assertion, mitigated assertion or hypothetical assertion).

II. An equative predication is associated with two generic referential expressions.

III. The assertion has an axiomatic character.

IV. With respect to information structure, the expression that contains the term being defined is given and the expression equated with it is new.

V. By means of paralinguistic features, the utterance identifies the term being defined as a new technical term and, by syntactic procedures, gives special emphasis to the defining expression.

To make I and II clear, some negative and positive examples can be contrasted. That a definition is an assertion means (1), (2) and (3) cannot be definitions, because their forces are those of hypothetical assertion, suspended assertion and mitigated assertion, respectively.

- (1) Let $x = a^2$.
- (2) Is z the probability?
- (3) It seems a nova is a star 100 times as luminous as the sun.

On the contrary, (4) and (5) are assertions and, therefore, could, in the right contexts, be definitions.

- (4) 1 cm = 1/10 m.
- (5) A planet is an opaque celestial body.

These five examples exhibit equative predications, whereas in (6) we have a comparative one. Therefore, it cannot be a definition.

(6) z > r.

Neither can (7). Its references are particular, as opposed to generic.

(7) Jupiter is the largest planet in the solar system.

Elements III to V require less clarification. Axiomatic definitions are properly exemplified by typical mathematical definitions, and it is such kind of definitions that people have in mind when they express the idea of something being true by definition.

'Given' and 'new' are, as is well known, Halliday's terms (see, eg Halliday 1970). They imply analyzing the sentence in use in two parts: what is being talked about and what is being said of it. The terms describe the two parts with respect to the information that has been expressed or made present by the previous utterances, and are self explanatory. Just one point needs to be added. In English, and probably in many other languages, the given information commonly appears first in the sentence and the new information appears last.

The paralinguistic means used to distinguish the term being defined in a written definition are inverted commas, underlining or contrastive typography. Syntactic emphasis is achieved by changing the basic sentential order of subject, verb, and object; this causes what is being talked about to be dissociated from the given information in unexpected, striking ways.

At this point, a remark must be made. The definition of definitions proposed (involving elements I to V) is the result of attempts to determine basic discourse units. However, it is possible to find larger units where the definition seems to be falsified. There are, for example, many defining paragraphs or sections (sometimes explicitly identified as definitions) where forces different from that of assertion, or predications different from the equative one, are involved. Nevertheless, such paragraphs always contain a clearly identifiable definition, in the strict sense of my definition. This is, for instance, what we have in the following extract:

If we start with a certain number a, an integer, and we count successively one unit b times, the number we arrive at we call a+b, and that defines addition of integers.

(Feynman 1966: 22-1)

This means the analyst must take a methodological decision: it can be considered that the whole extract is a definition or that it is some part(s) of it which can be identified as definition(s). I would opt for the second choice⁶, because it is more precise and rigorous; in fact, I would say that above we have two definitions: one of a+b, the phrase between commas, and one of addition of integers, the last five words. It is definitions in this sense which conform to the model presented above.

Rationale

The arguments I have in favour of the definition of definitions in the previous section are varied. Firstly, it is more general than the classical definition in terms of genus et differentia. Secondly, it allows us to understand why different and apparently contradictory, definitions of definitions have been put forth by applied linguists. Thirdly, it provides a basis to clarify important controversial issues about definitions, such as the distinction between nominal and real definitions. These arguments will be considered in more detail in the following sections.

Besides those reasons, I have empirical evidence, although it is of a peculiar nature. I have checked the corpora of my previous studies, as well as the definitions quoted by other applied linguists, and have not found any counter-examples to the definition. Furthermore, using my intuitions, I have tried to write counter-examples myself and have found it impossible.

Beyond the classical account

In philosophy and lexicography, a definition of something used to be considered as a statement of the class it belongs in, its *genus*, and the characteristics that distinguish it from other members, its *differentia* (see Robinson 1950). This view gave rise to a number of issues, most of them associated with the prescription of

rules for defining well. Among these we have, for example, the question of whether things should be defined in terms of their functions or should only be defined in terms of their intrinsic properties.

In spite of such difficulties, the traditional view has been held to be essentially correct. And it is...for a number of definitions, namely those which, as (5), involve classifying what is being defined under a *genus*. In modern semantic nomenclature, these definitions establish a hyponym-superordinate sense relation (for a discussion of sense relations, see Lyons 1977: 271-317).

The problem is that in many definitions there is no hyponym-superordinate relation. In a large number of cases we have other paradigmatic sense relations. Thus, in (4) we have a part-whole relation. This definition cannot be accounted for in traditional terms. Another sort of definitions is further apart from the classical account, because the sense relations involved are not even paradigmatic, but syntagmatic (see Lyons 1977: 240 and 261, for an exposition of these concepts). This is the sort of definitions in which the result of a process is referred to, as in Feynman's definition of a + b quoted above.

Now, what I want to point out is that in classical definitions the genus et differentia phrase is a generic referential expression, which is linked to the term being defined by an equative predication. In definitions of the sorts mentioned in the previous paragraphs, the expressions indicating the part-whole relation or referring to the result of a process, are also generic, and they are, too, linked to the terms defined by equative predications. In other words, the classical account is valid for a particular class of definitions whereas the definition of definitions I am proposing is general.

Critique of applied linguistics conceptions

The classical approach has been reflected in applied linguistics conceptions of definitions at least since the seventies' ESP boom, perhaps due to indirect connections with philosophical or lexicographic literature. Thus, in the first book of the English in Focus series (Allen, J.P.B. and Widdowson, H.G. 1977) a definition is treated as a "communicative function" whose realization has the following structure: An X is a Y which Z.

The idea that a definition is a statement of genus et differentia is more explicitly formulated by Selinker, Todd and Trimble, in points 2 and 3 of the paragraph below.

The core generalization of a paragraph whose purpose is to define is most commonly in the form of an explicitly stated definition. If this definition is a "formal" definition then it provides the reader with three kinds of important information: (1) the term naming the concept being defined; (2) the class (or set) of which the term is a member; and (3) selected essential characterizing information about the differences which distinguish the concept being defined from all other concepts which are members of the same class; that is, the statement of differences gives one or more the distinguishing characteristics of the particular concept being defined.

(Selinker et al 1976: 284)

At the time, I held a view which was, in this respect, similar. Consider, eg, B and C in the set of characteristics I had found in definitions:

- A. The entity being defined is considered for the first time in the sense defined.
- B. A definition associates the entity being defined with a set of distinctive characteristics.
- C. A definition classifies the entity being defined.
- D. A definition establishes the category of the object being defined.
- E. The set of associations entity-characteristic can be considered as a set of axioms.

(Castaños 1977; 91)

Of course, the criticism to the classical account is extensive to these conceptions, or the aspects of these conceptions that reflect it. They exclude many definitions, such as those of units of measurement.

Besides criticizing the classical orientation which the three conceptions have in common, it is possible to show the particular difficulties that can arise as a consequence of the way each one has been formulated. For instance, it can be seen that if the English in Focus series conception is not handled carefully, it can lead to a false association of form and function, one that can be contradicted by

(5). However, I think at this point it is more useful to consider how ideas that fall outside the classical paradigm have been taken.

The central idea I presented earlier is that utterances which combine I and II, without also having at least one of the other elements, would not normally be considered definitions. This is the case, for example, with many mathematical equations.

Now, the fact that, if I and II obtain, the presence of III or IV or V would make an utterance count as a definition has made some researchers think that III or IV or V are necessary characteristics of all definitions. This is, indeed, what I believed about III in 1977 (see E in the last quotation).

Sometimes it has been thought, mistakenly, that one of those three complementary elements is the defining characteristic of definitions. This is what is expressed in the following extract from a work by Widdowson, which is the original source of my IVth element.

... the point about a definition, of course, is that the term to be defined is given and the expression which does the defining is new. If the proposition is re-organized so that this given-new arrangement is reversed, then it can no longer function as a definition: we are no longer explaining a term already given, we are introducing a term to identify or name something already known. In other words, the rearrangement alters the force of the proposition from definition to identification, or naming.

(Widdowson 1978: 41)

That what Widdowson says here is not the case, is shown by the last sentence in the following paragraph, where the term being defined is new.

DEFINITION 1.5. Two matrices A and B can be multiplied together in the order AB if and only if the number of columns in the first equals the number of rows in the second. The matrices are then said to be conformable for the product AB.

(Noble 1969: 5)

This allows us to understand certain apparent contradictions among the various conceptions. As I have mentioned elsewhere (Castaños 1982: 9), in the paragraph by Widdowson quoted above, defining and naming are opposites, whereas in the paragraph by Selinker *et al* quoted earlier, defining includes naming.

Besides the obvious problem of 'naming' not being properly defined, I think Widdowson and Selinker et al had in mind different objects when they made their observations about definitions. The fact is that there are cases where Widdowson's opposition holds. If a definition is not axiomatic in character and the term being defined is not distinguished paralinguistically, then it has to be given. On the other hand, what Selinker et al say is also partially true. If either a certain definition is axiomatic or the term defined by it is paralinguistically salient, there is a sense in which the term is actually being introduced, and need not be new in Halliday's terms; in this case, there is, again, a sense in which the term defined names the other half of the definition.

A similar contradiction will be found between Widdowson's idea that a definition explains and my idea that it establishes the meaning of the term defined (characteristics A, C, and E). The clarification again depends on showing that neither his nor my conception are correct for all definitions, but each one is valid for a different set. Therefore, this clarification needs not be developed in detail.

Then, the definition of definitions proposed (elements I to V) is more general than the classical account and it allows us to assess the different conceptions of definitions in applied linguistics. It also lets us solve one important controversial issue, to which we now turn.

Real and nominal defintions

This issue is related to the distinction between real and nominal definitions (see, eg Alexander 1963: 89-90). According to this, real definitions provide information about the world, whereas nominal definitions provide the meaning of words. This has sometimes been accepted (Widdowson 1973: 286-288), but it can also be questioned (Widdowson 1977: 61).

From element II, it can be seen that the problem is all definitions are nominal and some (or many) are real, ie the distinction is not an opposition. An equative predication is, as it were, a meta-statement of co-referentiality; hence, any definition is nominal. Whether or not it is also real, depends on what the referential expressions refer to and on whether or not one of them contains empirical information.

Definition: a complex unit

The rigour and explanatory power that are achieved with the definition of definitions proposed invite us to reflect upon its elements (I to V). One thing to note is that I and II stand apart from III, IV and V in more than one way. In the first place, they are the only common elements to all definitions. In the second place they are about matters which belong in different areas.

III is related to the character of the propositional content of the definition, in relation to the rest of the discourse. IV has to do with the word order in the sentence used to express the proposition. V is, in part, related as well to properties of the sentence and, in part, to paralinguistic properties of the utterance which, strictly speaking, do not belong in the sentence.

Now, I and II do not refer to properties of sentences or properties of propositions. Nor are they about paralinguistic features. Rather, they have to do with what has been identified in the past as the speaker's intentions: her commitment to statements and what she *does* when she expresses a proposition. According to Searle (1969:72), she refers and she predicates. In other words, I and II have to do with speech acts, in the purest sense of terms.

What this means is that a definition is not a speech act, properly, but a more complex unit. It does contain a speech act, an asserted equation of generic references; but it also has propositional, sentential and paralinguistic properties.

Not distinguishing between acts and complex units is probably one of the main sources of inadequate coding systems. In the best case it results in comparing incomparable entities. In the worst, it can cause inconsistent identifications; due to the lack of awareness, at one point the sentential properties can be the

deciding factor and at another the propositional properties can weigh more in the analyst's mind. There is another source of problems which can be signalled from the point where the exposition has taken us.

Acts and act relations

What has been said indicates it is plausible to hypothesize that the defining features of dissertation acts could be forces of assertion, types of reference and types of predication. Perhaps the most important consequence of adopting this view would be the elimination of categories such as 'exemplification' and 'conclusion' from the list of dissertation acts. To see what this means let us consider the following (obviously fabricated) sequences:

- Seq. a) (1) All men are mortal.
 - (2) Socrates is a man.
 - (3) Therefore, Socrates is mortal.
- Seq. b) (1) All men are mortal.
 - (3') Eg Socrates is mortal.

The act category that we would use to code (1) in both sequences would be the one defined as a combination of assertion, general reference, and attributive predication. Supposing we called this 'generalization', its definition could be abbreviated as:

Generalization: A; Att (gen).

Here, A stands for 'assertion'; Att stands for 'attributive predication'; and gen stands for 'general reference'.

Similarly, (3) would belong in a category, which we could call 'observation', that would be defined as:

Observation: A; Att (part), where part stands for 'particular reference'.

Now, (3') would also be coded as an observation, because, just as in (3), the force is that of assertion, the reference is particular and the predication is attributive. In other words, we would not distinguish (3') from (3).

But, (3') and (3) are evidently different, and most available taxonomies can distinguish them, for example, as 'conclusion' and 'exemplification', even if these are ill-defined (see eg Williams 1973). However, as in such schemes these categories are co-hyponyms of 'observation', this cannot be employed if one of the other two is used, unless the minimum requirements of rigour referred to in the previous chapter are ignored, which is unacceptable.

In short, approaching the coding the way I suggested above would allow us to capture what (3) and (3') have in common, but not their difference, while available taxonomies would allow us to register them as different but not as having something in common. What emerges then is that there seem to be two things in (3) to be coded: the observation and the conclusion. It is also clear that the two cannot be co-hyponyms. But, if this is so, then a conclusion is not an act. What is it then?

Of course, the answer has to be found by looking into the differences between our examples. What is captured in a coding using the traditional taxonomies, and is missed by categories defined the proposed way, is the presence or absence of (2), as well as the connectors 'eg' and 'therefore'. Clearly, the difference is what is between (1) and (3) or (3'). On these grounds, it seems to me that 'exemplification' and 'conclusion' are relations between acts.

Hence, a proper system to analyse dissertation would require a distinction between acts and act relations. Let me further illustrate the need by commenting on this authentic extract of academic discourse:

This leads us to a new clash between classical mechanics and the results of experiment. There must certainly be some internal motion in an atom to account for its spectrum, but the internal degrees of freedom, for some classically inexplicable reasons do not contribute to the specific heat.

(Dirac 1930: 2)

The string between the first capital letter and the first full stop is an assertion — some would wish to say a meta-assertion — about three particulars: this, us, and the new clash. There is here a transitive predication, 'lead', linking the three corresponding referential expressions. It is a combination different from the ones we have considered so far; perhaps we could, provisionally, call it 'narrative description'.

There is also a clear relation between the last referential expression in this utterance, "a new clash between classical mechanics and the results of experiment", and the second utterance. It could even be said that it is as if membership to the class of clashes were predicated of the idea contained in the string — that degrees of freedom do not contribute to specific heat.

Certainly, we want to record both: the description and the relation it has, via one of its expressions, with the next string. This is precisely what the conceptual separation of act and act relations allow us to do. In fact, it would let us record other relations, besides the one already considered. Let us note one of them, to see why this is important. The use of the adjective 'new' presupposes the existence of other clashes. Indeed, two paragraphs above, we find:

The necessity for a departure from classical mechanics is clearly shown by experimental results. In the first place...

(Dirac 1930: 1)

There is an important relation between the acts in the two extracts. It is reflected and facilitated by: a) the repetition of the expression "classical mechanics"; b) the use of the synonymous phrases "experimental results" and "results of experiment", and c) the selection of the semantically linked pairs of words 'departure' and 'clash' and 'first' and 'new'. The point of this relation is to establish that the non-contribution of degrees of freedom to specific heat is one in a series of facts that do not go along with classical mechanics.

What this shows is that one act can enter into relations with several other acts. Clearly, this can cause many of the consistency problems I referred to in the second section of this chapter. If a coding scheme which includes acts and relations in the same list is used, one researcher might code the act (say, an observa-

tion), while another one might code one of its relations (an exemplification, let us suppose) and still another one a different relation (such as a reformulation).

At this point it is convenient to explore the consequences the suggested procedure to define dissertation acts would have.

Dissertation as illocution?

The concept of speech acts has been inherited from philosophy, and with it the idea that dissertation acts (referred to with other names) are a kind or kinds of illocutionary acts. In agreement with this view, some authors have stated that dissertation acts ought to be defined in terms of what philosophers call 'felicity conditions', "the things which are necessary for (their) smooth or 'happy' functioning" (Austin 1962: 14). In other words, a given act ought to be defined in terms of the conditions necessary for an utterance to count as such (the act).

This is, for example, the position Widdowson adopts after presenting some quotations on definitions, general statements and generalizations taken from an introduction to the logic of science by Alexander (1963):

What we have here are characterizations of certain illocutionary acts of scientific discourse, which would be recast in the more precise form of specific conditions in the manner of Searle's definition of the act of promising (Searle 1969).

(Widdowson 1977: 60-61)

To illustrate an attempt in this direction, it is useful to first recall that initially the paradigm was in fact not taken directly from philosophical works, but rather, indirectly, from the sociolinguistic work of William Labov. The classical example was his account of the act of ordering (Labov 1970). According to it, an utterance will be taken as an order if: a) the speaker, S, believes 1 to 4, which are called 'preconditions'; b) the utterance is about one (any) of the preconditions; and c) H, the hearer, knows by virtue of the situation that the other preconditions obtain.

- 1. Some action X should be done for some purpose.
- 2. H has the obligation to do X.
- H has the ability to do X.
- 4. S has the right to ask H to do X.

We can now note that the five characteristics (A to E) in my 1977 account of definitions quoted in the Critique of applied linguistics conceptions section seem to relate to realizations of definitions in the same way that Labov's preconditions relate to realizations of orders. For instance, if a form clearly signals that a new category is being established by an utterance, and, from the context, the reader knows that the other characteristics are applicable, then he reads the utterance as a definition.

For the above reason, I called A to E 'preconditions' of definition (Castaños 1977: 92). But, is this sort of analogy enough to take dissertation acts as illocutionary acts? My answer now is no. It seems to me that Labov's account is, roughly speaking, a description of social rules of conduct for speakers holding certain social relations. And there is nothing resembling social relations or rules of conduct in any of the accounts of definitions I have referred to. One wonders, then, what it means to consider definitions as illocutionary acts (eg as in Searle 1976). They do not seem to have anything in common to warrant such classification.

To put the matter in general terms, let us take Austin's felicity conditions for an illocutionary act, which is the framework, with slight modifications, for Searle's specifications of particular kinds of acts:

- (A.1) There must exist an accepted conventional procedure having a certain conventional effect, that procedure including the uttering of certain words by certain persons in certain circumstances, and further,
- (A.2) the particular persons and circumstances in a given case must be appropriate for the invocation of the particular procedure invoked.
- (B.1) The procedure must be executed by all participants both correctly and
- (B.2) completely.

- $(\Gamma.1)$ Where, as often, the procedure is designed for use by persons having certain thoughts or feelings, or for the inauguration of certain consequential conduct on the part of any participant, then a person participating in and so invoking the procedure must in fact have those thoughts or feelings, and the participants must intend so to conduct themselves, and further
- $(\Gamma.2)$ must actually so conduct themselves subsequently.

(Austin 1962: 14-15)

Now, as far as I know, in definitions of definition, or generalization, or any other dissertation act, no researcher has ever specified who is the appropriate person to perform the act, nor how are the participants expected to conduct themselves once it has been performed. It is not unreasonable, then, to suggest that dissertation and illocutionary acts are of fundamentally different natures. This suggestion, of course, would require a stronger and more detailed argumentation to warrant being a satisfactory conclusion. I believe the effort that would be involved is justifiable. It would provide a solid foundation upon which to solve the problem of defining dissertation acts systematically and it would improve our understanding of argumentation and exposition.

Conclusion

The notion of speech act, which gave momentum to ESP research and teaching, has disappeared from ESP research. This chapter has shown why. The types of definitions we had for acts could not provide the requirements a proper coding system must satisfy. They were not good enough to relate data to categories systematically; and they were neither mutually exclusive nor comprehensive.

But the chapter has also shown that, if ESP research will pursue objectives involving the understanding of academic discourse structures, the notion of dissertation acts is unavoidable. Furthermore, on the basis of a detailed discussion of one particular act, the source of theoretical inadequacy in analytic frameworks for acts was identified: confusing dissertation acts with illocutionary acts. Hence, the chapter completes Part I of this dissertation. It confirms that it is justifiable to attempt distinguishing dissertation and illocutionary acts at a foundational level.

The main purpose of Part II is, precisely, to establish the distinction between the two acts on the same grounds that the distinction between illocutionary act and sentence was originally established. It will also make a second distinction which was pointed to here, that between acts and relations.

Once the foundations are laid, Part III will concentrate on the systematic definition of acts. In particular, Chapter 9 will retake this chapter's conclusion that dissertation acts can be defined in terms of forces of assertion, types of reference and types of predication.

Chapter 3 notes

- An example of contributions from the rhetorico-grammatical and the genre analysis traditions
 is the explanation that tense use is not necessarily governed by time reference, but often indicates
 degree of generality (Selinker and Trimble 1976). One can also mention the finding that students
 have particular difficulties with sub-technical vocabulary, "common words that occur with special
 meanings in scientific and technical fields" (Trimble 1985: 129). A third result is that the methods
 section of a research articles is less cohesive, and depends more on "inferential bridging" than the
 introduction or discussion sections (Weissberg 1984; discussed in Swales 1990: 168).
- Other traces of speech act theory in rhetorico-grammatical studies and genre analyses are the use of phrases like "rhetorical action" and references to the work of authors like Widdowson.
- It could be added that, in separate personal communications, Selinker and Swales have expressed strong doubts about the soundness and usefulness of speech act theory itself.
- 4. The mechanics texts comparison presented in the body of this chapter is similar to one reported in Castaños 1978. The essential difference is that the new formulation is more precise, and results from re-analysing the same data using definitions provided in chapter 9. The comparison is presented as open to verification because, although the corpus consisted of complete chapters, and all their utterances were act coded for the analysis, only two books were examined.
- 5. In the 1993 Research Students Seminar at the ESOL Department of the University of London Institute of Education, H.G. Widdowson argued that data driven research is impossible, among other reasons, because selection of sample corpora imply previous assignment of texts to types. He also formulated a warning against the direct application of frequency studies to syllabus design. The pedagogical usefulness of an item is a complex product of various factors which may not be derivable from its frequency, such as coverage, learning difficulty and availability. He has also stated views akin to these in writing (1993).
- 6. Of course, a well developed coding system should contain sufficient levels to register both the elementary acts of definition and the medium size units where such acts are central. In order to mark the distinction, these could be called 'defining block', in a system neutral about global structure, or 'defining move', in a system developed after a hierarchical model, such as Sinclair and Coulthard's (1975).