

VAGUE LANGUAGE:  
SOME VAGUE EXPRESSIONS IN ENGLISH

by

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Thesis presented in partial fulfilment  
of the requirements for the degree of  
Doctor of Philosophy  
in the Department of Language  
University of York

January 1983

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### Acknowledgements

I am grateful to very many people in many different ways for their help with this thesis. Firstly, Patrick Griffiths supervised the research, and the writing of the thesis. He gave generously of his time and of his ideas, in many talks over the last four years. Discussions, or correspondence, with Jens Allwood, A.P. Cowie, D.A. Cruse, Elizabeth Dines, R.B. Le Page, Michael Lumsden, and Yorick Wilkes, were important in shaping the development of my views on vague language. Tom Wachtel's work on number approximations provided inspiration at a crucial time, and our talks and correspondence have been uniquely valuable, even though we hardly ever agree.

Particular people helped with specific aspects of the work. John Local commented on the transcription of intonation in Chapters 3 and 4; David Pimm and Rolph Schwartzburger tried to give me a more mathematical perception of number; Thomas Baldwin was kind enough to comment on sections of Chapters 3 and 7. John Illingworth of the University of York Computing Service, advised me on data handling, and adapted a sorting program which sorted the data in Chapter 4.

A linguist must owe a special debt to those who agree to have their speech used as data, and to those who act as subjects in informant tests. In this connection I thank undergraduate and graduate students of the Department of Language and the Department of Psychology of the University of York, 1978-79 and 1979-80; the University of York Graduate Students' Association; students of the Department of French, College of Ripon and York, St John; and Mr Arthur Harrison of Nunthorpe Grammar School, and the Sixth Form, 1979-80. Marion Owen kindly provided me with examples from her corpus of data. In addition, many friends, knowing of my interest,

collected written and spoken examples of vague language for me.

Two years of research were supported by a Department of Education and Science Major Award. Part-time work at the College of Ripon and York, St John, and the Linguistics Department of the University of Hull, enabled me to survive while continuing work on the thesis, and I am grateful to both institutions on that account.

The thesis was prepared using the Queensland version of RUNOFF on the University of York DEC-10 Computer. I would like to thank Suky Thompson and Ulla Wiberg for their help with formatting and editing, and all the Computing Service staff for their friendliness, and patience with my often unreasonable demands. Muriel Pirozek typed the references for me. Peter Monk read the whole draft, and tried to simplify and clarify my convoluted style. Where I refused his advice, it will be my readers' loss. I am grateful to him for his patience, and, as always, for his unswerving support.

Joanna Channell

York, January 1983

The cartoons in Chapter 5 are reproduced from The People's Doonesbury: Notes from Underfoot, 1978-81, by G.B. Trudeau, published 1981 by Wildwood House, London

### Declaration

Parts of Chapters 3 and 5 have appeared in a slightly different form as a paper: 'More on Approximations: a reply to Wachtel', in the Journal of Pragmatics 4 (1980).



## Abstract

There is evidence in the literature which suggests that the linguistic analysis of vague language poses problems. In particular, some vague expressions create difficulties as to which aspects of their meaning should be handled by semantics, and which by pragmatics.

In this thesis, the general phenomenon of vague language is investigated through a detailed examination of two types of vague expressions: number approximations (eg about ten), and vague category identifiers (eg a film or something). The results of informant tests, designed to discover how these vague expressions are understood, show that hearers interpret them as identifying fuzzy sets whose membership is defined by (a) the form and content of the vague expression; (b) linguistic context and situation of utterance; and (c) world knowledge. Informants exhibit a high degree of agreement in their responses.

Conversation data (and some written data) from a variety of sources are analysed in order to ascertain what are the conversational effects arising from the use of vague language, and what interactional problems are solved by its use. Intonational characteristics, lexical aspects, and idiomaticity are also covered.

The subsequent theoretical discussion confronts various existing proposals for drawing the distinction between semantics and pragmatics with these data, and finds no valid ways of establishing the distinction. In the concluding chapter an alternative strategy for the study of meaning is put forward in programmatic outline.

Table 1

Notational Conventions used in the Transcription  
of Conversation Extracts

+	attested example
A: B:	stands for different speakers
(laughs)	brackets enclose description of non-linguistic communication
(.)	untimed short pause
[	indicates speech or vocal noise concurrent with that above
/ /	encloses interjected utterance from a different speaker
~~~	indecipherable speech
/	marked pitch deviation, upwards/downwards
"	precedes emphatically stressed syllable
[ ]	enclose transcriber/situational comment
-	any prosodic features heard as delineating a sense group

I have used apostrophes in don't, can't, etc, simply because it seems unnecessarily upsetting to miss them out. They are, however, omitted, where intonation transcription is included, because they would interfere with reading the intonation symbols. I have not used capital letters at the beginning of turns, but in individual short examples I have used them, again because it seems typographically upsetting not to.

Table 2

Conventions used for transcription of Intonation

	onset of tone unit
	end of tone unit
'	stressed syllable
"	heavy stress
\	fall
/	rise
^	rise-fall
∨	fall-rise
(.)	untimed pause
↑↓	sudden pitch change for beginning of next segment

## Chapter 1

Introduction1.1 The Topic

"Some of the most interesting questions are raised by the study of words whose job it is to make things fuzzier or less fuzzy" (Lakoff, 1972:195)

The general subject of this thesis is vagueness in the use of language. There are many ways in which speakers can be vague: they can employ "hedges" (in the sense of Lakoff, 1972) such as virtually or it seems that, or they can use agentless passives (Fowler and Kress, 1979:30ff) to give just two examples. What are the linguistic and non-linguistic mechanisms which enable speakers to be vague, and which enable hearers to understand them when they are? Why and when are speakers vague? These are some of the questions which will be discussed.

The present work contributes to the study of vague language use through an investigation of two types of vague expressions. The expressions studied in detail are:

Type A: Number Approximations

(n and m = members of the set of Real Numbers)

about n  
 approximately n  
 (a)round n  
 n or so  
 n or m

Type B: 'Tag' Approximations

(X = typically NP or VP)

X and things like that  
 X and things  
 X and that  
 X or anything like that  
 X or anything  
 X or something like that  
 X or something

In Chapter 2 a classification of different types of vagueness is presented - and other vague expressions are introduced and described at various points where they are relevant.

The pretheoretical notion of vagueness will be refined and defined throughout the thesis, but a general working definition would be that a vague utterance is one which cannot be assigned an exact (or in the case of ambiguity being present, several discrete but exact) meaning(s), even with recourse to context. One example to suggest the general notion:

[Context gloss: discussion of academics who publish many articles]

(1) +B: ...and they repeat themselves each time. You find that  
           you get five or six articles and they're really  
           very much the same                   [II.21.2]

The hearer of (1), even with recourse to all he<sup>[1]</sup> knows of the speaker's knowledge, and likely intentions, to the discourse situation, and any other relevant or irrelevant pragmatic factors, cannot know from the information provided whether he should take the reading of five or six articles to be "exactly five" or "exactly six" or exactly any other number or interval of numbers. Importantly, however, this apparent vagueness causes no difficulty to the hearer or to the progress of the conversation.

## 1.2 The Rationale

"What then is a reasonable field of endeavour for linguistics? We would claim that the study of meaning is vitally important but that meaning must be studied in a new light, namely with respect to the actual usage of speakers."  
 [Schank and Wilks, 1974:312]

<sup>1</sup> Where there is no antecedent which is clearly marked for gender, he, him and his should be read as referring to people of either sex.

Recent linguistic work on "meaning" has tended to broaden its scope in the way suggested by Schank and Wilks, in order to look at more non-linguistic (pragmatic) aspects of meaning; and the interface between semantics and pragmatics especially has received and is continuing to receive a good deal of attention (typified for example by Wilson, 1975, Wilson and Sperber, 1982; Gazdar, 1979, Levinson, 1979; Allwood, 1981).

The vague expressions investigated here are particularly relevant to this area because they seem to be more inherently 'pragmatic' in nature than many others, indeed it has been suggested that some of the expressions are almost semantically empty and that their interpretation has to be handled entirely within pragmatics (Sadock, 1977). However we evaluate this particular view, what is clear is that these expressions can probably not be handled satisfactorily except by looking at both semantics and pragmatics.

There is evidence in the literature to suggest that the linguistic analysis of vague expressions poses problems (Lakoff, 1972; Sadock, 1977; Wachtel, 1980, 1981; Channell, 1980; Fauconnier, 1976, Klein, 1980, 1982; Danell, 1978). In particular, some vague expressions create difficulties as to which aspects of their meaning should be handled by semantics and which by pragmatics. Partial theoretical analyses have been proposed for a few expressions, but remain to be substantiated. There is as yet no major study of linguistic vagueness, and no generally agreed approach to it. This study of vague language is intended to be on the one hand theoretically relevant in contributing to the continuing debate on the semantics/pragmatics interface, and on the other, descriptively useful in making available a body of data concerned with a hitherto

underinvestigated area.

Such work as there has been on vague language(see 2.2) has been more theoretical than descriptive (these terms are distinguished as described in Lyons 1977:138), in the sense that it uses only limited numbers of (often unattested) examples to substantiate particular theoretical analyses. The work reported here begins to right the imbalance between theoretical and descriptive work by proceeding in the opposite direction. It is very largely descriptive, and moves towards theoretical analyses through observation of a body of attested data of different sorts (see 1.5 Methodology). The expressions studied, listed at 1.1, do not exhaustively cover even the narrow field to which they belong. They are however seen as representative in that the problems they raise for theory are essentially the same as those raised by other vague expressions. The decision to study this particular set of expressions, and not others, arose from a wish to study only expressions which were attested from conversation or written data. Random data, even in very large quantities, cannot be expected to produce examples of all the phenomena the investigator has identified as possibly related. His two choices then (given practical limitations on his data collecting resources) are to make use of unattested data, or to restrict his investigation. For theoretical reasons which will be discussed in greater detail in Section 1.5 the second alternative was preferred [2].

2 Nevertheless it was necessary, especially in discussing syntactic restrictions, to make use of some invented data. In addition, examples drawn from the work of other authors are usually unattested, or no information on their provenance is given.

Although the work discusses only a restricted set of data, its firm links with an existing body of theoretical work enable it to avoid the methodological pitfall noted by Teeter (1964):

"If we are willing to restrict our range of enquiry sufficiently, we will be able to find some answers easily, but they will have little bearing on anything of importance." (:205)

He goes on to describe what he sees as the correct relationship between generalisation and particularisation, as follows:

"If we insist on dealing with large questions, our first attempts at answers are likely to be mistaken, or untestable without a great deal of further work. But our answers to questions are only worthy of the name of science when they are both significant and testable. Theory divorced from the best available knowledge is irrelevant, a castle in the air, and by that token of no interest to science. But knowledge which fails to rise to the level of theory is of equal lack of interest, an accumulation of unconnected trivia. Science lies between these two dangers." (1964:205-206)

According to a conventional model, it will be the task of two sets of rules, semantic rules and pragmatic rules, to account for the observed meanings of the vague expressions described in this thesis. Perhaps however the main point which emerges from trying to see how this would be done, is to call into question the semantics/pragmatics distinction, for the practical reason that it does not appear to elucidate the account. Allwood (1981) has argued coherently on both theoretical and practical grounds that the distinction is not helpful. He does not however map out an alternative approach which could be followed. It cannot be the task of this thesis, whose primary aim is descriptive, to develop an entire new theory of meaning. I shall therefore proceed as follows. The theoretical discussion of meaning will take place within the semantics/pragmatics approach. The various possible ways of drawing the distinction, outlined by Allwood, will each be considered, in relation to the data presented herein. This will mean that the different analyses will be of interest and



accessible to adherents of any of the theoretical positions mentioned, as well as to those who may incline to a more ethnomethodological perspective.

### 1.3 The Results

#### 1.3.1 Status of the results

Given the present lack of an accepted linguistic theory of vagueness, plus the lack of a complete and generally agreed psychological theory of production/comprehension, it is not possible to give the empirical work reported in this thesis the status of "experiments to confirm or disconfirm the hypothesis involved" (Wirth, 1975). The work must be seen principally as exploratory. Wirth contends that the logical relation between theory and observed data is as follows:

$$H_g \ \& \ H_c \ \rightarrow \ P_{sb}$$

Where  $H_g$  is a grammatical hypothesis (with 'grammatical' being understood in its broadest sense),  $H_c$  a theory of speech production, and  $P_{sb}$  a proposition describing some observable aspect of speech behaviour. The partial analyses I shall present are  $H_g$ s, and the observations from data are a series of  $P_{sb}$ s, but with no definite and widely accepted  $H_c$  available, the  $H_g$ s are neither confirmed nor disconfirmed by the relevant  $P_{sb}$ s, and neither can they be by relevant experimental evidence presented by other workers.

The rationale of the present work has therefore been to seek out and systematize a set of  $P_{sb}$ s relevant to a particular sub-area of linguistic enquiry and to use these to confront existing approaches to meaning in order to see whether they can deal with vague language in an acceptable way.

In the light of this logic, all the work reported herein must be seen only as a contribution to the continuing increase in our scientific knowledge of how language behaviour takes place. It represents one step into the whole largely uninvestigated area of vague language use.

### 1.3.2 Psychological Reality

Clearly the business of engaging in linguistic behaviour involves a variety of cognitive skills, and both the nature of these skills and the allocation of different activities to them are as yet not very well understood. For the descriptive linguist, a necessary assumption is the hypothetical division of cognitive skills into linguistic and non-linguistic skills. The linguist's (as opposed to the psychologist's) investigation of the linguistic skills usually makes the further assumption that linguistic behaviour is the result of the existence of a shared system or systems, the necessary elements of which can be ascertained by studying linguistic data. The linguist's task is construed as making a description of the elements of the system(s). The work presented here offers a description, valid for speakers of Standard English (see below), of some elements which must be present in the system(s) of English in order to account for vague language behaviour.

To what extent can the theoretical descriptions presented here be said to have "psychological reality"? I think it important to make this clear since "psychological reality" is often brought to bear as an evaluative criterion in regard to particular linguistic constructs.

In the case of semantics, it has even been suggested that formulation of "psychologically real" semantic constructs is the only possible goal for semantics:

"The main problem in linguistic semantics is that of empirical validity. To construct a revealing semantic representation of an utterance is to show what thought this utterance corresponds to. When we propose a semantic representation we want to be sure that our formula actually has some psychological reality - that it is not a more or less elegant fantasy but rather a faithful portrait of a thought." (Wierzbicka, 1978: 118)

First we must be clear about what it would mean to claim "psychological reality" for a linguistic construct. To say that a construct is psychologically real is to say that the construct as described is a component of a system the brain uses, and to predict that if we could examine the operation of people's brains, we would be able to recognise the particular cognitive construct in the processes going on in the brain from the description previously provided. A useful analogy is to say that a construct is psychologically real if it is part of the software held in the brain and used for cognitive processing. Since this is not the right setting for lengthy discussion of this question, I want briefly first to make the point that "psychological reality" so characterised is not a reasonable goal for semantics, and neither therefore for this study, at present, and second to describe a relationship between theory-building and cognitive considerations which is reasonable, and is the one adopted in the present work. Finally I shall summarize the general psychological claims which can be made for this work.

Kosslyn (1978) in describing why, in general, the act of investigating how the brain works, verges on the impossible, shows us why 'psychologically real semantics' is not a reasonable goal:

"This situation [that of the investigator] is rather like one where an unknown solid object is placed in a dark box and our task is to describe the surface of the object by shooting in BBs and observing how they bounce back. There are three important aspects to this situation: first, there is the nature of the hidden object of study; next, there is the data, the angle at which BBs bounce back when they are shot in at various angles; and finally, there is the systematic

relation between the angle of incidence and the angle of reflection. It is clear from this example that one needs to know two of these things in order to determine the third. If one does not know that the angle of incidence equals the angle of reflection, one cannot use the data to deduce the shape. Similarly, if one wants to discover the incidence/reflection relation, one must have knowledge of both the data (the results of shooting BBs at particular angles) and the surface characteristics of the object. Consider the sorrow of one who knows only how BBs bounce out of our dark box, and knows nothing of the law relating the angles of incidence and reflection, nor anything about the concealed object. Somehow he must infer both the incidence/reflection relation and the nature of the surface of the object from the data, but he needs prior knowledge of the relation to infer the surface characteristics and vice versa! This pitiful creature is the cognitive psychologist." (1978:218)

If we accept Kosslyn's analogy[3], the goal set out by Wierzbicka for semantics is unrealisable in the present circumstances. The situation is that outlined by Wirth (Section 1.3.1); if three variables are involved in a function, and we know only the value of one, we cannot deduce either of the other two. Given this, it is misguided to use the criterion of psychological reality in criticising semantic constructs.

This means that linguistic model making can be quite unconcerned by questions of the relationship of the model to the psychological mechanisms in the brain, if its proponents so choose. This attitude is made explicit, and to a certain extent has been viewed as sanctioned by, Chomsky's early statement that (1965: 9) "a generative grammar is not a model for a speaker or a hearer". A linguist may,

3 And we might not, since as Peter Monk has pointed out to me, an investigator in this position can use simple trigonometry to plot points which must be on the surface of the object, and thus, if he makes enough observations, he can arrive at quite a detailed description of the object. If this is the true analogy, psychologists and linguists are not in such a bad position.

and most do, legitimately choose to give an account of a particular subset of linguistic data without wishing to claim psychological reality for that account. Such an approach takes the view propounded for example by Wilks (1977: 72) that predictive power is the final test of a theory - "Their ultimate accountability [ . . . ] can only be whether or not they work." According to one widely quoted definition, such a theory could claim psychological reality simply by virtue of its ability to account for the observed data:

"A linguistic concept is psychologically real to the extent that it contributes to the explanation of behaviour relative to linguistic judgments, and nothing more is necessary for this." (Levelt 1974, vol 3: 70)

(cf also, Kiparsky, 1968:171)

Because of the "bouncing ball" problem, this claim is in fact the strongest that can at present be made for a linguistic construct.

Yet this is intuitively unsatisfactory. The problem is articulated by Wierzbicka in the passage previously quoted: many linguists would like to have a further criterion for empirical validity than mere descriptive adequacy. The appearance of an entire book devoted to the topic (Halle, Bresnan and Miller, 1978) testifies to the strength of this desire. Most discussions and invocations of psychological reality as a criterion spring from this wish, which is certainly one I share. Yet, as we have seen, a genuine claim of psychological reality is empirically impossible at present.

There is, however, a further guiding principle which may be used. This is what I shall call psychological plausibility. Making a model psychologically plausible means on the one hand making it compatible with any experimental information about psychological aspects of the phenomenon under investigation, and on the other, making it compatible with those sections of psychological theory which the investigator

finds convincing. (Note that the conclusions drawn by a psychologist are equally a matter of combining inference with plausible assumptions, see Kosslyn (1978:218ff).

It is important to realise that psychological plausibility in no way confers empirical validity on a model. I think this may be the mistake made by many people who invoke psychological reality; for example Bresnan (1978:): "...previous attempts to realize transformational grammars as models for a speaker or hearer are valuable and informative. By showing us in what respects grammars may be psychologically unrealistic, they can guide us in our efforts to construct better theories of grammar." [my underlining] What psychological plausibility does do is to make the model more intuitively acceptable, and perhaps acceptable to a greater number of people.

In the present work, for example, the theoretical discussion in Chapters 7 and 8 is compatible with the results of research into cognitive aspects of perception of category membership (in particular that reported by Rosch and her various associates, see references). The fact that my analysis of the vague expressions studied is supported by Rosch's results renders it more pretheoretically plausible, but it would not support the claim that it is 'psychologically real'.

The claims I would make then for the work presented here are the following:

- 1 It is psychologically real only in the weakest sense of Levelt (1970) in that it gives a correct account of the data, and
- 2 the proposals are psychologically plausible in that they

take account of available psychological data, and cognitive assumptions currently accepted by some psychologists.

#### 1.4 General Theoretical Approach

The main emphasis of this work is descriptive. This section aims only therefore to provide information about the general theoretical (and pre-theoretical) approach which I adopted, and to describe my theoretical assumptions.

##### 1.4.1 Idealisation

Any scientific investigation must idealise. It is impossible to study everything to the same depth from the beginning. I therefore set out to describe vague language use in just one speech variety of English: that of Standard English as used by educated native-speakers. As noted by Milroy (to appear 1983:mimeo) "the notion of a standard is notoriously complicated and hard to pin down", yet it is reasonable in a linguistic study to make an overt assumption that such a variety can be the object of description (cf Lyons, 1977:587). A sensible rationalisation of the choice of Standard English is given by Crystal (1969: 11-12):

This choice was directed, not of course by any concept of a linguistic betterness within this dialect or accent, but by the greater usefulness of research based upon them, as opposed to any other British regional or class dialect or accent: this variety is the one upon which most research has already been done, and is the basis for the majority of textbooks available, hence its use will facilitate correlation of my results with already familiar information".

In collecting my data I deliberately set out to minimise variation arising from social differences, by taking data from what might plausibly be assumed to be one speech community: that of people working and studying in higher and further education institutions in England. The written data is all from sources which should broadly

fall within the same category, mostly the 'quality' newspapers. The test subjects equally can be classified in this category, since one group were higher education students, and another sixth-form students from an 11-plus selected grammar school.

An empirically testable prediction arising from this work would be that a theoretical framework which successfully accounts for vague language use in standard English should be applicable in principle to vagueness in any other language or language variety.

Another approach to vagueness is to view the vague expressions themselves as sociolinguistic variables. Dines (1980) suggests that for Australian English the tag approximations are markers of social class differences. Some subjective comments by test participants suggest this may also be true between varieties of English; and that especially is felt by some standard English speakers to be a stigmatised form (see Chapters 4 and 6). In order to discuss a particular set of structures relatable by their meaning as sociolinguistically variable, it is first necessary to have an adequate description for just one variety. My decision was to provide that description, in order that further work could subsequently investigate the sociolinguistic aspects of vague language use.

#### 1.4.2 A Note on "meaning"

"Pending a satisfactory explanation of the notion of meaning, linguists in semantic fields are in the situation of not knowing what they are talking about." (Quine, 1953:47)

Since I believe that anyone not defining the term 'meaning' adequately before using it must be viewed, as suggested by Quine, as not knowing what they are talking about, there now follows a short section



describing the general approach to meaning adopted in this work.

"Meaning" will be used as a broad cover-term indicating all the propositions which a hearer can reasonably derive, taking account of contextual and background knowledge, from the utterance of a given sentence on a particular occasion. Thus part of the meaning of

(2) Do you always make your own pastry? (Hudson, 1975:4)

in a given context, might be taken to be "This pastry is really leathery". Thus 'meaning' is used to encompass all the subdivisions which have been proposed for it, such as 'sentence meaning', 'propositional content', 'entailments' and 'implicatures'.

The meaning investigated is hearers' meaning. At a theoretical level, this is because hearers' meaning is seen as more conversationally salient in the sense that it is hearers' meaning which gets acted upon, and which therefore influences the developing structure of a conversation. The suggestion is that 'speakers' meaning' is, inasmuch as communication succeeds, the same as hearers' meaning, because speakers have to take into account the mechanisms they know hearers will use, in formulating their utterances. Hudson (1975:5), who is reformulating Grice (1967), with, I think a clearer example, puts this view forward as follows:

"The work done by the speaker in conducting a conversation is closely related to that done by the hearer [ . . . ]: what the speaker must do is decide what conclusions he wants the addressee to come to, and then find a way of ensuring that this happens. This means that before saying [(2) above] Mrs Green has to work out how Mrs Brown is likely to take it: e.g. does she realise that Mrs Green prefers home-made pastry to shop-bought pastry? Needless to say, speakers often make mistakes in this kind of calculation, although they usually put the blame on the addressee."

Psycholinguistic work offers confirmation of this point. Harris, Begg and Upfold (1980) report an experiment in which it was observed that speakers consistently tailored their messages to anticipate the hearer's interpretation. Therefore hearers meaning should be of the most interest to linguists.

In attempting to describe hearers' meaning, I reject the formulation that what hearers do is to "recover" what speakers intend. The meanings hearers arrive at may be quite other than those intended by speakers. For example in the following exchange:

(3) [Context: wife to husband at 6.30 pm in Christmas week]

+B: Would you like to have a bath - the water's hot?

C: Why, where are we going tonight? [12.78]

C's reply makes it clear that he had inferred that one proposition forming part of the meaning (as broadly characterised herein) of B's utterance is

I think you should have a bath, because we are going out

The subsequent breakdown and repair enabled the participants to see (amid hilarity) that B had not intended this proposition at all. So far as its role in determining subsequent conversation was concerned, the meaning of B's utterance was as understood by C, its hearer.

At a methodological level, the reason for preferring to investigate and describe hearers' meanings is that while they may still be difficult to observe, they are more open to empirical observation than information about speakers' intentions. For example, hearers' meaning may be construed through observation of hearers' action resulting from a particular utterance. Thus the investigator observing the exchange at example (3), may legitimately attribute the proposition "request/strong suggestion" to the meaning of B's

utterance, on the basis of C's reply. C has indeed made inferences about B's intention, and has acted upon them in his reply. What the investigator may not legitimately do is either to state B's intentions on the basis of what B says, or to state that C has in some sense "recovered" what B intended. The ways in which hearers' meanings are investigated are described in Section 1.5 Methodology.

### 1.4.3 Grammar

I assume that the three components traditionally recognised (syntax, semantics, phonology) can be separated for the purposes of description. (This leaves aside the question of whether they are valid for psychological models of speech production.)

#### Syntax

This work makes no direct contribution to syntactic theory. Therefore the relevant assumptions about syntax are not well-developed. I assume that there are syntactic rules which map logical forms into "surface strings". Where syntactic terminology is used, it should be seen merely as a convenient way to refer to a generally acknowledged phenomenon rather than as indicating adherence to any particular syntactic theory. For example, I use the term "conjunction reduction" in reference to semantically-relatable sets of sentences like:

- (4) a I bought some apples and some oranges at the market  
       b I bought some apples at the market  
       c I bought some oranges at the market

but this does not mean that I necessarily believe that (a) results from a transformation working on (b) and (c). I use the term as a convenient way of linking with the relevant existing literature.

#### Phonology

The area of phonology which is drawn on in this study is intonation. Intonation is relevant in that it is observed that certain expressions

from the list at 1.1, which are structurally ambiguous between a vague and an exact reading, are differentiated by means of intonation differences. In addition the 'tag' expressions use intonation to mark the 'scope' of the tag - that is in an expression [ VP TAG ] where VP consists of [ V NP ], whether the vagueness is relevant to the whole VP, or just to NP.

Intonation should be understood in the sense of Crystal (1969: 195) as "a complex of features from different prosodic systems. These vary in their relevance, but the most central are tone, pitch-range, and loudness, with rhythmicality and tempo closely related." He has previously defined prosodic systems as "sets of mutually defining phonological features which have an essentially variable relationship to the words selected"(1969:5).

The contrasts referred to in the first paragraph of this sub-section are contrasts of tonality and tonicity. Crystal notes (:263) that tonicity may perform either an accentual function, as in the case of the choice of nucleus positions possible for a sentence like

(2) Do you always make your own pastry?

or it may perform what he calls a grammatical function, as in the case of, for example,

(4) Was she wearing a green dress or a red one? (Crystal, 1969:263)

where the word red must be nuclear. In the cases I consider, the tonicity and tonality have a grammatical function.

The transcription system used is that developed in Crystal (1969). For convenience the symbols are set out in Table 2.

### Semantics and Pragmatics

I understand semantics and pragmatics to be convenient (or not so convenient) labels which arise from a hypothetical division of cognitive skills relating to meaning into those which are specifically linguistic and those which apply also to other types of behaviour. The considerable amount of attention paid to the exercise of boundary-drawing between semantics and pragmatics may be a pretheoretical indication that drawing such a boundary might turn out to be spurious.

If the distinction is adopted, it will be axiomatic that

SEMANTICS & PRAGMATICS ---> Pmsb

(cf Wirth's formulation, Section 1.3.1 and Gazdar's "PRAGMATICS = MEANING - TRUTH CONDITIONS"(1979:2))

where SEMANTICS and PRAGMATICS are sets of hypotheses about the meaning of linguistic expressions, and Pmsb is any proposition about the meaning of particular speech behaviours (to the extent that the empirical difficulties outlined in 1.4.2 can be circumvented to allow observation).

From observations of speech behaviour we have at present no clear-cut theoretical or practical way of deciding which aspects of meaning are semantic and which are pragmatic (it is again the point made by Wirth, in an expression with three variables, if only one value is known, its impossible to deduce the other two). Wachtel (1980) in criticising Channell (1980), claims that it is invalid to base semantic constructs on evidence from observation of speech behaviour (specifically, elicitation tests). Lyons (1977:117) states that "the distinction of pragmatics and semantics in relation to the analysis of meaning in natural language is, [ . . . ] generally recognized as controversial". This area of controversy will be taken

up in Chapter 7.

### Representations of Meaning

A problem which has bothered many writers interested in semantics is what sort of representations should be found at pre-lexical level. Confusion arises because the most obvious way of talking about the meaning of words is with other words, with a consequent possible confusion of levels. Logicians employ ' ' to mark the sentences of the object language, so in, for example, the expression 'snow is white' is true, iff snow is white the sentence with ' ' refers to an object language proposition, and the whole expression is a statement in metalanguage of its meaning. Generative semanticists used capital letter written words, thus

[WE CAUSE[DRAGONS BECOME DEAD]]  
S S

"The terminal elements in this phrase marker are written in capitals to indicate that they are not language specific lexical items but are universal semantic primitives." (Fodor, 1977:78) Others have used square bracketing around prelexical semantic features (eg Katz and Fodor, 1964; Lehrer, 1972).

Such attempts at describing meaning by the use of a meta-language which is an adaptation of the object language have been termed as nothing but translations into "semantic markerese" by Lewis (1972). That is, he claims that merely using other words to describe meaning, reveals as few interesting generalisations about the nature of language as does translation from English to French. His criticism is, I think, too sweeping. The proposals for a semantic description of verbs made in Dixon (1971) use a small set of semantic components to define nuclear verbs, and then define non-nuclear verbs using them. Evidence from the Dyirbal 'mother-in-law' language demonstrates the

salience of the two categories, as does evidence about the order in which children acquire words (nuclear before non-nuclear, as a general rule). Rosch et al (1976) examined Roger Brown's corpus of spontaneous child speech of one child (Brown, 1973) and found that at Stage 1, only basic level (=nuclear) names were used (Rosch et al were only interested in nouns). So it may well be true that expressing the semantics of non-nuclear words in terms of nuclear ones does reveal an interesting generalisation about the nature of linguistic meaning.

My purpose is not to contribute to this debate, but to state how descriptions will be made here. Despite the circularity and possible confusion arising from formulations in English, I shall continue to do this, principally so that the description is comprehensible. J. D. Fodor's rationalisation of this is to say that such descriptions "mirror the prelexical structures from which words would be derived [in a Generative Semantic Grammar]" (1977:119). Contra the criticism of Lewis, I hold that the resulting descriptions will embody valid generalisations about meaning.

### Pragmatics

Pragmatics is the area of language study which probably at present enjoys the smallest degree of agreement as to what it includes and how to study it. Since the purpose of the present work is practical more than it is theoretical, I shall not do more here than draw attention to some of the unresolved considerations, and say how I propose to proceed.

Given the axiom

SEMANTICS & PRAGMATICS ---> Pmsb

it was inevitable that those with a major interest in semantics would assign to pragmatics observed aspects of meaning which they did not

wish to include in their proposals for semantics, and thus that the area would acquire the 'waste-basket' air which has been attributed to it (for remarks in this vein, see eg Chomsky, 1969:81; Bar-Hillel, 1971; cited in Kasher, 1977). If however, we take as our object of study a set of observations of the meaning of particular expressions, with a view to providing a description which accounts for that set of observations, we shall, as suggested by Levinson (1979) be equally interested in semantics and pragmatics.

It is usually implied, if not made explicit, that hearers faced with incoming utterances first process these through their grammar, and then deploy pragmatic inferences to sort out problems (for an example of this view, see Smith and Wilson, 1979:197). Contra this view, some recent work suggests that in accounting for language understanding, we should possibly be more interested in pragmatics than in grammar, on the basis of evidence that hearers deploy non-grammatical inferences of the type - "What could this speaker possibly, and reasonably, be meaning, in this context?" before they deploy the full range of relevant semantic and syntactic rules (cf Milroy to appear 1983: mimeo; Danell, 1978:14).

There are currently no well-developed or widely-accepted theories of pragmatics which can be adopted. Grice's (1968, 1969, 1975, 1978) proposals provide a possible set of principles for a theory, but do not constitute in themselves such a theory. Gazdar (1979) is an attempt to formalise a theory of pragmatics, because such a formalisation, he contends, will expose directly the explanatory and predictive value of that theory (cf Gazdar 1979:10). His formal system, it is claimed, "given an utterance, tells us what that utterance implicates and presupposes" (:129). Examples are given



which show that his system makes correct predictions. I think it is correct to say that most of the examples used are invented. My view is that such examples cannot provide a real test of the validity of the proposed system. It must be tested against real utterances complete with accompanying observations relevant to determining hearers' meanings.

Given the lack of any generally-accepted or developed theory, I shall proceed with the two goals of discovering (a) what propositions relevant to the meaning of vague utterances a putative pragmatic theory must account for; and (b) what its necessary components are.

The putative set of pragmatic rules relevant to language understanding has, as noted, an interface with semantics. It also has an interface with more general rules of social behaviour. In drawing that other boundary, I follow the suggestion of Levinson (1979), whereby pragmatic rules make reference to particular social relationships, which bear on the communicative effects arising from utterances, which in turn are codified by sociolinguistics. In the present case, for example, the pragmatics of vagueness could include a rule to the effect that number approximation is often used where a speaker is/feels inferior in knowledge/ability to his hearer(s); while the description of the social relationship which had as a product the use of a numerical approximation, would be the concern of sociolinguistics. This is a practical division of labour, and as Levinson notes "coincides with the kind of information that on the one hand one would expect, and on the other expect not, to find in a grammar, whether theoretical or practical" (:218). Incidentally, it is also useful in that it allows a unitary approach to human communication, that is, the same kind of rules as will account for the

appropriateness of number approximation will also account for the appropriateness of kissing, or bowing.

### "Context" and "Pragmatics"

The putative subject matter of pragmatics has been defined as an account of those meaning propositions not accounted for in semantics. The widely-held assumption is that propositions not directly attributable to the semantics are in large part a result of the influence of context. Should this be taken to mean that all facts about any context of utterance were relevant to pragmatics, the linguist's task would be quite unmanageable. Clearly though, we can distinguish theoretically between linguistically relevant, and irrelevant context, as suggested by Lyons (1977:572):

"... the linguist abstracts from the actual situation and establishes as contextual all the factors which, by virtue of their influence upon the participants in the language event, systematically determine the form, the appropriateness or the meaning of utterances."

Yet this is unhelpful, unless accompanied by an indication of how to do it. Here, I believe an ethnomethodological perspective is useful. In accounting for stretches of talk, we identify as pragmatically relevant those factors of context which emerge as relevant to the developing structure of the talk. Thus, for example, identifying a perceived social difference of the type mentioned above as relevant, must arise from evidence in the talk, possibly in the form of utterances like "you know more about this than I do" (examples of this approach will be seen in Chapter 5). In this way, all that is context is not necessarily relevant to an account of meaning, and yet what is excluded is excluded for motivated reasons.

### 1.5 Methodology

My fundamental assumption is that the linguistic study of meaning

should be an empirical study. It must involve accounting for real occurrences of talk, rather than accounting for invented sentences. There are reasons why this is particularly true for the study of meaning. The data relevant to the study of meaning is 'meanings'. They cannot be counted, measured, recorded and quantified in the way that sounds, syntactic patterns, and words can. Ringen (1980) makes the distinction by calling this data 'Putative Linguistic Facts', in opposition to 'Linguistic Data'. An example sentence on a page, or a recording of an utterance, does not itself provide information about its meaning. This must mean that the meanings investigated by a linguist are meanings which he has ascribed to an utterance or sentence by virtue of his knowledge of the language. Such use of intuitions does not appear very empirically valid (for a similar observation, see Fodor, 1977:6-7)[4]. It is, however, greatly improved when the investigator attributes meaning to utterances forming part of real conversations. In this situation, his assignment of meaning to any utterance can be made on the basis of, and constrained by, the subsequent development of the talk (as was suggested for example (3), Section 1.4.2). No such constraints are present with invented sentences, the meanings attributed to which can be any the writer is able to persuade his readers to accept. Conversation data, used in the way I am suggesting, should lead to accounts of meaning more valid than those which arise from accounting for invented data. Martinet, as long ago as 1958, point out the dangers of abstracting language data from what he called "linguistic

4 Despite this, most writers do not question the process, eg Gazdar (1979:11) "I shall assume throughout this book that invented strings and certain intuitive judgements about them constitute legitimate data for linguistic research."

reality in the raw".

Naturally it is acknowledged that this type of post-hoc analysis has problems. The linguist's tendency to allow his theoretical perspective to influence his intuitions is well-known (see Spencer, 1973, for an empirical study, and also Ringen, 1980:115 footnote 30). Wootton (1975:6 and 64), writing within a Conversation Analysis framework, gives examples where particular investigator glosses lead to particular analyses of the conversations being studied.

I would argue, however, that post-hoc analysis of meanings, if it is carried out with rigorous attention to seeking justification for glosses within the structure of the conversation or its situation, is a reasonable way to study meaning. (For similar discussion, see Milroy 1983, and references therein.)

In addition, using real data has certain other advantages:

- 1 All utterances are attested as having been produced in a non-experimental linguistic situation. Their acceptability can be assessed in part by the reaction of hearers to them.
- 2 Examples drawn from real data can be seen in their real linguistic context. This avoids the uncontrolled recontextualisation by the reader which is necessary with ordinary decontextualised examples and which can drastically change his interpretation of them. It also greatly reduces the opportunity for the analyst to introspectively invent contextual or situational details to support his argument.
- 3 Each example has been spoken naturally by a native speaker. It is therefore possible to make direct appeal to intonational and other non-segmental phonological features, rather than imagining what kind of prosodies would accompany an invented example.
- 4 Real data reveals characteristics of English which might well not

arise from introspection.

### 1.5.2 The Data

There are four types of data:

#### 1 Attested Conversation Examples

Most of the examples used are taken from surreptitiously recorded conversations. The conversations are not a truly principled sample of all possible conversations. They were used because they provided the opportunity for recording. The participants did not know of the recordings until afterwards, when their permission to use the material was obtained.

The practical and ethical difficulties of collecting naturalistic data are manifest (as noted by Crystal and Davy 1975:ix), especially with limited technical and financial resources, and working alone. The investigator must prearrange the recording materials without the participants' knowledge, and make sure he is not given away by sudden mechanical noises in the corner. Many people consider it an infringement of privacy to be recorded. So the investigator must also try to preselect participants who might be supposed, because of their interests and background, to be amenable. The students and research students I recorded were chosen with this in mind.

The second type of recorded data was collected from BBC Radio, to serve as comparison data against the conversation corpus.

Thirdly, Dr Marion Owen kindly supplied me with attested examples of number approximations from her corpus of surreptitious recordings made in a variety of everyday situations. Fourthly, some attested data published in other work has been used. In each case, this is credited to the investigator involved. In addition, many examples were observed and noted, but not tape-recorded, as and when I heard

them.

A different type of attested examples are the written ones, collected from a random selection of reading matter encountered over the last four years. These are credited to their source.

## 2 Elicitation Data

The elicitation tests described in Chapters 3 and 4 aimed to complement the attested data by providing information about what meanings subjects acting as hearers would assign to vague expressions. This also provided a further check on my post-hoc assignments of meaning. In both tests, attested examples were used as stimulus items, together with invented items which systematically varied particular parts of the structures of vague expressions.

## 3 Introspective Data

After every session of elicitation testing, test subjects discussed the test material with me. These discussions were recorded, and the subjects comments are referred to.

## 4 Unattested data

Unattested examples occur where I refer to examples used by other writers. They also occur where I analyse the syntactic behaviour of a particular construction and need to try it in a number of similar environments. A limitation of real data is that it rarely (even if the corpus is enormous) produces examples of the same word or expression in even all of its commonly accepted environments.

The work is limited by the scope, in terms of time and resources, of a D.Phil. thesis project. Further work using a much larger database, and considering a greater range of expressions, should follow. Further elicitation tests could be designed to investigate in detail the pragmatic variables identified as relevant to vagueness.

### 1.5.3 Transcription of recorded data

Given the principal interest of the work, the conversation data was transcribed in conventional orthography. Punctuation, which might impose the investigator's interpretation, is not used. The transcription schema is set out in Table 1.

Each example used is prefaced by introductory notes about the situation and participants in the conversation and, in some cases, a longer extract containing the example is reproduced in Chapter 5. In all conversations, participant A is me.

### 1.5.4 Elicitation Tests

I have said that the meaning under investigation is hearers' meaning. One way of obtaining information on hearers' meanings is by directly asking hearers (as subjects in tests) what they understand by certain expressions. As suggested, this also provides a check on the meanings assigned by the investigator. Leech (1970: 346-7) suggests three reasons for carrying out semantic tests in order to test introspective hypotheses about meaning - (1) it will give the resulting analysis claim to generalisability to a population, (2) it avoids the fallibility of the investigator's introspections, and (3), it corrects the bias possibly arising from the investigator's theoretical perspective.

Clearly, however, there are problems with data obtained in this way. What subjects presented with a decontextualised linguistic stimulus do is to invent plausible contexts for that stimulus, and then attribute meanings to it in those contexts. The ways they individually recontextualise cannot be directly controlled by the experimenter. (For similar points, see Mikkil Blakar and Rommetveit, 1975:6; Lanin, 1977:292; Channell, 1980; Wachtel, 1981; Greenbaum,

1977). Set against this is, however, the fact that the informants in the test reported in Chapter 4 all appeared to recontextualise the test stimuli in the same way (ie, they imagined the same or similar contexts), although no contextual information was given. I infer from this that such a test is valid, and that in addition, the systematic ways in which recontextualisation must take place are themselves of interest.

Evidence from controlled tests designed to investigate the influence of particular variables on subjects' responses, shows that these may vary systematically according to the subjects' perceptions of, among other things, the purpose of the test (Greenbaum and Quirk, 1970:50ff); the number of contextual cues (Oller and Eilers, 1975), and the linguistic discourse (Greenbaum, 1977). It has also been shown that the subject's state of mental self-awareness affects his responses (Carroll, Bever and Pollack, 1981). Given this evidence, it could be argued that elicitation data do not provide a valid basis for making generalisations about meaning. This is the substance of the criticism of my work made by Wachtel (1981).

It seems to me that what is in question is really the status of the results. The most any investigator can claim for a test is that certain observations are true for a set of expressions and a set of subjects. If (as is the case for my two tests) the observations from the tests are consistent with quite unrelated, independent, conversation data, then it is reasonable to claim that the test results are valid for a larger population. If test results are inconsistent with other data, then they are correspondingly less interesting.



## 1.6 Organisation of the Thesis

In Chapter 2, firstly, the general notion of linguistic vagueness is discussed, through description of the relevant literature. Secondly, a working classification of types of vagueness is presented, with examples.

Chapters 3 and 4 are descriptive, each being devoted to one of the two major groups of vague expressions studied. These chapters present the results of the elicitation tests and set out in detail the observations about linguistic vagueness which linguistic theory must account for.

Chapter 5 takes a different perspective, drawing on real data to describe the conversational effects which arise from use of vague expressions and the problems which participants may use them to solve.

In Chapter 6 I concentrate on lexical considerations. In particular, I discuss the relationship between the words found in the vague expressions, and their other (non-vague) uses. This leads naturally into consideration of the extent to which the expressions studied should be analysed as 'idioms'.

Chapter 7 relates the descriptive content to linguistic theory, and in particular to semantics and pragmatics. It confronts existing proposals for drawing a distinction between semantics and pragmatics with the data on vague language, and concludes that no satisfactory ways of drawing it are forthcoming. Having reached this rather negative conclusion, in Chapter 8 I finish by offering a speculative sketch of a possible future approach to the study of meaning.

## Chapter 2

## Vagueness and Language

[asking for a 5 x 3 index card]

A: + Have you got one that's blank

B: Fairly blank yes

In a section entitled 'Words with blurred edges' Ullmann (1962) traces from Plato to Byron man's recurrent feeling of the inadequacy of language to express thought, particularly because of its lack of precision. He notes also the converse feeling among poets and creative writers, that such vagueness is in fact an advantage, reflected also by Wittgenstein who suggested that words are like blurred photographs and added "Is it even always an advantage to replace an indistinct picture by a sharp one? Isn't the indistinct one often exactly what we need?" (1953).

In this chapter, I look generally at vagueness, and review other work. Most of this suggests that vagueness is present in a great deal of language use, and that therefore a complete theory of language must have vagueness as an integral component. I identify different ways of "being vague" and suggest that these should be divided into two general categories - cases of vagueness, and cases of suppression of reference.

### 2.1 Vagueness vs. Ambiguity

The standard distinction between vagueness and ambiguity is assumed. In both cases, speaking pretheoretically, the hearer does not know exactly what he should understand. Ambiguity has traditionally been identified where a sentence has two or more competing but distinct meanings attaching to it. However, for an analyst working on the real

data of conversations, questions of ambiguity are not as relevant to language understanding as they have been claimed to be by theorists studying sentences in vacuo. Lyons (1981b:203) describes the attitude of philosophers and linguists to ambiguity as "a highly prejudiced and unbalanced view". He continues:

"Not only is it frequently, and erroneously, associated with the view that all sentences have precise and determinate meanings; it is based on the equally erroneous assumption that clarity and the avoidance of vagueness and equivocation are always desirable, regardless of what language game we are playing."

As John Local has pointed out to me (personal communications) ambiguity is rarely a factor in real communication, because hearers generally read off a meaning without even realising that there could have been another one. Ambiguity becomes interesting and descriptively relevant only when it can be observed to be being actually used by conversational participants, for example in punning, or where a breakdown can be attributed to a wrong reading being given to an utterance. Take the example:

(1) A: +Tim Bailey plays the trombone

B: No he doesn't, it's something else brass

C: Well in that case, it must be a trumpet [NS,10.9.79]

The hearer of this (me) chose the wrong reading, paraphraseable by "given what you have told me, it's a trumpet", as was made clear by subsequent turns. The other reading can be glossed as "In a case shaped like that, it must be a trumpet". Here the difficulty arises from the structural identity of the partial idiom in that case with a locative prepositional phrase introduced by in.

There is considerable intuitive agreement regarding the distinction between ambiguity and vagueness but independent evidence is lacking. Weinreich (1966:411) suggests that if a lexeme "can be

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The hearer of this (me) chose the wrong reading, paraphraseable by "given what you have told me, it's a trumpet", as was made clear by subsequent turns. The other reading can be glossed as "In a case shaped like that, it must be a trumpet". Here the difficulty arises from the structural identity of the partial idiom in that case with a locative prepositional phrase introduced by in.

There is considerable intuitive agreement regarding the distinction between ambiguity and vagueness but independent evidence is lacking. Weinreich (1966:411) suggests that if a lexeme "can be

understood as ambiguous" in a neutral context, it has two dictionary entries, if it cannot be understood as ambiguous in a neutral context, but different meanings seem possible, it is vague. In his examples eat is vague between the action required to eat soup and to eat bread, whereas file is ambiguous. Considering a number approximation, such as around four o'clock "in a neutral context", we might want to argue that it can be understood as ambiguous between, say, all the various times between 3.45 and 4.15. But analogy with Weinreich's example, eat, however a vague assignment seems preferable, inasmuch as this is a valid test.

Zeugma also shows lexical ambiguity, such that:

(2) ?I filed the letters and my nails

should be either zeugmatic, or require bizarre contextualisation. In Chapter 3 I describe how the number approximation n or m (like example (1) in Chapter 1) is distinguished from the alternative use of or, by a special intonation pattern. This means that zeugmatic examples cannot be constructed, because choice of one intonation or the other will automatically select only one reading. Zeugma does not arise with other number approximations, either. Comparing:

(3) I saw her duck and I saw Susie bend down as well

= potentially zeugmatic

(3') She came at around 4 o'clock and so did Clive who arrived at

4.15 = zeugma impossible

we see that around 4 o'clock is not ambiguous. I have not succeeded in constructing potentially zeugmatic examples with or something either.

Zwicky and Sadock argue that a sentence "isn't many ways ambiguous just because we can perceive many distinct classes of contexts in which it would be appropriate or because we can indicate many understandings with paraphrases" (1975:4). For example in the case of the number approximations described in Chapter 3, these are appropriate in varying contexts, and moreover, are understood differently in different contexts, but this does not mean such expressions require analysis as being many ways ambiguous.

Vague expressions appear to fail the contradiction test demonstrated by Zwicky and Sadock. Where there is ambiguity, a second conjunct denial, using the other sense, is possible, thus

(4) That's a dog, but it isn't a dog

but this is nonsense if done for a vague expression, thus

(5) Sam is about six feet tall but he isn't about six feet tall

seems not to make sense, and it is certainly impossible to assign a meaning where Sam is 5' 11" in the first conjunct, and 6' 1" in the second, although, as we shall see, both of these meanings can be assigned to the expression about six feet tall.

Lakoff (1970) proposes a test which works for some sorts of constructions but not for others. It shows that a number approximation like (1) in the last chapter is vague rather than ambiguous, since it is compatible with

(6) George has written five or six articles and so have I

that George has written seven articles while I've only written five.

Lakoff's test is used where it is applicable.

Confusing vagueness with ambiguity may lead to false attribution of polysemy. Bennett (1975) notes that

(7) John has gone to the study

is, by Lakoff's test, intrinsically vague as to whether John is now in the study or outside it. However the possibility of either of these meanings, Bennett notes, led Lindkvist to set up two senses of to, one for each meaning. Dictionaries often multiply polysemy because lexicographers tend to identify vagueness as ambiguity (cf Weinreich 1966). Bennett's thesis, which describes the use of spatial and temporal prepositions in English, identifies considerable vagueness in the meanings which can be attributed to these prepositions.

It is important to understand that a sentence or an utterance can be both ambiguous and vague. Concerning number approximations, Zwicky and Sadock (:31) analyse as ambiguous the distinction between a "literal" and a "hyperbole" reading, as in their example:

- (8) [31] There are about a million people in San Antonio and there are about a million people in my introductory course

where the first is literal and the second hyperbole. They claim that this sentence is acceptable, whereas

- (9) [32] There are about a million people in my introductory course and there are about a million people in San Antonio

is not. This is, they say, because a violation of the sincerity condition causes a perceptual set in the hearer who then expects another violation and in (9) does not find it. I think that both these sentences are equally odd - they certainly create zeugma, deducible from a possible humorous effect, which would indicate that Zwicky and Sadock are correct in suggesting ambiguity is in play. At the same time about a million would receive a vague reading, as we shall see from informant test results in Chapter 3.

It is perhaps the case that linguists have been misled, by philosophers' emphasis on ambiguity as an important part of semantics, into thinking that ambiguity plays a greater part in the act of meaning than it actually does. From now on, I shall be concentrating on vagueness, which I do believe, and hope to show, plays a very important part in the act of meaning.

## 2.2 Previous Work on Vagueness

Interest in vagueness in language use and meaning has arisen in a number of disciplines: literary criticism, linguistics, psychology, philosophy. This survey sketches the lines of interest that have been pursued.

Ullmann's discussion of vagueness has been introduced above. He notes that:

"If one looks more closely at this vagueness one soon discovers that the term is itself rather vague and ambiguous: the condition it refers to is not a uniform feature but has many aspects and may result from a variety of causes. Some of these are inherent in the very nature of language, whereas others come into play only in special circumstances." (1962:118)

He attributes vagueness to four factors: (a) generic character of words; (b) meaning is never homogeneous (ie, it is context-bound); (c) lack of clear-cut boundaries in the non-linguistic world; and (d) lack of familiarity with what the words stand for.

Reason (a) yes indeed. As he says, words refer to "not single items but classes of things or events bound together by some common element" (1962:118). This inevitably leads to vagueness which is "in some ways regrettable, but it is the price we have to pay for having a means of social communication flexible enough to cope with the infinite variety of our experiences". (For a similar view that if language were not vague, it would not permit adequate communication,



see Daitz, 1956).

Reason (b) - interpretation of meaning is context-bound. Indisputably so, but Ullmann's implication is that context will permit an exact interpretation to be put on any word: "only context will specify which aspect of a person, which phase in his development, which side of his activities we have in mind" (:124). That is, he holds that ultimately there are exact interpretations. I shall suggest, in reference to specific examples of vague language discussed in Chapters 3 and 4, that this is not the case.

Reason (c) - the extra-linguistic world is vague. Indeed, in any case as far as our subjective perception of it goes. Reason (d) - definitely, as we shall see from conversation examples in Chapter 5. Ullmann's points are true, but I think he confuses causes and effects. That is to say, (c) and (d) are facts about the world and people in it, which in turn are reflected by, even necessitate, the capacity of language to express vagueness, that is (a) and (b), among other factors. So linguistic vagueness is not gratuitous - it is caused (like many other observed characteristics of language) by the world (in the most general sense) in which language is used.

Schmidt (1974) cites C. S. Peirce as the originator of the notion of vagueness, although as we have seen Ullmann dates it rather earlier. Peirce was perhaps the first to try to formulate the notion in any precise way, as follows:

"A proposition is vague where there are possible states of things concerning which it is intrinsically uncertain whether, had they been contemplated by the speaker, he would have regarded them as excluded or allowed by the proposition. By intrinsically uncertain we mean not uncertain in consequence of any ignorance of the interpreter, but because the speaker's habits of language were indeterminate; so that one day he would regard the proposition as excluding, another as admitting, those states of things. Yet this must be understood to have reference to what might be deduced from a

perfect knowledge of his state of mind; for it is precisely because these questions never did, or did not frequently, present themselves that his habit remained indeterminate." (1902:748)

That is to say, the language system permits speakers to produce utterances without having decided whether certain facts are "excluded or allowed by" them. Taking this definition as her basis, Schmidt says "Language use (ie the use of words) is inconsistent. It is not only inconsistent among speakers, but within an individual speaker himself. The assumption that the speaker possesses an unchanging definition of the words which governs usage is not borne out by actual performance." (1974:620) Schmidt argues for the least specification of words in competence, to account for their varied uses in performance. She says "insofar as a word is vague on a particular occasion, it must be vague when considered in competence as well as in performance". The best way to account for inconsistent word meaning, she holds, is a dynamic model in which "the meaning of concepts or words [...] is continually being reconstructed from event to event". It seems to me that allowing the semantic specification of words to change from use to use would be a highly dangerous proposal from the point of view of linguistic model making. In addition it would be difficult to account for how speakers and hearers actually do understand each other. Where I do agree with Schmidt is in holding that vagueness has to be represented.

Schmidt differs from Ullmann, and from Deese (below) in that for her vagueness is a phenomenon of language, and not of reality. There does not seem to be any strong reason why both proposals should not be the case (as suggested by Ullmann). That the extra-linguistic world (or rather, perhaps, our perception of it) is vague supports, at least intuitively, the view that the language system man has evolved to

describe that world is correspondingly vague.

Another approach to vagueness is found in the more psychologically oriented work of James Deese. He (in Deese 1974) holds that vagueness of communication is inherent in the structure of our ideas, rather than in the language system:

"I have been arguing for some years now [...] that the correspondence between the ideas possessed by two individuals who are in communication on a common topic is rather poor, a condition which we ordinarily do not notice because we seldom make explicit attempts to validate a communicated idea against the original. When we do, as in the case of giving directions to someone about how to do something, we are suddenly made aware of the discrepancy that exists between 'the same' idea in the minds of two different people. Ordinary situations demand that we place only the loosest of interpretations upon some linguistic utterance we hear."  
(1974:72, underlining mine)

My view would be that at present we have little more than intuitive or circumstantial evidence to suggest that the poor apparent correspondence of ideas between two people results from their ideas rather than from the language system. Binnick (1970:151) argues similarly that vagueness is not a concept which applies to language, "but rather to the ideas which language expresses". Ambiguity, on the other hand, he argues, is a property of language. I think Binnick was wrong, because he looked only at lexical vagueness vs ambiguity. When one considers (as herein) vague expressions, it becomes clear that vagueness can get into language via the combination of words involved. The idea that the structure of ideas is vague in no way precludes the language system also incorporating vagueness, but in a sense, discussing the structure of ideas goes beyond the proper province of the linguist (cf remarks in Chapter 1) in this matter, which is to explain how it is that vagueness is part of language.

Vagueness, or as they call it, imprecision, is referred to in a very different context by Crystal and Davy (1975), in an applied linguistics textbook which accompanies a series of recordings of natural conversations. Analysing conversational English from the point of view of helping the foreign learner, they state that "lack of precision is one of the most important features of the vocabulary of informal conversation" (:111). They put forward the view that vagueness is on a scale related to the formality of the occasion, and that speakers can, if they choose, be more precise. They give four reasons for vagueness: (a) memory loss - speaker forgets the correct word; (b) the language has no suitable exact word, or speaker does not know it; (c) the subject of the conversation is not such that it requires precision, and an approximation or characterisation will do; and, (d) the choice of a vague item is deliberate to maintain the atmosphere. (We shall see examples of all these in Chapter 5.) They note that speakers in their extracts seem to mark vagueness by use of certain expressions. Among others they cite are something like that, or something, somewhere, probably, and in a way. Dines (1980) reports an investigation of some of these, from the point of view of sociolinguistic variation. This will be discussed in more detail in Chapter 4.

A useful point which Crystal and Davy make is to draw attention to the existence, in spoken English, of three types of device for expressing vagueness: Firstly, a set of nouns "which express total vagueness", such as thingummy, thingy, thinguammajig, whatsit. They note that "their spelling is somewhat uncertain, since they are features of the spoken language only" (:112). In the same way, Sankoff, Thibault and Berube (1978) note chose, affaire, de quoi, histoire, patente, machin and truc for Montreal French. Probably all

languages have dummy nouns of this sort.

Secondly, Crystal and Davy note a number of generic terms and collective nouns, such as oodles, bags of, heaps of, umpteen and a touch of; and thirdly, ways of expressing number approximations: a class of thirty odd, there were about/around thirty, there were getting on for thirty. They note also the existence of prefixes and suffixes which "are frequently used to express approximation, when precision is not of primary concern" (:116), giving as examples

(10) That mountain is rather table-like

(11) Linguisticswise she's rather clever

They conclude "Native speakers manipulate their language in this way all the time in informal speech".

Their 'reasons' for vagueness mentioned informally begin to sound like informal statements of pragmatic rules relevant to vagueness. The existence of the words and expressions they note, and their prevalence in their recordings, lend support to the contention that vagueness is both intrinsic, and important, in the language system of English.

Another writer approaching vagueness from an applied linguistics perspective is Brown (1979), who discusses the importance for foreign learners of English of 'Learning to be Imprecise'. He says that learners who do not know how to refer vaguely are on the one hand often stuck for a way of talking about some item which they don't know the word for; and on the other, tend to sound "bookish and pedantic, which is to say, inappropriate". His observations about the English of foreign speakers make it appear that degree of vagueness is closely and importantly bound up with conversational appropriateness.

Crystal and Davy's number approximation examples recall the observation of Jespersen (1924:325ff) who, in discussing the meaning of negation, introduces the idea of uncertainty as defined by Peirce, when he notes the contrast between

(12) These shoes cost no less than £20 (=exactly £20)[1]

and

(13) These shoes cost not less than £20

which "implies uncertainty with regard to the exact amount".

A quite different slant on the inherent vagueness of language is given in Lakoff (1972), in which he attacks the tripartite division of sentences into true, false, and lacking a truth value:


"Clearly any attempt to limit truth conditions for natural languages to true, false and "nonsense" will distort the natural language concepts by portraying them as having sharply defined rather than fuzzily defined boundaries."  
(:183)

He draws evidence to support this view of language from the work on category membership of Rosch (1973). Rosch reported experiments which showed that perceptual categories such as colour and shape have internal structure. By internal structure the following is meant: categories are composed of a "core meaning" which consists of the "clearest cases" (best examples) of the category, "surrounded" by other category members of decreasing similarity to that core meaning" (:112). She then extended this to see if psychological categories not showing obvious perceptual scaling, such as vegetables, or birds, were also internally structured. Her results suggested strongly that they are and that there was a high degree of agreement about the "exemplariness" of any item for any category. For example, for birds,

1 There is some evidence to suggest that the form in (12) may also be vague, since it is used also to predict costs in the future.

she found the following judgments held:

typical birds:	robins, eagles
	chickens, ducks, geese
	penguins, pelicans
hardly birds at all:	bats



This is reminiscent of Ullmann's attribution of vagueness to "lack of clear-cut boundaries in the non-linguistic world". From Rosch's findings Lakoff suggests that sentences about category membership, such as

(14) A penguin is a bird

are judged by speakers as to degree of truth, (14) being more true than

(15) A bat is a bird

No classical set theory or logic can cope with this, but Lakoff deploys Zadeh's fuzzy set theory which can deal with degrees of set membership.

For Lakoff, further, "some of the most interesting questions are raised by the study of words whose meaning implicitly involves fuzziness, words whose job it is to make things fuzzier or less fuzzy" (:195). These are Lakoff's hedges - sort of, kind of, technically speaking, etc. Lakoff's idea that the function of such expressions is "to make things fuzzier" is similar to the way Crystal and Davy suggest particular lexical items exist to make conversation appropriately imprecise. Lakoff's observations suggest strongly that vagueness is an essential feature of language, and one which any theory we devise must take account of. I shall suggest, in Section 2.4.1, that Lakoff's hedges should be subdivided into different types, for purposes of analysis.

Lakoff proposes what he calls "fuzzy semantics", in which, however, the semantic representations which are arrived at in any given case (via functions mapping from context) are exact. Sadock (1977) devotes himself in part to showing that the neat formalism proposed in vacuo by Lakoff will not, in practice, produce acceptable semantic representations, because of its extreme complexity. Sadock (1977:434):

"If the reader is growing suspicious of this increasingly inelegant equation, I am not surprised. The more it is made to fit our impression of what determines the defensibility of an approximation, the more it diverges from an honest representation of a purposely, and unabashedly inaccurate statement, which is what an approximation is. Furthermore, and more importantly, nothing that I have observed about the various contingencies that seem to play a role in the evaluation of the validity of approximations is really true."

Sadock's own solution to the vagueness of number approximations is to make the semantics simple and exact. On his view it is the purpose (seen as part of the context of utterance) of the approximation which determines its acceptability in any given case. His view is that approximations are almost "devoid of real semantic content" (p435) and that the way to state the truth conditions of an approximation is to make it true in all circumstances, except those where the thing being approximated does not have the property at all. Sadock's account of number approximations leads to some wrong predictions, detailed by Wachtel (1980). His proposals will be evaluated in greater detail in Chapter 7.

Weinreich's (1963) discussion of vagueness has broadly the same viewpoint as Sadock:

"Some vagueness is inherent in every sign, and the vagueness of different signs is not commensurable since vagueness is a pragmatic factor in denotation and hence beyond the province of semantics as the study of designation." (:143)

He discusses (:130) "hedges" such as real and so-called "which



function as instructions for the loose or strict interpretation of designata". I think his view is that designation is always exact, but that pragmatic rules can mediate to give vague meanings.

Wachtel's semantics for number approximations (1980,1981) involves an account in which the truth value of an approximation is dependent on its containing a number which is an appropriate exemplar number for the exact number in question. In this account, an approximative sentence is true if and only if (iff) the exemplar number in it is an appropriate round number for the actual number involved. Importantly, the formalisation states, for example, that if 10 is an appropriate approximation for an actual quantity 8 then the definition would also be satisfied by any real numbers between 8 and 10, and for real numbers above 10 up to the same distance away as 8 is from 10, ie in this case 12. So his function  $f$  associates an 'actual' number with an interval  $I_y$ , where  $y$  is the number appearing in the approximation, ie the exemplar number. The "appropriate round number" for any number in the interval  $x, \dots, z$  is the number central to the interval. On Wachtel's system therefore, understanding a number approximation entails computing an exact interval of acceptable numbers, and then seeing whether the actual number involved falls within that interval. This proposal will also be evaluated in Chapter 7.

The common thread running through Lakoff's, Sadock's and Wachtel's proposals for dealing with this particular bit of vague language is that the semantics for it will be exact, and trying to find ways of arriving at exact semantics leads them to the semantically complicated (Lakoff) and pragmatically complicated (Sadock and Wachtel) structures they propose.

For Fine (1975), vagueness is "a semantic notion" defined as "deficiency of meaning". For him, "any type of expression that is capable of meaning is also capable of being vague". He cites names, name-operators, predicates and quantifiers. For example, he says, the predicate 'bald' is extensionally vague, and intensionally vague in our particular world. He shows that logical relations hold among what he calls indefinite sentences (these are vague); for example, if  $P =$  'the blob is pink', then  $P \ \& \ -P$  is false even if  $P$  is indefinite. These logical relations are what he calls 'Penumbral Connections'. His paper is mainly concerned with the theoretical problems posed for a truth conditional account of any language by the existence of vagueness in that language. His examples (:276) which focus on English, show that his discussion is chiefly concerned <sup>with</sup> what I call Categorical Vagueness (see below, 2.4.2) - problems of extension.

The same issue is one of the chief concerns of the concluding speculative chapter of J. D. Fodor's (1977) book which raises a number of issues connected with vagueness without explicitly explaining them in such terms. The causal theory of meaning, which she discusses, makes specific provision for vagueness in the sense that it attributes it to lack of knowledge about which things are of the same kind:

"Both for proper nouns and common nouns, one's knowledge of the referent may be extensive or quite fragmentary. One may even have to rely on more expert members of the language community to fill in gaps, to show how to distinguish tigers from leopards or Chomsky from Halle, and perhaps even to back up one's belief that they differ at all. But though I may be hopelessly ignorant about tigers, my word tiger still refers to tigers, because I acquired it from someone who acquired it from someone who...acquired it from someone who does know how to attach it to the world. The chain of communication (some kind of causal chain) ultimately reaches all the way back to the original event of "baptism" in which tigers were given their name." (:210)

Such an account fits in well with Ullmann's and Crystal and Davy's

remarks about lack of knowledge leading to vagueness. Fodor notes that the fuzziness of categories discussed by Lakoff can be explained in the same way. Lakoff's claim that the sentence a penguin is a bird is only partly true "seems to rest on the view that the word bird IN FACT applies to whatever competent English speakers BELIEVE it applies to, and that their criteria for 'birdiness' may be many and vague and can be satisfied to a greater or lesser extent." (Fodor, 1977:212)

Fodor's view of the causal theory is that it probably exaggerates "the extent to which referents of common nouns are genuine natural kinds". She suggests:

"A realistic view of natural language surely must recognise that ordinary people often do use the word bird without intending to include penguins, or use the word fish intending to include whales. To what extent do we really care, in our everyday conversation, whether the words we use carve nature at its joints?" (:212)

and concludes by making two speculations. Firstly that perhaps all kind terms will eventually be found to be fuzzy. If so, then an explanation of how we use such words will have to depend on stereotypes. Her second suggestion is that the special fuzzy properties of kind terms referred to, may perhaps not be so special after all, but be properties of language in general. This is the view of Bolinger (1965):

"It is characteristic of natural language that no word is even limited to its enumerable senses, but carries within it the qualification of 'something like'." (:567)

Danell (1978), in a wide-ranging but therefore rather general paper on vagueness and language, discusses whether apparent vagueness in language is the result of description based on faulty models, or whether language itself is vague. Drawing on speculative discussion of how language processing takes place, he concludes that "vagueness is a property of language that must be included in the models" (:21).

### 2.3 Vagueness and Communication

If words and expressions are vague as often as has been suggested in the preceding pages, we might reasonably expect communication using them to be rather inefficient and unsuccessful, as suggested informally by Deese. A piece of experimental work carried out by Lehrer (1975) shows indeed that, at least in one limited area of activity, this is the case. Lehrer was interested in vocabulary used for talking about wine, from two points of view. "Firstly, assuming that some of the wine words mean anything at all, even if they are to be interpreted subjectively and evaluatively what is the structural analysis of this vocabulary? Second, how do typical (non-expert) wine-drinkers use these words, and what do they understand when they hear these words?" (:901)

Lehrer's subjects all professed some interest in wine and drank it at least once a week, so they could reasonably be expected to be quite accustomed to manipulating the kind of vocabulary under investigation. There were two kinds of experiments; description tasks and communication tasks. On the description tasks

"the most striking result on all the tasks, [...] was that descriptions (not just evaluations), varied enormously depending on whether or not the taster liked the wine. Wine F was described by one person as 'sweet, bubbly... flowery, light fizzy feeling in the mouth' and as 'quite dry, quite tangy' by another (both liked the wine). The same wine was described as 'harsh odor, pungent, unpleasant; taste is bitter, sharp' by one who did not like it."

This already suggests that use of such terms cannot be regarded as leading to accurate descriptions. A more conclusive result was obtained in the communication tests in which the percentage of successful communications (ie, being able to identify a wine by its description) was never significantly above chance.

While, as Lehrer says, these results raise more questions than they answer, they do demonstrate fairly adequately that communication between participants on a topic on which they expect to share quite a lot of knowledge, is in fact very poor. These terms used to describe wine, despite appearances to the contrary, and protestations to the contrary by those that use them, are very vague, and their failure to provide adequate communication in the reported tests shows that this is so.

In her concluding sections Lehrer raises a number of points about precision vs vagueness, and appropriateness. Professional experts on wine need to communicate precisely, whereas "the wine drinker who comments on the softness of the wine to his companion across the candlelit table does not need to be so precise", and we might add, it would be rather inappropriate if he was. Lehrer judges that the primary function of wine discussions in social settings is "to share an experience rather than to convey precise information". This brings to mind Malinowski's (1923:313-5) coining of the description "phatic communion" for communication which has more a social than an informing function, and again suggests a link between appropriateness and degree of precision.

Lehrer notes that wine experts have been carefully trained to know which wines are suitable for which descriptions, whereas "most of us have to learn to use these terms, and perhaps most of our language, in a rather haphazard manner, picking up what we can from conversation and abstracting properties from objects and contexts". This again is like the causal theory of meaning, and Ullmann's idea that vagueness arises from lack of knowledge of the words being used, or the subject under discussion. Lehrer is suggesting, I think, that a great deal of

language use is vague.

An important point which she makes about vague and precise use, and one which will be taken up in Chapter 5 is the following:

"When a need for precision and a scientific use of language does arise, as among enologists or shippers of wine, the vocabulary can be sharpened, both in its internal relations and the application; but this use is derivative - both historically and functionally. In other words, I am opposed to a view of language in which the scientific meaning attached to words is seen as basic and correct and where any deviations are looked on as performance errors made by sloppy speakers." (:920)

I take Lehrer to be arguing here that vagueness of meaning is inherent in language and must be accounted for as such.

Her speculative conclusion asks a question to which this study contributes part of the answer:

"My study of wine words has shown that people do not apply words to things in the same way. Is the domain of wine discussion an unusual one, or it is fairly typical of speakers' application of words? If the latter is the case, then speakers probably do not communicate with each other nearly as well as they think they do, since they usually have no way of knowing that others apply words differently. But perhaps they communicate well enough for their purposes, even without knowing."

As we shall see, especially in Chapter 5, where language is vague, speakers take this into account, and manage to communicate apparently rather successfully.

The similarity of Lehrer's point to that raised quite separately by Fodor in relation to kind terms, taken together with the other investigations referred to in this chapter, indicate that the eventual answer may well be that, as both Lehrer and Fodor suggest, most linguistic communication is vague rather than precise.

Considering the disparate origins and purposes of the work referred to here, it might be quite surprising that everyone makes such similar points about the nature of and reasons for linguistic vagueness. It is less surprising if we construe their remarks not as a random selection of circumstantial and trivial observations about little understood areas of language, but rather as evidence for intuitions about the nature of language which will at some future time prove to be correct.

#### 2.4 Different kinds of vagueness: a working classification

The varied work referred to in the foregoing review has suggested that there are a number of different ways in which speakers can avoid being precise or exact. From my observations of vague language, I can propose four categories, but this is not to say that there may not be others. They are VAGUE ADDITIVES, VAGUE WORDS, VAGUENESS BY OMISSION, and VAGUENESS BY IMPLICATURE.

##### 2.4.1 Vague additives

In these cases lexical material is added to what would otherwise be a precise statement, to result in a vague reading.

One type of addition is to embed a sentence under a predicate which confers vagueness on the whole assertion, for example:

(16) It seems that he hit her

where the same sentence, without the introductory element, makes a precise assertion. In general, these allow possibilities other than that the precise statement is true. Often they are used as self-defence to cover the speaker against the event of being mistaken.

Similarly, Baker (1975) describes the way remarks which express a negative viewpoint are often prefaced with self-defence expressions like that in the title of her paper: "This is just a first

approximation, but". She claims the ability to use these things is part of "pragmatic competence".

Cogen and Herman (1975) describe the use of let's just say to introduce violations of conversational rules, which will create implicatures, for example in:

(17) [6] Antony: Who was that man I saw you with last night?

Cleopatra: Let's just say he's a friend

The hearer reads off from the presence of let's just say that the man is in fact quite other than a friend, but his true status is left to guesswork. The use of friend is perhaps, in addition, an instance of paradigmatic vagueness (see below).

2 Another type of vague additives are those found in combination with numbers, for example:

(18) [article reviewing Habitat catalogue]

+A team of around ten people at Conran Advertising works on the design and production for most of the year [ST 23.08.81]

Here the precise quantity is made vague by the addition of around. Approximately, which was studied by Lakoff in his paper on hedges, and subsequently by Wachtel and Sadock, as mentioned previously, falls into this category. Chapter 3 gives a detailed account of number approximations.

3 A third type of vague additives are those referred to as TAGS by Dines (1980), and listed at the beginning of chapter 1. Here again, a precise assertion is made vague to allow for other possibilities:

(19) [tennis commentary - Mark Cox at Wimbledon]

+And we see McEnroe there with his foot - maybe a little bit of stone or something like that [DS/10]

The structure, use and meaning of these expressions are described in detail in Chapter 4.



The set of expressions I am referring to as Vague Additives, as opposed to Vague Words (cf 2.4.2) and Vagueness by Omission (cf 2.4.3), are, I think the same as those identified in Lakoff(1972) as HEDGES. He defines hedges as "words whose job it is to make things fuzzier or less fuzzy"(:195). I have chosen, however, to subdivide the major category into different types of hedges, recognising (1) sentence hedges, (2) number hedges, and (3) tag hedges. Obviously there are other types. The major part of this thesis is devoted to investigation of types (2) and (3). I have chosen to focus on these, firstly because each forms a cohesive and identifiable set, and secondly because even my quite small sample of data contained plenty of examples.

#### 2.4.2 Vague Words

##### 1 Vague Substitutes

This category embraces lexical items which are used as substitutes for exact specifications. Crystal and Davy's set of nouns which express near vagueness (thingummy, whatsit, etc) would be in this category. So would vague "pronouns" like someone, something. These items fill places for expressions which must be present but about whose exact specification the speaker wishes to remain vague or cannot be more specific (for example because lexical search has failed to yield an appropriate word).

##### 2 Vague Quantifiers

Similar to place fillers, but giving a little more referential information, are what Crystal and Davy categorised as "generic terms" and "collective nouns", examples being oodles of, or a touch of. Since I prefer to reserve these terms for the types of words discussed in 3 below, I have called such expressions VAGUE QUANTIFIERS. Notice

that using a vague quantifier can fulfil a similar purpose to using a vague additive with a number, although it will give, usually, very much less information as to the quantity involved (compare oodles of mayonnaise with about six tablespoons of mayonnaise).

### 3 Paradigmatic Vagueness

Another sort of vagueness arises through choice of a superordinate lexical item when world knowledge and lexical knowledge would make further precision possible. For example:

(20) He came into the room leading an animal

We know that a specific type of animal must have been involved, but we are not told what it was. Similarly in:

(21) A person telephoned

(22) The car has broken down again

An interesting paper by Alan Cruse (1977) draws attention to the fact that in some cases it is actually inappropriate to give more precise information, even if it is known. For example, of

(23) (a) I think I shall take the dog for a walk

(b) I think I shall take the alsatian for a walk

(where there is only one dog in the house) (a) is "more neutral, more matter-of-fact, perhaps also more usual". Cruse shows that the degree of specificity necessary is dictated by contextual features such as how much information is already known.

The vagueness produced by these vague words is different to that produced by the Vague Additives itemised previously. These examples involve a lack of specificity to a greater or lesser extent, rather than a vagueness, at a fixed level of specificity, about what is and is not being asserted.

#### 4 Categorical Vagueness

This is the sort of vagueness to which Fodor drew attention in the extract quoted earlier - the fact that the terms we use for categories often do not have a completely agreed extension. Thus, is someone who asserts I love animals understood as including yeast or mosquitoes? And when does a hill become a mountain? Putnam (1975) addresses the question of what it means to 'know the meaning' of a word. He holds that knowing the meaning may involve being able to identify a stereotype, to which members of a category conform to a greater or lesser extent. The psychological evidence from the work on category membership by Rosch and her associates, and by Battig and Montague (1969), testifies to the psychological reality of this extensional fuzziness and also provides evidence for the notion of stereotypes.

#### 2.4.3 Vagueness by Omission

A quite different way of being less than precise is by simply not saying things.

The grammar of English allows this for example in the use of imperatives. Fowler and Kress (1979:30ff) explain how imperatives involve massive deletion of elements which are supplied by the addressee "from his knowledge of the non-linguistic context in which the speech act occurs". One of their examples is

(24) a Take particular care of untrained children

[Rule of school swimming club]

from which they say

b I order you that you will

containing Agent, Patient of order and person to whom the imperative is directed, can be reconstructed. Omitting these, as in (24a), enables the writer (in this case) to withhold from the reader

information about the identity of the agent.

They go on to discuss what might be called the social effects of such deletions:

"The point at issue is that the uncertainty about agency spreads a general vagueness through the rules, and a vagueness precisely in the area of who does what. The readers of the rules are left in a situation of helpless ignorance: apparently the knowers know, but seem to keep the ignorant from knowing. A dissatisfied member can be left very frustrated by not knowing where to turn for specific action. Here the process merely confers the power derived from relatively trivial knowledge on those who have it, and creates a class of those who do not have such power/knowledge. In more important contexts it works as a powerful means of control. Anyone who has even come up against 'faceless bureaucracy' will know what this is about."  
(:32)

A different example of omission is agentless ("truncated") passives. Here, the grammar of the language allows us to omit mention of the agent and thus avoid specifying its identity. Fillmore (1971) exemplifies this with:

(25) The girls were blamed for the mess

of which he says: "the speaker is merely being indefinite about the identity of the accuser" (:379). At the same time, knowledge of this grammatical structure allows hearers to infer that an agent is involved but has not been mentioned (Freidin, 1975, discusses the derivation of these structures via transformational rules). They are particularly well-exemplified in news reporting, where it is frequently essential that sources are disguised, for example:

(26) +The Independent Peace Group was formed in Moscow in June. Since then its founder members have been detained for various reasons [The World at One, 27.10.82]

It will be clear that agentless passives are often used with the same power/knowledge versus ignorance/weakness effect, as that described for imperatives by Fowler and Kress.

A third type of omission occurs when elements which can be reconstructed from the semantics of the verb involved are omitted. Work, separate from this project, in which I have been involved (reported in part in Channell, Cowie and Jeffries, 1981, and in Willis and Jeffries 1982) investigated the way in which particular participants are necessarily present in a situation, for a particular verb to be appropriately used. Put in a different theoretical framework, the presence of these participants is part of the truth conditions for sentences in which the verb appears. To take a well-worn example (discussed by Fillmore, 1968:390, and Anderson, 1971, Freidin, 1975), for:

(27) He bought a car

to be felicitously uttered, it is necessary that there have been an exchange of money, and a vendor. If either of these are absent from the real life situation, buy cannot be used. So the semantics of buy allows a speaker to suppress mention of both vendor and money, if he does not wish to detail them, and equally allows a hearer to infer that they were present in the reported situation. Again, with hit, Fillmore (1971) suggests that in

(28) He hit the dog [2]

"the speaker is merely being indefinite about the implement he used". The vagueness by omission exemplified by (24) to (28) is again qualitatively different from additive vagueness in the sense that these are cases of things whose identity is unspecified in the sentence concerned. While the ordinary language user may refer to these three sorts of omissions as "being vague", an analytical

2 Of course (28) is also ambiguous between the reading Fillmore is focussing on, and the one where he falls out of a tree and onto the dog.

approach will do better, on my view, to see this not as vagueness, but as suppression of reference/mention. Recalling Peirce's definition, and applying it to for example, (27) as a test, we can see that we would not want to say that it was intrinsically uncertain whether (27) applied to a particular vendor or not. It is rather that the identity of the vendor is simply not given.

#### 2.4.4 Vagueness by Implicature

The fourth way of being vague which I have identified is where an apparently precise sentence can be used with a vague meaning. This has been observed to occur frequently in cases involving numbers and quantities. Wachtel (1980) notes that sentences like:

(29) Sam is six feet tall

(30) Sam has \$10,000 in his savings account

(31) Odessa has a population of one million

are on one reading "inherently approximations" (of course there is also an exact reading), in the sense that (31) would not normally be considered false if the actual population of Odessa were 1,002,593.

The reason for this is that the numbers in (29) - (31) are seen as 'round' numbers within the base-10 number system. Attested examples from my data are similar:

(32) [article about Habitat catalogue]

+However, there is less difference between London and the provinces than one might suppose - 25,000 have bought a wok; they can't all be Wong and live in Gerrard Street [ST 23.08.81]

(33) +I was teaching on a language summer school in UCL once and they were working on the roof there and we were on the top floor, there were no windows, it was a sort of attic floor really but there were skylights and every so often you'd notice a bit of disturbance around the class and there'd be half a dozen faces all looking, staring in at you (laugh) it was really creepy [Camb 13A180/963]

In these two examples, hearers infer, I think, from the context supplied by the speaker, that the quantities given are not to be taken

as exact.

Percentages are often used in this way. We all remember the household disinfectant which "kills ninety-ninety percent of all household germs". Presumably most people took this to mean "nearly all". Here is another similar example:

(34) [electrical shop assistant explaining why repair cannot be carried out, because of lack of spares from factory]

+They've had one fire which has destroyed ninety-five percent of their total, in fact ninety-five percent of their total stock [Camb 1B267/p.7]

The speaker, one infers, did not really know exactly how much stock was lost, he wanted rather to stress that it was most of it.

In some cases, the implicated-vagueness use is institutionalised to the extent that it almost completely supplants the exact use. In North American usage, and similarly but to a lesser extent in Britain, a couple of means "a few" or "a low number". Bernstein (1971), a prescriptive guide to good English, notes that "using a couple of in the indefinite sense of a few or several is frowned upon by judges of reputable writing; dictionaries tend to label it "informal"." (:27). Bolinger (1979) describes this use and its constraints in some detail.

Clearly it is sufficiently widespread to make it worth legislating against. In an example from Cicourel's doctor/patient interviews we find an example of this use:

(35) [patient sometimes "sees stars"]

+P: Oh I see them occasionally [I: delivery] (pause) yes uh [I: okay] sometimes I see them during the day, like I saw (slight pause) a couple this morning [Cicourel, 1974]

This process is noted by Menninger (1969), who calls it SEMANTIC FADING, because the exact number meaning "fades", leaving the signification "a few" or, more often "many". He says:

"In Greece both 60 and its multiples such as 360 were frequently used as "round numbers" - that is numbers whose specific meanings are inflated into the indefinite "many", as in the expressions "if I've told you once, I've told you 'a hundred times' that..." The inflation or semantic fading of a number word is the opposite of the specification of its meaning and usually involves the three ranks 10, 100, and 1000, but it can happen to any other number which for one reason or another has acquired special significance (as in seine sieben Sachen packen, 'picked up his seven things'." (:153)

and quotes an example from the Odyssey:

"the number of swine remaining was only 360" [Odyssey 14, 20]

Other common English examples are the sixty-four thousand dollar question ("very important") and I've got a thousand (and one) things to do (= "lots").

For the non-institutionalised examples, one question is what triggers the vague as opposed to the exact reading. One factor is whether or not the number is round.

(36) Sam is five foot eleven and a half tall

(37) Sam has \$9,873 in his savings account

(38) Odessa has a population of 1,002,493

I submit that it is (at least) very hard to get a reading of these where they are vague, whereas as we have seen (29) to (31) are quite normally judged as being vague. The reason is that (36) to (38) do not contain what we think of as round numbers. Clearly the presence of a round number is a good indication that a vague reading is intended. Further, Menninger suggests that the numbers which are more likely to be institutionalised as vague quantities are round numbers. As we shall see in Chapter 3, round numbers also have a key role in the formation and interpretation of additive number approximations. In addition, as has been mentioned, context and world knowledge are important in deciding whether an exact or a vague quantity is being



given.

### 2.5 Summary

We have seen that there are, in English, a number of ways of "being vague". I have suggested that from the point of view of analysis, some of these are true instances of vague language, whereas others are cases of suppression of reference. Vagueness has been observed to occur widely in language use, and we have noted some investigators wishing to maintain that all language use is vague in some way. Vague utterances are defined here, following Peirce, as those for which it is intrinsically uncertain whether they apply to particular referents or states of affairs, or not. The major question which arises is how to deal with vagueness in an account of language understanding. I shall return to the issue of the theoretical implications of the existence of vague language, in Chapters 7 and 8.

## Chapter 3

Number Approximations

Neddie Seagoon: How far is it to the valley?

Major Bloodknock: Roughly sixty miles.

NS: I know it's roughly sixty miles but what is it exactly?

MB: Seventy miles.

NS: We'll go roughly, it's ten miles shorter.

[The Goon Show]

## 3.1

We saw in Chapter 2 that there exist a number of ways of being vague about quantities in English. In particular, speakers have the option of either adding something to a precise number or numbers, or of using a vague quantifier, or of omitting information, the necessary presence of which can be inferred, for example from the semantics of the verb involved. In this Chapter I concentrate on the first of these types, those where lexical material is added, to result in a vague quantity reading. Examples of this are:

- (1) +You find that you get five or six articles and they're all very much the same [II,21.2]
- (2) +He's producing about ten pages a week and they're all getting published [II,21.2]
- (3) +It's something around the twenty per cent mark, and it's never changed [II,21.2]
- (4) +This does save you eighty or so pence [W1]

All these are examples of approximations which contain some lexical material (such as about or approximately) which leads to the approximation reading - these will be called APPROXIMATORS); one or, optionally, two numbers, which I shall call EXEMPLAR NUMBERS; and, also optionally, a measure noun (pounds, feet, etc). Note that this

use of the term APPROXIMATOR is quite different from and unrelated to that employed by Quirk et al (1972:8.29ff) to refer to downtoners to the force of a verb as in, I almost resigned.

An intuitive analysis of structures like those in (1) - (4) suggests that they designate not precise numbers or quantities, but rather intervals whose extent is apparently not exactly specified. "Interval", throughout the following, should be understood to mean "continuous sequence of whole numbers and parts of numbers, or real numbers". The expressions are in wide use, and despite their vagueness, it is clear that they present no problems of interpretation to either speakers or hearers:

"There's a lot of occasions where you don't pay any attention to ... how exact it is so its like there's fifteen or so people out in the hall its probably likely to be less than that I would think rather than exactly fifteen or more" [comment made by test subject]

The three theories of approximations which have been proposed (Lakoff, 1972; Sadock, 1977; and Wachtel, 1980, 1981), which I referred to in the previous chapter, approach them as posing a problem for a bivalent truth-conditional semantics, in the sense that it is apparently impossible to specify the points on the number continuum at which any particular approximation ceases to be true [1]. These three accounts direct their attention towards the problem of incorporating apparently intractable data into an existing semantic theory. As such, they do not overtly interest themselves in psycholinguistic aspects of approximations; ie what are speakers, and more particularly, hearers, actually doing when they process

1 Klein (1982) discusses adjectival comparatives, which are similar to these expressions in being vague, but he notes specifically (note 7:121) that number approximations are an independent issue.

approximations? Neither do they interest themselves in attempting to discover empirically the propositions that are expressed by sentences containing approximators. They assume that they (and we) know them. The present study approaches approximations from the opposite point of view (ie, that of language users) and presents data which complements and illuminates the theoretical perspective of the studies mentioned. All four suggest that number approximations, rather than being phenomena which require a special theoretical corner of their own, have characteristics which are rather general in language use.

In this Chapter I examine in detail the structure, intonational characteristics, and meanings of a sample of number approximations, drawing on other studies, conversation data, and informant work. A note on data (3.2) is followed by an account of the elicitation tests I carried out (3.3), a full description of the structures involved and their meanings (3.4), together with some general aspects (3.5, 3.6 and 3.7). 3.8 is a note on Partial Specifiers, which are shown to be, in use, almost identical to Approximators. Finally a summary (3.9) of the propositions relevant to speech behaviour which must be accounted for by a theory concerned with the meaning of number approximations.

### 3.2 Conversation examples

The conversation data I had collected at the start of this study contained a number of examples of what I had tentatively identified as number approximations. These appear to be used naturally and with no observable difficulties of comprehension. As we have seen, Crystal and Davy (1975:113) assign an approximation reading to these kind of structures, grouping them in "the wide range of devices that the colloquial lexicon contains which allows for approximations to be made". Quirk et al (1972:13.70) comment similarly on the expressions

containing or that these are "expressions of approximation". Lakoff, Sadock, and Wachtel (op cit) also assign vague readings to these structures. A desire to test and confirm these plausible but intuitive assignments, was one of the motivations for the elicitation test I carried out. In Chapter 5 I examine some of the conversation extracts in detail, and discuss the kinds of conversational effects which number approximations are used to achieve.

### 3.3 The Elicitation Test

#### 3.3.1 Objectives

The test had two main objectives:

- 1 to test the hypothesis that number approximations designate intervals of numbers
- 2 to find out the length of intervals which different approximations designate, and the placing of the intervals relative to the exemplar number(s) present.

#### 3.3.2 Method

A paper and pencil test was used to present 32 examples of putative number approximations. Some were attested examples from my data, and the rest were invented sentences. The test items contained four different approximators and a selection of exemplar numbers. Subjects were 26 first-year University of York students who took the test in two groups on two successive days. They were told that the two sessions would replace their normal descriptive linguistics seminar and that there would be a short test, followed by discussion.

The test items were presented in reverse order to alternate subjects. This was intended to balance out the effects of practice and fatigue across the items, and also the effect of an item acting as context for the subsequent one (cf Greenbaum, 1977). It also had the

advantage that each subject was completing a test paper different from that of his two immediate neighbours.

Before seeing the test materials, subjects heard a short tape extract of a conversation in which an approximation was used (it was example (1)), and they read a transcript of it, in which the approximation was underlined. This served two purposes: first to direct them towards the intonation normally used for n or m approximations (such as that in (1), see Section 3.4.3 for discussion) and second, more importantly, to encourage them to believe that every test item they read was an attested example from my corpus of data. For this reason also, each item was written between quotation marks. I wanted to encourage them to act, as far as possible, as hearers of the test stimuli; that is, rather than asking themselves "do I say this and what do I mean when I do?", to ask themselves "if I heard this, what would I understand?". The written instructions each subject saw are reproduced below:

Example

"You find you get five or six articles and they're all very much the same"

Someone who thought this could ordinarily refer to anywhere between 3 and 8 articles (inclusive) would mark their answer as:

1 2 (3 4 5 6 7 8) 9 10

IF YOU FIND THE NUMBERS GIVEN NOT EXACT ENOUGH PLEASE WRITE  
IN ANY ADDITIONAL NUMBER YOU NEED  
PLEASE WORK ALONE

The list of test items is given in Table 3.1 at the end of this chapter.

### 3.3.3 Results

The results for each item (identified by its approximation) are given in Table 3.2.

### 3.3.4 Discussion

The hypothesis that number approximations are understood to designate intervals of numbers was clearly supported by the large percentage of subjects (100 percent in 15/32 items and less than 90 percent for only five of the items) who marked intervals for each item. The comparatively low score for Item 10 around ten million is explainable by faulty test design. In discussion after the test, subjects said that the interval for this did not go as low as nine million, or as high as eleven, yet the answer sheet had given only whole millions as possible numbers to mark. Despite the specific instruction to add additional numbers if they needed to, only one of them had done this.

Commented one:

"It was obvious that it wasn't exactly ten million people and I didn't think it was as few as nine million or as many as eleven. I didn't want to sort of go round deciding well its between ten million two hundred and fifty thousand so and so but you know sort of ... it obviously wasn't exactly the ten million"

Results relative to the different approximators are discussed under separate headings below.

The second finding was that as a general rule, the length of the interval increases as a function of the size of the exemplar number, such that, for example, about £14,000 is judged as designating a much larger interval than about £500 (see Table 3.2). The results were equivocal as to demonstrating a consistent proportional relationship between exemplar number and interval length. As we shall see subsequently, this is because Interval length (hereinafter I-length) is determined not only by the E-number (=Exemplar Number), but also by

several other factors, such as the nature of the item being approximated, the purpose of the utterance in which it is found, and which approximator is used.

The third finding supports the general observation made by all three writers on this topic that the nature of the item(s) being approximated affects the length of interval for which the approximation seems appropriate. Taking Sadock's example, he claims that we understand something different when told that a man is approximately six feet tall from when we are told that a cockroach is approximately six feet tall, because of our world knowledge about how tall men usually are. My own, more specific finding, is that a difference is discernable between discrete items (such as people, pages, replies) and non-discrete measure nouns (such as pounds, feet, litres). From Table 3.2, we see, for example, that responses to about ten pages were different, a longer interval resulting, than those for 10 lbs or so and 10 or so litres. This is the more striking because it runs contrary to the general rule observed, that or so approximations designate longer intervals than about/around approximations. This difference would account for a secondary result of a series of experiments on category width (Pettigrew, 1958) which showed a distinct loading on test items involving time and speed measures (ie non-discrete items) in approximations, as opposed to another loading towards judgments on discrete items such as numbers of births, submarines, or churches.

Having noted these three general results of the elicitation test, we now pass on to a detailed consideration of individual number approximators, drawing not only on the test data but also on attested examples and other studies.



### 3.4 Number Approximators

#### 3.4.1 about/around/round

About, around and round appear to be interchangeable in most examples, and test results for about and around indicate that they have the same effect on the meaning of an approximation. About occurs more frequently in my spoken examples, and around more frequently in my written examples, but the samples are not large enough to draw any conclusions from this. I am treating round as a variant of around.

#### Distribution

These words appear as modifiers to a number and they always appear before the number (n). Anywhere that a number can occur, about, round or around can be added before the number and result in a grammatical string (except if the number is already modified by something which would contradict the approximator, ie \*exactly about 10.) Thus:

(5) +I wonder what time I've got to go to the dentist. Its  
always round four-o'clock [LJ 2,7]

(6) [context: talking about buying Christmas trees]  
+I had one some while ago that my mother managed to  
keep for about three years [Camb 9B14/63]

(7) [article on climbing Everest]  
+He hopes to set up an advance camp at around 20,000 feet  
in early July [written, ST 4,5,80]

(5) - (7) could all have appeared without their approximators, and still been acceptable and meaningful. It is in this sense that I classify these as lexical additions to sentences which bring vagueness to propositions which could otherwise be precise. To schematise, an approximation of this type has the form:

(about )  
((a)round) n

where the subsequent material is subject to the general constraints of what can follow a number.

Meaning: about/(a)round

At this point I cover those aspects of meaning (construed in the broad sense in which it was characterised in Chapter 1) which are particular to about/(a)round. More general features are discussed later. The effect of "adding" about/(a)round to a sentence containing a number is to make it vague as to the exact quantity involved. The speaker in (5) wanted to include appointments at, perhaps, 3.45 and 4.10 in her reference to her dental appointments. The speaker in (6) was allowing for the tree to have lasted less than, or more than, or exactly three years, and so on.

From the test results for items containing about/(a)round it was observed that subjects judge these approximations as designating intervals of numbers which are symmetrical about the exemplar number given. Frequency counts on each item give in all cases a mode which is the E-number (or two modes, one of which is). Tabulating the frequency gives in every case a symmetrical figure (Table 3.3). So a hearer hearing example (2) understands apparently that this person writing "about ten pages a week" writes between 8.5 and 11.5 pages each week.

These results explain the judgment reported in Sadock (1977), that

(8) [26] \*John ate around all of the beans

is unacceptable. Clearly if around designates intervals symmetrical about their exemplar, a constraint on its use is that it cannot be used with an exemplar such as all which is at the extreme end of a continuum. Dubious for the same reason are sentences like:

(9) \*?About 100 percent of those questioned would vote for the SDP

and \*approximately/about/(a)round none is also not possible.

3.4.2 Approximately

The use of approximately has received the largest amount of attention in the literature - Lakoff discusses a semantics for approximately without consideration of other approximators. Sadock only discusses approximately in any detail, though he does mention a few other approximators in passing (1977:438). Wachtel (1980) discusses approximately and its relationship to sentences not containing a lexical approximator, but he does not refer to other approximators. Since Lakoff, Sadock and Wachtel are principally interested in the theoretical problem of finding a suitable semantics for vague quantity expressions, they look at only a very few (invented) examples.

It is curious that approximately has received so much attention, since it does not appear to be the most commonly used approximator. My sample is perhaps too small for firm conclusions to be drawn from it, but in the informal conversations I recorded, there were no uses of approximately. The examples I have suggest that use of approximately is generally confined to rather specific official, semi-official and scientific registers. These two examples appear to be semi-official situations:

(10) [telephone call to estate agent]

+B: How many houses are there in the street?

C: There are approximately four houses in the street [DJP

DN/9]

(11) [Doctor (I) taking preliminary notes from patient (P)]

I: Okay and when was that approximately? [P:hm] This was after delivery or [interviewer mumbled something]

P: yeah [slight pause] now this was [pause] the last visit I  
[pause] yeah [slight pause] this was approximately a month  
ago

[Cicourel, 1974]

Further examples will be discussed in Chapter 5.

### Distribution

The distribution of approximately is the same as about/(a)round, that is, anywhere a number can be used, approximately can be added to it providing a contradiction does not arise. It may well be that approximately and about/(a)round are in complementary distribution in different sociolinguistic contexts, but a large corpus study with control of the relevant sociolinguistic dimensions would be necessary to demonstrate this.

A constraint on the use of approximately noted by Sadock (1977:436) is the following:

(12) [23] \*Sam has approximately some money in his savings account

(13) [24] \*Sam has written approximately a few/several/many books

That is, approximately is grammatical only when combined with exact numbers or measures denoting exact quantities. It is apparent that this constraint applies equally to all the approximators under consideration, thus:

(14) \*Sam has (about ) some (                    ) money in his savings  
          (around)            (                    )                                    account  
          (round )            (                    )  
                                  (or a bit of)  
                                  (or so                    )

are all unacceptable. This constraint is easily explained by reference to the test results reported above. According to these, number approximations are understood by hearers as designating continuous intervals of numbers, whose position on the number

continuum is established by reference to the exemplar number given. An exact exemplar is required to do this (although as I shall show in 3.6.1, some exact exemplars are more favoured than others). It is to be expected therefore that some, a few or several cannot act as exemplars because they are not exact.

The requirement of approximators to be followed by something exact is shown also by what happens in combining approximately with other things than numbers:

\*?approximately pink and \*?approximately rabbit-shaped are ruled out because they are not exact enough, whereas approximately circular is acceptable because circular indicates something precise.

Meaning: approximately

Lakoff (1972:222) tries to demonstrate, by means of a series of invented examples, that the sentence

(15) [3b] Sam had approximately \$10,000 in his savings account is "true no matter what" of a situation where he actually had \$9,992, and progressively less true of one where he had \$9,950, \$9,500, \$9,200, and so on. He does not say whether he thinks the same judgments would hold for \$10,021, \$10,500, \$10,750 etc, so his only claim about the meaning of approximately is that it can be vague to different degrees in different circumstances.

Much of Sadock's paper is devoted to showing that Lakoff's proposal for a semantics for sentences containing approximately is unworkable. This will be discussed in Chapter 7. He makes two important observations about the meaning of sentences containing approximately: Firstly, that the judgment of how good the approximation is, depends partly on the nature of the item being

approximated. He compares:

(16) [8] Sam is approximately six feet tall

(17) [9] That cockroach is approximately six feet tall

and asserts that if both are actually 5 ft 8, (17) is a better approximation than (16), because of what we know about humans and cockroaches. That is to say, we know that humans are often around six feet tall, and we know that cockroaches most usually are not. Second, he holds that the form of the whole approximation alters the length of interval over which it is acceptable. By comparing

(18) [11] Odessa has a population of approximately one million

(19) Odessa has a population of approximately 990,000

he suggests that the number of significant figures is relevant. He also asserts that about a dozen is rougher than about twelve and that approximately two and a half tons is "not as accurate sounding" as approximately 2.5 tons. Again here, since it is clear that if these points are valid, they apply equally to other types of number approximation, discussion of them is deferred to section 3.5 - 3.7.

The sum of Sadock's account of the meaning of approximations is that they are in some way vague, but that the degree of vagueness is related to the two observations above. As the aim of this section is to set out observations about the meaning of approximately, rather than to discuss how to deal theoretically with that meaning, Sadock's proposals for the semantics and pragmatics of approximately will be dealt with in Chapter 7.

Wachtel's (1980) paper makes a number of points relevant to the meaning of approximately, the most important of which is that if, in a given context, an approximation (containing approximately) is true for a particular actual number which is less than the exemplar number, it

is also true for any other number between the actual number involved and the E-number, and for all numbers up to the same distance away which are more than the E-number. Put another way, this says that an approximation using approximately is true for an interval of numbers, the centre point of which is the exemplar number. The exact length of the interval in any given case is determined, in his analysis, by a function from C, the set of contexts, into F, the set of rounding functions which map from actual numbers into the set of real numbers to select an appropriate approximating (exemplar) number. His account will be discussed in Chapter 7.

The test results indicate that the meanings of the set of number approximations I looked at are basically of two types: those which have intervals symmetrical about their exemplar number, and those which have skewed intervals. Approximately is then, apparently, a symmetrical approximator.

### 3.4.3 n or m

These approximations differ from those so far considered, in having two exemplar numbers, thus:

(20) [reporting on Christmas trees]

+There's another shop in Blackheath that was selling really scrawny ones, five or six quid a time [Camb 9B14/32] [2]

Faced only with examples of this structure, and in the absence of any experimental evidence, a possible approach would be to subsume it into an analysis applying to other uses of or. Two analyses suggest themselves:

1 the two numbers given are alternatives (like "either...or..." constructions)

2 This example is discussed further in Chapter 5.

2 the two numbers are inclusively disjunctive (either one is true, or both are true simultaneously).

Evidence against these two approaches, but quite independent of that gained from the elicitation test, is provided by an examination of intonation patterns for or constructions.

### Intonation

Crystal (1969) notes that tonality may have what he calls a grammatical function of distinguishing between "certain types of idiom and literal interpretation", among which he lists:

(21) would you | like 'one or | two lumps of 'sugar ||

compared with

(22) would you | like one || or | two lumps of 'sugar ||

where the first is an approximation and the second presents two alternatives. Another example of alternative use of or which he gives

(:273):

(23) would you like | gin || or | whisky || or | tea ||

also shows the same pattern of a separate tone unit for each alternative. Even where two alternatives are in the same tone unit, the tonicity is non-optional. In Crystal's example (:263):

(24) Was she wearing a green dress or a red one?

"the item 'red' must be nuclear because of the grammar of the co-ordinate construction, and the speaker has no choice as to the distribution of emphasis when he enters the 'alternative' part of this construction". Alternative uses of or in my own data show the same characteristics:

(25) +I just intuitively feel that being in a department thats  
 full of people who are | " really || " really || " famous || either  
 in their discipline or even further outside it || is likely  
 to be | a good idea || [II,21.2]



(26) +either you | " \ take them || or you | \ dont take them || or if  
 theyre | good well fair enough youve said once || why say  
 it | again || [II,21.2]

In contrast with these alternative constructions, my examples of approximative or show different tonality and tonicity: [3]

(27) +yeh | but its ' still around that || four or ' five  
 ↑ \ region || [I,13.2]

In alternative constructions the two alternatives must both be stressed, and at least the second, or both, must be nuclear. In the above example, four or five region is one tone unit and region carries the nucleus. It is behaving intonationally like any prehead modifier plus noun group, eg

(28) I want some | orange paint ||

Similarly in:

(29) you find that you get | five or six ↑ \ articles || and |  
 theyre very much || the | ^ same || [II,21.2]

This shows that n or m constructions are distinct from alternative uses of or and should not be analysed like them. It also underlines the necessity of using real data in a study of meaning of this kind, in order to be able to draw on intonational evidence where it is relevant.

### Distribution

There are some restrictions on the way an n or m approximation can be put together. Firstly the smaller number must always precede the larger:

3 Notice that this same intonational contrast occurs also to differentiate more or less with the reading "nearly" from the reading "either more, or less".

(30) \*There were twenty or fifteen people there

Secondly there are some constraints on what the two numbers may be:

(31) There were ten or twelve people there

(32) \*There were ten or a hundred people there

(33) \*There were five hundred and nineteen or five hundred and twenty people there

(34) \*There were (fifteen or twenty-one ) people there

(fourteen or twenty-two )

(sixteen or twenty-three)

If the \* examples are considered with the one tone group intonation observed in attested examples of approximations (and described above) they seem rather unacceptable (and even quite difficult to say). Of course as presentations of alternatives (using the other intonation pattern) they are quite all right.

These unacceptable examples, plus evidence from my attested examples, suggest the following pattern for acceptability of n or m approximations (with other combinations being, in general, unacceptable):

The m number is:	for an n number which is:
adjacent	up to 19
2 above	even, 6 - 18
5 above	a multiple of 5, 10 - 95
10 above	a multiple of 10, 10 - 190
20 above	a multiple of 20, 60 - 140
50 apart	a multiple of 50, 150 - 950

Hundreds, thousands and millions follow the same rules applied to the numerals preceding them, eg:

two or three hundred

eight or ten thousand

fifteen or sixteen thousand

A general constraint is that the higher level round number (ie 200 vs 150) is preferred in the m position, that is to say, everyone accepts 950 or a thousand, but some informants find 900 or 950 awkward. The top ends of the intervals of possibilities for n numbers are also variable across speakers, but not in a way which affects the general pattern. So, for example, no speakers I have found can make an approximation out of (33).

From this patterning it appears that for an acceptable approximation to be made, the distance apart of the two exemplar numbers increases with the size of the numbers involved.

The above observations highlight, I think, important facts about the way number concepts are internalised, and their relationship to the number names of English. Numbers which we think of as "round" have special functions. It is clear that unity, duality, base 5, base 10 and base 20 play a vital role in the way speakers of English manipulate these approximations in particular, and their base 10 number system in general.

Meaning: n or m

Quirk et al (1972:13.70) suggest that these structures designate continuous intervals of which the two exemplar numbers are the extreme ends. They note that such expressions "will not normally allow the actual time to go beyond the specified range though it could err slightly upwards". They do not unfortunately discuss n or m where it refers to other things than time. Their suggestion about time expressions is partly supported by the result obtained for the one time expression I tested - six or seven hours which produced a mean interval centre of 6h 42 mins and a mode of 7h, with 80 percent of

informants marking times above 7h, compared to 42 percent marking times below 6h.

It is clear that the two numbers given are highly relevant to the interval designated. Over the ten examples tested, the mean percentage of informants marking both given numbers as part of the interval was 79.0. Scores for the individual items are given in Table 3.4.

Table 3.4 shows why Quirk et al's ascription of meaning is not viable. Over the ten items, the percentage of informants marking numbers outside the interval bounded by the two exemplar numbers was 75.0, nearly as high as the number marking the two exemplars. The majority of informants clearly did not feel that the two exemplar numbers marked the ends of the possible interval. As to Quirk et al's other suggestion, we can see from Table 3.4 that the overall tendency for the n or m expressions I tested was to allow an interval running higher above the higher exemplar than it did below the lower one.

A further observation concerned whether n or m was combined with a quantity measure or with a discrete item. It was observed that this had no effect on the percentage of subjects who judged the interval to extend outside that bounded by the two E-numbers. The difference was that where a quantity measure was used, fewer subjects judged the interval to extend below the n number: 41.5 percent, compared to 56.0 percent of subjects for n or m with discrete items. As far as the upper limit went, a marginally larger proportion of subjects (66.1 percent) thought the interval could stray upwards where there was a quantity measure, than where there was a discrete item (60.8 percent). The ten n or m items were ranked according to the percentage of informants who judged both E-numbers to be included in the interval.

Of the five items in the lower half of the ranking, four out of five used another quantity measure.

These two results demonstrate that, as Sadock and Wachtel suggested, the item being approximated is important in determining the length of the interval understood.

The test results contribute the following factors relevant to the meaning of n or m approximators. They designate intervals, which contain the two exemplar numbers. The most frequently occurring score (mode) is most often the point half way between the two exemplar numbers. That is, here is a symmetrical approximator, symmetrical about the mid-point between its two exemplar numbers.

A notable contrast between n or m and the other symmetrical approximators is in the general length of intervals it triggers. Expressing interval lengths as a percentage of the exemplar number given, (or for n or m, of the mid-point) shows that about/around approximations had mean interval lengths varying from 7.6 to 32.3 percent of the exemplar. n or m approximations had interval lengths of 22.9 to 66.6 percent of the mid-point. Thus an observed effect of using an n or m approximator is to increase the size of the interval designated, or, to put this another way, to be more vague.

Here I have treated n or m holistically, having rejected its analysis as a use of alternative or. While still maintaining that it should be analysed holistically, in Chapter 6 I examine the relationship between its observed meaning, and the meanings of its constituent parts.

All the approximators discussed so far appear to designate symmetrical intervals. We now come to consideration of an apparently different phenomenon - approximations whose intervals are skewed in relation to their E-numbers.

#### 3.4.4 n or so

##### Distribution

For some speakers, the following judgments hold:

- (35) Six or so books
- (36) \*six books or so
- (37) ten pounds or so [lbs]
- (38) ?ten or so pounds

With regard to the unacceptability of (36) Quirk et al state: The items preceding the or so approximation must be units " of measurement or items contextually rendered units of measurement". For certain speakers an arrangement like (38) is also unacceptable. These people appear to have simplified their grammar such that they have one rule stating that Ns designating units of measurement precede or so and Ns designating discrete items follow it. A further factor is that an arrangement like (36) becomes more acceptable (less awkward) where the number involved is larger, eg:

- (39) three thousand students or so

Quirk et al's observation is born out by all the examples I collected, thus

- (40) [letter to York Weekly Advertiser]

York is a wonderful place. All through the year we have holes in the road, we have the tourists and for six months or so we have the stink from the sugar beet factory [DN/7]

whereas if the N is not a unit of measurement, it follows:

- (41) [questionnaire on student housing]

+The response was again poor - only fifty replies from the  
1,500 or so questionnaires which were  
 distributed [written SO 4.12.81]

Configurations of the type in (38) also occurred ("eighty or so pence", "ten or so years ago"). No obvious explanation for Quirk et al's rule suggests itself. The unacceptability of (36) as compared to (35) may arise from what can be observed of their meanings. Or so triggers a vague reading which is understood to attach vagueness to the item immediately preceding the or so. Where a number immediately precedes, this means that parts of whole numbers (ie real numbers between the whole numbers) may be involved in the interval. Something hearers know about the number system is that there are units smaller than whole numbers. Equally where a measure noun is immediately to the left of or so as in (37), it is this which is made vague, but quite acceptably, since language users know that the units designated by measure nouns are susceptible to division either into smaller units or into parts of units. But where the item preceding or so cannot be so subdivided, as with books or people, the approximation seems contradictory, and gives rise to a judgment of unacceptability. This would leave the contrast between (36) and (39) still unexplained. We know from the test that, pragmatic considerations aside, larger E-numbers produce longer intervals; so the interval in (39) may be something like 500 (cf Table 3.2, item 21, the result for 3,000 or so students), whereas that for (36) might be 2.5 (cf Table 3.2, item 15). One possibility is an explanation connected with the way people perceive numbers. The quantities involved with low numbers can be conceived of at a practical level, in a way that the high numbers cannot. "Six people" are imagineable, and picturable, in the mind, in a way that 3,000 are not. From the point of view of perception 3,000 is just "very many". In this connection we may note the many examples

cited by Menninger (1969) of 'primitive' peoples having only lexical items for a few low numbers, and a word for "many". It can be said perhaps that we "know the meaning" of the high numbers intellectually, but not experientially. So, a hearer interpreting an utterance containing "3,000" does not "picture" 3,000 students; he notes rather that a high number which he knows of is being used. Pragmatic knowledge about the possibility of dividing up students (or not) is perhaps not called on in this juxtaposition so no clash results. Whereas in the case of six books or so the ability to "picture" six whole entities conflicts with the vagueness arising from or so. This is not a very well-developed or well-motivated explanation, but since I believe that the work necessary to improve it lies in the area of perception of number, I feel justified in excluding further pursuit of it from the current work.

Meaning: or so

Two main characteristics differentiate or so approximations from those mentioned so far. Firstly, a comparison of interval lengths shows that an or so approximation tends to designate a longer interval than an about/(a)round one. It shares that tendency with n or m. On about/(a)round approximations the sizes ranged from 7.6 to 32.3 percent of the exemplar numbers, whereas for or so the percentages are from 15.5 to 56.8.

The intervals judged in the test as being designated by approximations containing or so, are skewed upwards from their exemplar numbers in the manner shown by the histograms in Table 3.5. This result confirms the observation of Quirk et al (1972: 13.70) to this effect.



Again I discuss or so in Chapter 6, from the point of view of its lexical composition.

### 3.5 Combinations of Approximators

From the data, it appears that some approximators may be combined, and others not. Examples of combinations are:

(42) [tutorial discussion: length of sequence of numbers you can hold in short term memory].

Yeh but its still around that four or five region [I,13.2]

(43) B: What's the time now

C: It's about sevenish or a bit later [Camb 9B14/70]

-ish when added to numbers representing times appears to mean "about".

Quirk et al (App I.29) say "with ages, it has the meaning 'approximately'. They do not discuss its use with time expressions.

And:

(44) [paper reporting informant work at LAGB]

+We've got about five or six of them but I'm only going to talk about three of them today [LAGB 9,81]

Sadock notes in his paper (:436) certain combinations which he judges unacceptable:

(45) [21] \*Sam is about approximately six feet tall

As we saw previously combinations like approximately some are not possible, and I suggested that this is because a symmetrical approximator like approximately requires an exact number. The unacceptability of example (45) would appear to be for the same reason. But, as we can see, this explanation is challenged by (42) - (44) which according to my explanation, should not be possible. What alternative account can be given?



(47)

- a It's seven
- b It's sevenish
- c It's about sevenish
- d It's about sevenish or a bit later

which seem to me to allow a progressively greater latitude as to the actual time. Had I been aware at an earlier point in this study of the interest of these double and triple approximation cases, I would have liked to offer informant data to show this. I would predict quite confidently a result supporting my intuition.

These data, incidentally, demolish one of Sadock's arguments for proposing that approximations are more or less semantically empty. If approximators have semantic content, he argues, you should be able to pile them up. Look at (45), you cannot. All the approximator does is to trivialise the semantics so "double approximations would therefore be ruled out since a single approximator does as much semantic trivialising as is possible". This falls, since (a) double and even triple approximation is allowed (42) - (44) and (b) examples like (47) seem to show that combining does indeed give vaguer and vaguer readings.

### 3.6 Numbers in Approximations

#### 3.6.1 Certain Numbers are Favoured

In theory, it is possible to combine any number approximator with any number, whole or real, so about 10 and about 9.568 are equally possible. In practise however, approximations are very much more likely to occur with what we think of as "round" numbers, such as multiples of 5 and 10, hundreds or thousands. I have very few examples of approximations containing non-"round" numbers. We shall

see below that using a non-"round" number in an approximation may produce several particular effects not observable with "round" numbers. Earlier in this Chapter, I described how "round" numbers appear to be important in dictating the acceptable combinations of n or m approximations. Given their importance for both the form and the meaning of approximations, it is necessary to establish more definitely what exactly the notion "round number" means to language users.

### 3.6.2 "Round" Numbers = Reference Point Numbers

In a paper entitled 'Cognitive Reference Points', Rosch (1975b) investigated the composition of what she called "natural categories": ie sets of items perceived as belonging to the same set, eg numbers, fruits, straight lines. She tested the hypothesis that such categories, rather than being undifferentiated bundles of items, are in fact structured internally, in the sense that some members of the set serve as reference points for positioning the other members in relation to the whole set. She has previously shown (Rosch, 1973) that certain members of such sets were judged as 'more typical' than others or even as 'best examples' of their set. For example, her informants judged an orange to be a more typical fruit than a tomato. In her 1975 experiment, subjects were required, among other tasks, to place given numbers in particular 'hedge' sentence frames such as ".....is roughly ....." or ".....is basically.....". The numbers used are shown in the Figure 1. The numbers in the Stimulus 1 column for experimental pairs were those expected to be taken as reference points.

STIMULUS PAIRS USED IN EXPERIMENTS I AND II

Pair	Stimulus type			
	Experimental pairs		Control pairs	
	Stimulus 1	Stimulus 2	Stimulus 1	Stimulus 2
Numbers				
Set 1—Variation "greater than"				
1	10	11	17	18
2	50	52	36	38
3	100	103	164	167
4	1000	1004	1027	1031
Set 2—Variation "less than"				
1	10	9	17	16
2	50	48	36	34
3	100	97	164	161
4	1000	996	1027	1023

Figure 1 (adapted from Rosch, 1975b)

The following figure shows the number of subjects (out of a total of 240) who used stimulus 1 as the reference point (ie, they placed it in the right hand blank in the sentence frames, producing a result like 'eleven is roughly ten':

Set 1		Set 2	
Experimental	Control	Experimental	Control
166	109	220	151

$p = < .001$

Figure 2 (adapted from Rosch, 1975b)

Rosch reports her results as "highly confirmatory of the basic hypothesis. Subjects consistently judged supposed reference stimuli in the domain of . . . numbers in the decimal system to belong in the reference position in sentence frames containing hedges." The substantive implication of this result, she suggests, is that in a natural category such as numbers, not all members are equivalent. Certain members of the category serve as reference points to which other members are related. The relevance of this finding to the present study is that Rosch's number stimuli (that is those judged to

be reference points) were all multiples of ten. I have already suggested that multiples of ten are among those numbers available for making n or m approximations. They are also frequently found in other approximations. These observations allow us to go beyond an intuitive judgment that certain numbers are "round", to the point where we may suggest that the expression "round number" designates, as far as ordinary English is concerned just those numbers which, in Rosch's terms, are reference points in the base ten number system. To take this (speculatively) further, if we imagine a mental lexicon which utilizes these reference points in its organisation, we might expect the reference point numbers (RPNs) to be more "easily" accessible, and therefore perhaps faster to interpret. If language processing uses what Yorick Wilkes (personal communication) has called 'the laziness principle', RPNs might require less processing than other numbers, and therefore be suitable for use in approximations. Coincidentally, when I asked some test informants why speakers would use an approximation when they in fact knew the exact number in question, they said that it was "easier".

It may be seen that those numbers which emerge as RPNs, do so in part as a result of the structure of the base-10 number system. The whole system is generated by a small set of recursive rules. Thus Hurford (1975) was able to propose grammars which would generate all the number words from a fixed set of recursive rules, plus some phonological exception rules.

Menninger (1969:10) suggests that the structure of the number system has perceptual effects on how we use it. He thinks we access RPNs by grouping, and other numbers by counting on from an RPN; so that 1000 is "found" sooner than 543. He writes:

"Even today, if we contemplate the number sequence in our minds, 1000 seems clearer, more "available" to us than 543, a number of which we can really say only that we must certainly arrive at it if we keep counting long enough. We can visualize it directly only with difficulty, if at all." (:46)

If this is right, it accounts for the test subjects believing that approximations containing round numbers are "easier" to use than exact numbers.

But it is the case that the numbers which function as reference points may be determined by other factors than the structure of the number system. Menninger notes the importance of 12 in Western European Cultures. 56 lbs ( = half a hundredweight) is an RPN quantity while we still use non-metric measures, as is 8ozs. Again, six feet is an RPN quantity in Western Europe and North America, when talking about people's heights (but as Sadock points out, it is not perceived as such if we are talking about the height of cockroaches).

A different kind of evidence for the importance of RPNs in communication, and a good indication of which numbers they are, comes from word frequency counts. Johansson (1980) looked at the frequency of the words for numbers one to twenty in four different corpora. His findings are reproduced in Figure 3.

The frequency of the forms one to twenty

	LOB	Brown	Carroll et al	Jones and Sinclair
one	3,203	3,439	19,976	775
two	1,652	1,516	10,085	251
three	787	704	4,413	157
four	442	417	2,357	87
five	334	385	1,725	127
six	269	247	1,229	92
seven	140	132	687	51
eight	121	123	651	45
nine	100	103	417	31
ten	203	185	1,225	100
eleven	49	40	146	17
twelve	58	49	339	32
thirteen	11	11	116	0
fourteen	22	34	93	0
fifteen	48	61	23	23
sixteen	27	21	104	17
seventeen	21	27	59	10
eighteen	24	18	68	13
nineteen	14	21	40	17
twenty	189	174	387	66

Figure 3(from Johansson, 1980)

He notes that there is a pattern of decreasing frequency from low to high numbers, except that:

"The consistently decreasing frequency with higher numbers is, however, broken by peaks for 'round' numbers (10, 15, 20 etc). There are also one or two other deviations, in particular a peak for twelve and a slight drop for 13." (:69)

He notes that in Jones and Sinclair

"there is a peak for five, which seems to count as a 'round' number in spoken English" (:71)

The RPNs are very apparent, and include 12.

RPNs are also important for approximation because they can be used to approximate on their own, without a lexical approximator, as we saw in Chapter 2. Wachtel (1980) has some discussion of these uses.

### 3.6.3 Reference Point vs Non-Reference Point Approximations

Number approximations often contain RPNs. What happens when they do



not? Some examples:

(48) [doctor/patient interview]

+I: When were you, how old were you uh (pause) when you were in Japan? When you were in Japan at that time?

P: (mumbling and unclear initially) I'd say three years ago

I: Okay so you were about age 31 [Cicourel, 1974]

(49) [article in The Guardian on the history of the death penalty]

+The records, though far from complete, show that about 61 people died on the block

Now in (48) the doctor's use of about reflects the patient's uncertainty (indicated by "mumbling" and "I'd say"). Neither of them know exactly how old she was (cf Chapter 5, Section 5.4.4). But supposing it was three years ago, 31 would be right rather than the nearest RPN, 30. (Although years can be subdivided, we do not usually divide them when talking about people's ages, so the effect I describe below relevant to (53) and (54) is not present here. Of course we can imagine a situation where years would be seen as divisible, for example a discussion of children's ages for examinations.) Notice now that one would tend as a hearer to understand a different (longer) interval in:

(48b) Ok so you were about age 30

than in (48) as it was actually said. (48) is a narrower approximation. This is shown also by considering the invented

(50) It's going to cost about £25 to have the exhaust done

(50') It's going to cost about £26 to have the exhaust done

where in the same situation, the interval for "about £26" would appear to be understood as smaller than that for "about £25", an RPN. I am arguing that whether an approximation contains an RPN or not affects the length of interval understood. A different account, proposed by Sadock, is that the number of significant figures in the E-number

alters the meaning, such that

(18) [11] Odessa has a population of approximately one million

(19) Odessa has a population of approximately 990,000

are judged as designating a wider and a narrower interval, respectively. He further suggests that the relevant interval can be obtained by subtracting fifty percent from, and adding fifty percent to, the last significant figure (:433). This would give an interval of half to one and a half million for (18) but only 945,000-1,035,000 for (19). This appears to be quite a good explanation. The entry referring to Mount Everest in the Encyclopaedia Britannica says that it has a height of "29,028 feet". The presence here of five significant figures has the function of telling the reader that this height is being given to the nearest foot. Compare the heights given in the accounts of particular ascents, for example:

(51)+ Norton went on to 28,300 ft, a height unsurpassed until 1953

(52)+ Finch and Bruce reached 27,300 ft

which I think have the interpretation "approximations to the nearest hundred feet".

However, Sadock's account will not deal with (50) vs (50'). Neither will it explain an effect which I think is present in (48) -  
 x (49). In each of these, hearers receive, I think, a strong impression that the figures given are the exact figures involved to the best knowledge of the speaker or writer. The tendency is to suspend the conventional approximation reading, and understand rather a self-defence ploy : "this is the figure, but just in case it is slightly different, I'm using an approximation, so that I'm not wrong". I discuss this effect further in Chapter 5, Section 5.4.5. The point here is, why does the effect arise in these examples, but not apparently with RPNs? I suggest that hearers have a very strong

predisposition to expect RPNs to follow approximators. When they do not find them, they judge that there is a special reason for it, and read off particular implicatures (ie, there is a violation of the Maxim of Quantity). If it was not the case that RPNs have special status and that approximations usually use RPNs, this effect could not be accounted for.

There is another effect which arises from using a non-RPN. This is described in Wachtel (1980:204). Compare

(53) Sam has \$10,000 in his savings account

(54) Sam has \$9873 in his savings account

of which Wachtel says: "10,000 is a round number and 9,873 is not, if we are measuring Sam's wealth to the nearest thousand dollars, but 9,873 is a round number if we are measuring his wealth to the nearest dollar, his account may actually contain exactly \$9,872.91."

[It must be remembered that for Wachtel "round number" = appropriate exemplar number, in my terms; it has nothing to do with RPNs]. Now, what triggers the reading of 9873 as expressing a measure to the nearest dollar, is that it is a non-RPN. This reading of a non-RPN is different from the "self defence" one suggested for the earlier examples. I think this one arises in this case because dollars are perceived as things which can be subdivided into smaller conceptual units (=cents). If a non-RPN is used of something which cannot be so subdivided (eg people, as above) the self-defence reading is favoured. Wachtel's paper takes no account of these differences (cf Channell, 1980, for discussion in the same vein).

### 3.7 Implicatures and Entailments of approximator + n structures

In considering several different approximators, we have seen that the effect of using an approximator is to designate an interval of

numbers, any of which could be the exact number in question. In his 1980 paper, Tom Wachtel makes some interesting observations about the likely implicatures arising from, and also the entailments of, sentences containing approximators.

Firstly, a sentence containing an approximator has the im-plicature (Gazdar's term for a potential implicature not necessarily realised in any given case; Gazdar, 1979:55), that the exemplar number is not the number in question. For example, the assertion of example (41), repeated below:

(41) [questionnaire on student housing]

+The response was again poor - only fifty replies from the 1,500 or so questionnaires which were distributed [written SO 4.12.81]

implicates that not exactly 1,500 questionnaires were distributed.

Furthermore, as Wachtel notes, this im-plicature can be explicitly cancelled (Grice 1975), or reinforced (Sadock 1978), cf

(55) 1,500 or so questionnaires were distributed - in fact exactly 1,500

(56) 1,500 or so questionnaires were distributed, but not exactly 1,500

(cf Wachtel's examples, 203-204)

Another im-plicature is "speaker does not know how many questionnaires were distributed", and this can also be cancelled by (55) or (56).

Secondly, an exact sentence always entails its equivalent with an approximator; that is

(57) Exactly 1,500 questionnaires were distributed

entails

(58) 1,500 or so questionnaires were distributed

A third point, not noted by Wachtel, but which follows quite naturally from this entailment, is that an approximation like (41) cannot ever

be used to assert (57). An approximation of this type can never, whatever the context, be interpreted as asserting that exactly and only its exemplar number is the quantity in question (although a hearer may infer this, as we saw above in relation to approximations with non-RPN numbers).

Notice that this is not the same thing as saying that the fact reported in (57) is not compatible with (41). Precisely as we have seen, from the test results and other evidence, the quantity 1,500 is among those for which (41) would be appropriately used.

### 3.8 A Note on Partial Specifiers

Not less than is one of a set of expressions which specify upper or lower limits (Wachtel's term is PARTIAL SPECIFIERS) for quantities on the number continuum. Others are at least, at most, less than, (not) more than, under, over. These contrast with the approximators under investigation here in that they do not apparently involve the cut-off point problem which is the focus of interest of the expressions discussed so far. As noted by Wachtel (1981:320), in terms of truth-conditional semantics,

(59) She was wearing a dress costing not less than £500

[test item 11]

"is not false even if the dress cost £900 or £3,500".

I had included two examples with not less than in my test to provide a deliberate contrast to the other test items. I thought that people would treat these expressions differently. Contrary to my expectations, however, many subjects indicated that not less than expressions designate intervals which extend below their exemplar numbers, 27 and 24 percent respectively for the two items tested.

Furthermore, contra the contention that there is no upper cut-off point for these expressions, subjects gave consistent upper limits.

The size of the interval designated by not less than appeared to be the same as that for about. For example "about £500" produced a mean interval length of 51.92, and "not less than £500", a mean interval length of 54.62. The important difference is that for not less than the mode in each case is higher than the exemplar number rather than the same. That the majority of subjects place their interval for not less than above the exemplar number is shown by the resulting positively skewed histograms (see Table 3.6), which can be revealingly compared with the symmetrical ones for about/(a)round (Table 3.3).

Apart from having failed to show a result contrastive with that for the approximators, the effect noted raises a distinct question mark over the suggested analysis of these partial specifiers, ie that they have a specified limit in one direction and none in the other. Could it be that these should be dealt with in the manner of the other approximators? While partial specifiers (if such they are) have not been singled out for close attention herein, a short digression on the above question is justified, inasmuch as the relevant arguments are closely related to (or the same as) those pertaining to the established set of approximators. In addition, an answer to the explicit criticism of my approach made by Wachtel (1981) is required.

So there are two problems: (1) subjects judged that the intervals could run below the point marked by not less than, and (2) subjects judged that there was an upper limit. I shall first consider these separately.

One possibility is that the test result is spurious. Wachtel (1981:320) suggests this, claiming that subjects were misled into judgment (1) by the use (in both items) of natural round numbers, which are habitually used alone to imply symmetrical approximation (cf discussion in Wachtel, 1980, Channell, 1980, and 3.6 above). Furthermore, the experimental set across items could have led them to erroneously judge these two items as more like the others than they really are in non-test uses. Wachtel takes this result as evidence that one should not rely on the results of elicitation tests to give indications about semantics.

Let us now consider a non-test use of not less than n. Unfortunately this was not collected verbatim, and so is to a certain extent reconstructed. I telephoned the garage to book my car in for a rear brake overhaul. To help myself come to terms with the eventual bill, I asked for a verbal estimate of the likely cost and was told "not less than £60, more if we find anything else wrong". Now, suppose that when I collected the car, I was told that the cylinder seals had not needed replacing, so the bill was only £58.50. I think I would be unlikely to challenge the garageman with the falsity of his estimate for the job. That is to say, I would be making exactly the same kind of judgment as we have seen applying to classical approximations - not less than £60 would not normally be considered false, say, for amounts between £57 and £60. cf the formulation of Wachtel (1980:204): "(14) would not normally be considered false, or even misleading, if the actual population of Odessa is, say, 1,002,493".

Another example shows that the point "specified" by the partial specifier does not have to be exact. In this case, the point is made vague by an approximator. If the point mentioned by a partial specifier was perceived as a fixed limit, (60) would be some sort of contradiction, or at least should sound odd:

(60) +She's not old enough, rubbish. Well she's only about 45  
at the very most [Camb 1B267/p3]

If these examples are typical of the use of partial specifiers, then the result obtained in the test may be seen as a true reflection of the meaning attaching to them.

It appears therefore that in this respect the evidence which will constrain our treatment of the meaning of not less than n is exactly the same as that which will constrain our treatment of the approximators. Note also that the same sort of pragmatic factors as have been mentioned previously also influence these meanings. Not less than n will receive a very different reading depending on whether it is being used in an engineering shop, or to talk about dress prices.

The second point was that subjects judged upper limits to apply, in direct contradiction to the usual view that no limit is involved in these cases. As pointed out by Wachtel, what happens is that hearers draw on such information as the purpose of the utterance, and assumptions about the speaker's knowledge, to determine the extent of the interval of possible numbers in a given situation. Examples show these factors at work.

(61) [Customer telephoning builder]

+B: Could you give me some idea of how long it would take?

C: Well the quote might be done within three or four days  
but the job won't be done for at least five weeks [Camb  
111B1058]



I think it is likely that the customer in this example would decide that a false or very misleading estimate had been given if no work had been done after twelve weeks. One normally reads at least five weeks as "in an interval including five, but more likely over than under".

Here, the situation appears entirely parallel to that for the approximators, and just the same kind of pragmatic information is involved in deciding where the upper limit comes.

My conclusion (contra that reached by Wachtel; 1981:320) is that partial specifiers are actually used to approximate in very much the same way as the approximators so far discussed.

### 3.9 Summary

In this chapter I have presented a considerable quantity of different data concerned with number approximations of the approximator + n type. I have been especially concerned with describing the meanings which hearers attribute to these expressions when they are used.

Before turning to look at data concerned with another set of vague expressions, I summarise below the Propositions about Speech Behaviour relevant to the meaning of number approximations, which a theoretical analysis must account for.

- 1 There is a set of expressions whose effect is to bring a vague reading (= an approximation) to an utterance containing a number
- 2 The resulting approximations are understood as designating continuous intervals of numbers
- 3 Different approximators change the interval designated. Given an Exemplar-number x, (and setting aside the effect of other factors such as situation, and the form and nature of the E-number), the effect of the different approximators (as observed from the test results) can be

seen schematically as follows:

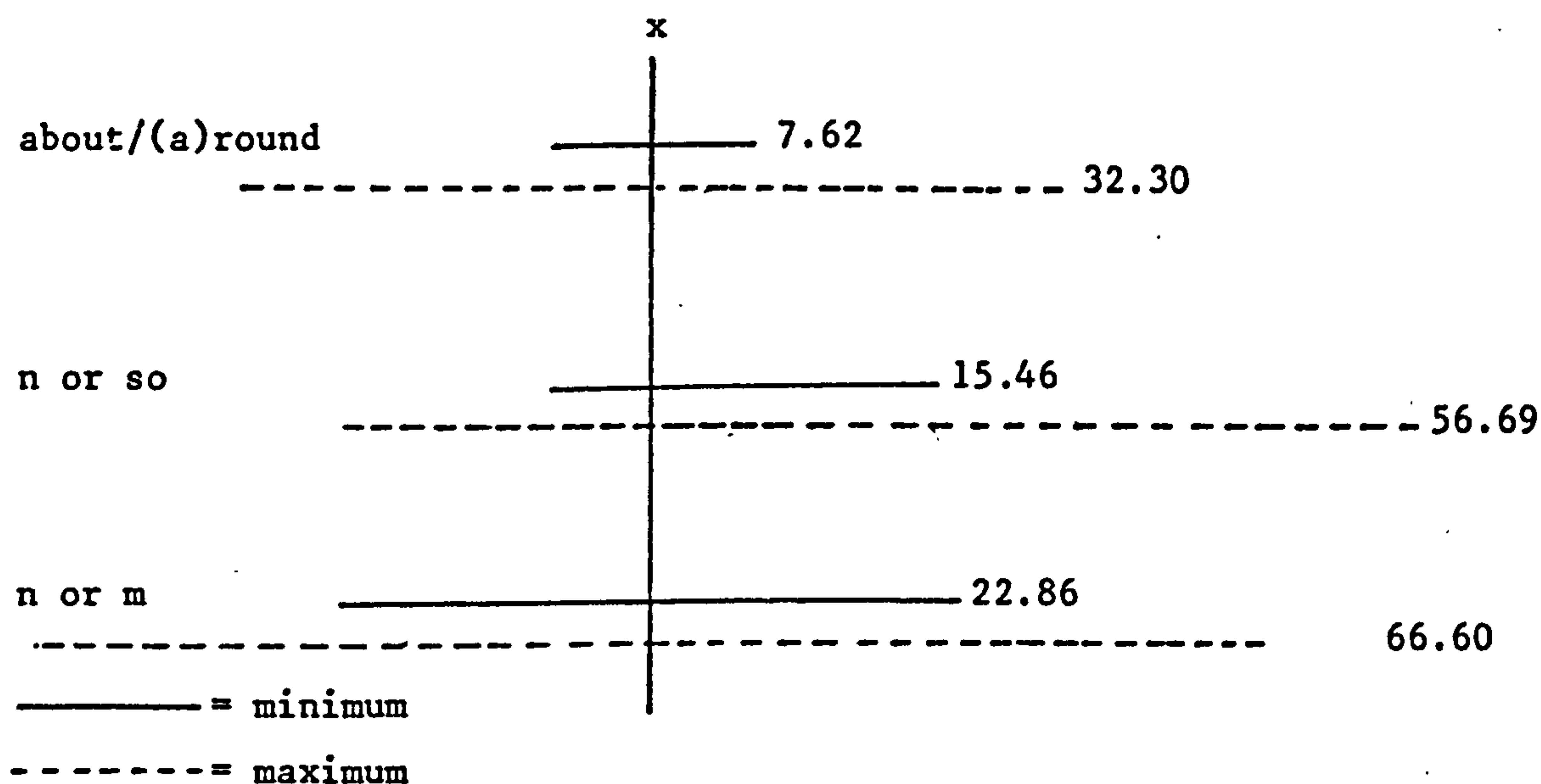


Figure 4

4 Although there is a high degree of agreement among speakers that numbers near the exemplar number are members of the interval, there is variation about the extent of the interval in any given case

5 The size and form of the exemplar number both affect the length of the interval

6 Whether the E-number is a round number (= Reference Point Number) or not affects the length of the interval ("about 31" vs "about 30")

7 The nature of the item being approximated (discrete vs non-discrete, man vs cockroach) affects the interval

8 The conversational setting in which an approximation occurs affects how it is understood

9 Sentences containing approximators characteristically have the entailments and implicatures described in 3.7.

Table 3.1

List of items used in number approximations elicitation test

- 1 "After the girl had rung up everything I'd bought, I suddenly realised I only had about £2.00 on me"
- 2 "You'll need about 4lbs of oranges"
- 3 "We should be there around 6"
- 4 "He's producing about ten pages a week and they're all getting published"
- 5 "There were about 15 people there"
- 6 "... it's something around the 20 percent mark and it's never changed"
- 7 "We sent out two hundred questionnaires and had about 40 replies"
- 8 "It's going to cost about £500 to fly there and back"
- 9 "I want to spend about £14,000"
- 10 "In a country with a population of around ten million, like Belgium, proportional representation makes much more sense"
- 11 "She was wearing a dress costing not less than £150"
- 12 "The repair bill certainly won't be less than £500"
- 13 "It was a good evening, we must have drunk a bottle or so of wine each"
- 14 "How much flour shall I put?" "Two spoonfuls or so"
- 15 "Six or so books will be enough for a week's reading"
- 16 "There are ten pounds or so of butter in the freezer"
- 17 "Ten or so litres of wine should be enough for the party"
- 18 "They hired the de Grey rooms and invited 200 or so people to a champagne lunch"
- 19 "It's okay, I've got £500 or so in my account at the moment"
- 20 "It'll cost two thousand or so pounds to do this place up reasonably"
- 21 "There are 3000 or so students at York"
- 22 "The Tower of London gets 30,000 or <sup>so</sup> visitors a year"
- 23 "You'll need three or four metres of rope"
- 24 "Yes, but it's still around that four or five region"
- 25 "It takes six or seven hours to drive from Paris to the Midi"
- 26 "The garden extends eight or nine feet beyond the true boundary of the property"
- 27 "Eight or ten students were waiting in the entrance"
- 28 "How many people will turn up for the meeting?"  
"We usually get fifteen or twenty"
- 29 "They had seventy or eighty people with broken bones over just one weekend"
- 30 "He's bought a stereo costing three or four hundred pounds"
- 31 "Two or three thousand people turned up to hear him speak"
- 32 "A burst water main in the Hull Road flooded neighbouring streets with two or three thousand gallons of water"

Table 3.2

Number Approximation Test: General Results

1	2	3	4	5	6	7
No	Item title	% subjects marking interval	Mean length	Mean centre	Mode	Interval length as % of exemplar no
1	about £2.00	100.0	.30	1.97	2.00	15.0%
2	about 41bs	73.1	.61	4.08	4.00	15.1%
3	around 6pm	96.2	.58	6.00	6.00	9.6%
4	about 10 pages	92.3	3.23	9.96	10.00	32.3%
5	about 15 people	100.0	4.65	15.05	14/15	31.0%
6	around the 20% mark	96.2	4.27	20.60	20.00	21.3%
7	about 40 replies	96.2	5.96	40.13	40/41	14.2%
8	about £500	84.6	51.92	508.00	500.00	10.4%
9	about £14,000	100.0	1067.30	14,033.65	14,000	7.6%
10	around 10 million	69.2	1.5 million	9,942,307.00	10 million	15.0%

Notes:

- 1 The Units in columns 4, 5 and 6 are those specified in column 2 for each item.
- 2 Standard half rounding, to two decimal places, and for percentages, to one decimal place

(Table 3.2 continued)

Not less than:

11	not less than £150	96.2	24.42	162.44	160	16.1%
12	not less than £500	100.0	54.42	529.00	520	10.9%

n or so:

13	a bottle or so	96.2	.568	1.08	1	56.8%
14	2 spoonfuls or so	96.2	.788	2.30	2.50	39.4%
15	6 or so books	100.0	2.35	6.21	6	39.1%
16	10 lbs or so	88.5	2.15	10.58	10	21.5%
17	10 or so litres	92.3	1.62	10.63	10	16.2%
18	200 or so people	100.00	46.15	208.46	200/210	23.1%
19	£500 or so	88.5	77.30	560.96	500	15.5%
20	£2,000 or so	100.00	550.00	2300.00	2200	27.5%
21	3,000 or so students	96.2	538.46	3117.30	3000	17.9%
22	30,000 or so visitors	96.2	4846.00	30923.00	30,000	16.1%

n or m:

23	3 or 4 metres	96.2	1.10	3.65	3.50	31.4%
24	4 or 5 region	100.00	3.00	4.71	4/5	66.6%
25	6 or 6 hours	100.00	1.51	6.70	7	23.3%

(Table 3.2 continued)

26	8 or 9 feet	96.2	2.23	8.61	9	26.2%
27	8 or 10 students	100.00	4.42	8.87	8	49.1%
28	15 or 20 people	100.00	8.23	17.61	16/17/18	47.0%
29	70 or 80 people	100.00	17.15	73.94	75	22.9%
30	3 or 4 hundred pounds	100.00	90.46	358.17	350/375	25.8%
31	2 or 3 thousand people	100.00	1260.60	2541.34	2250	50.4%
32	2 or 3 thousand gallons	100.00	1177.10	2596.00	2500	47.1%

Notes:

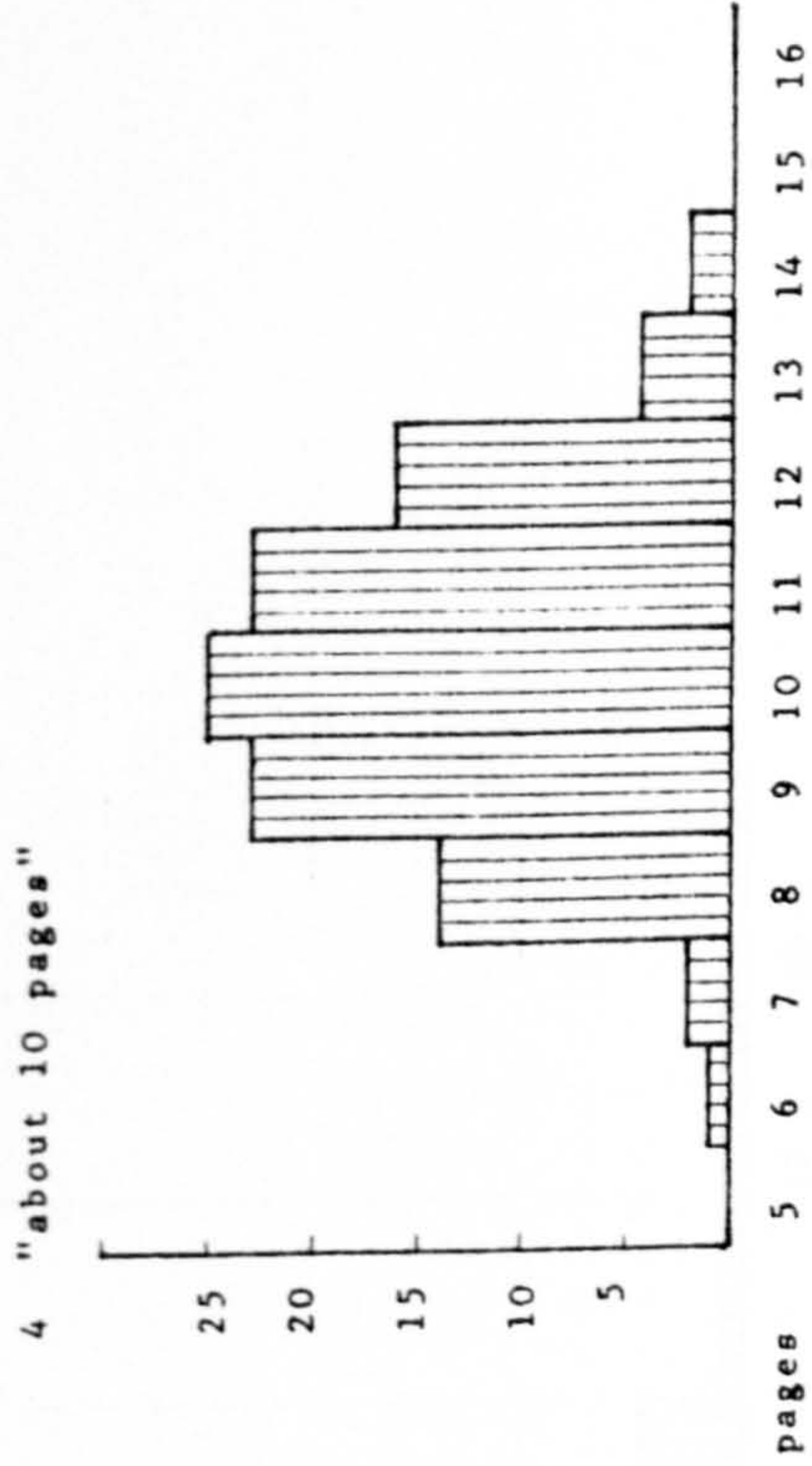
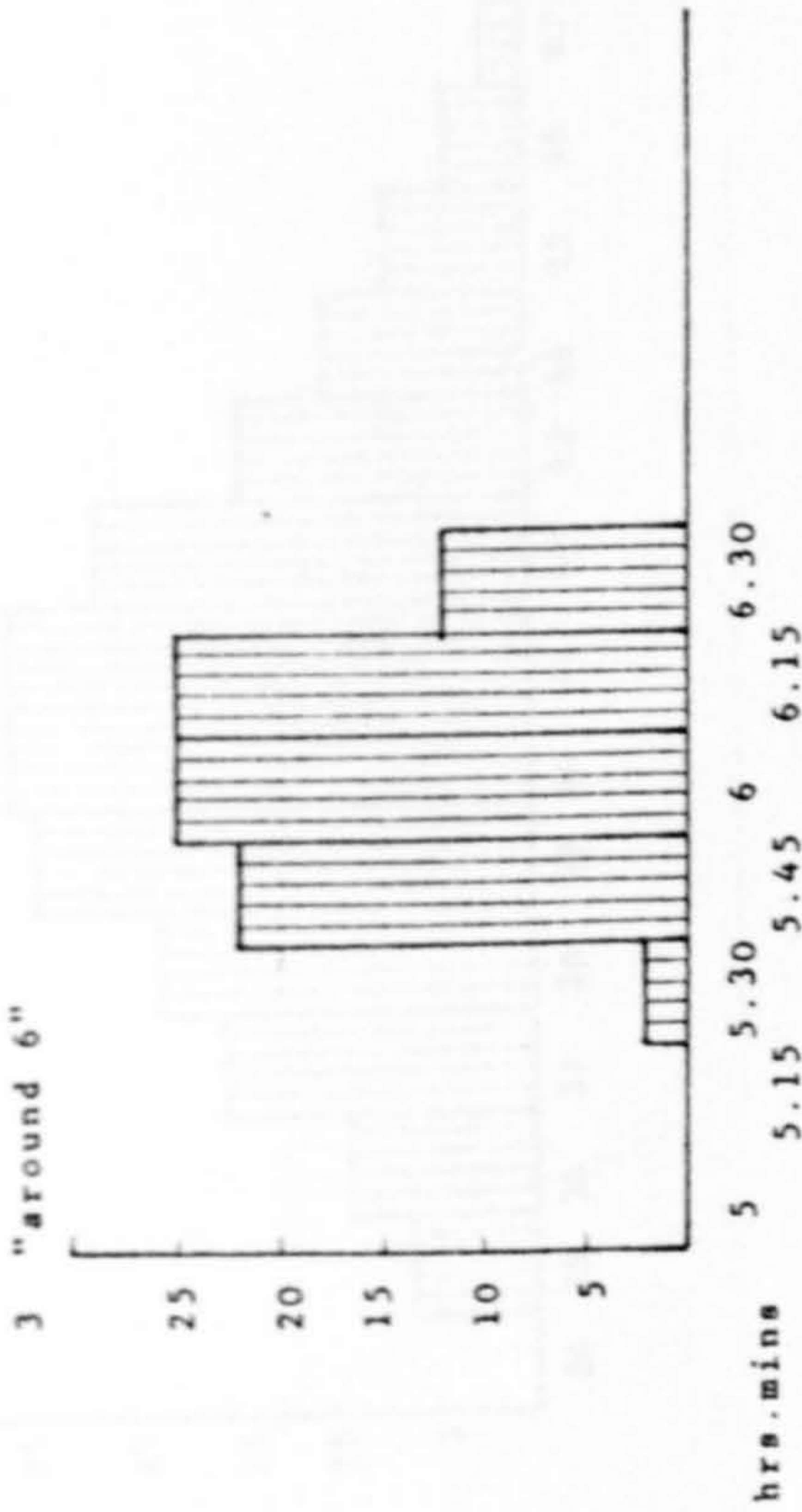
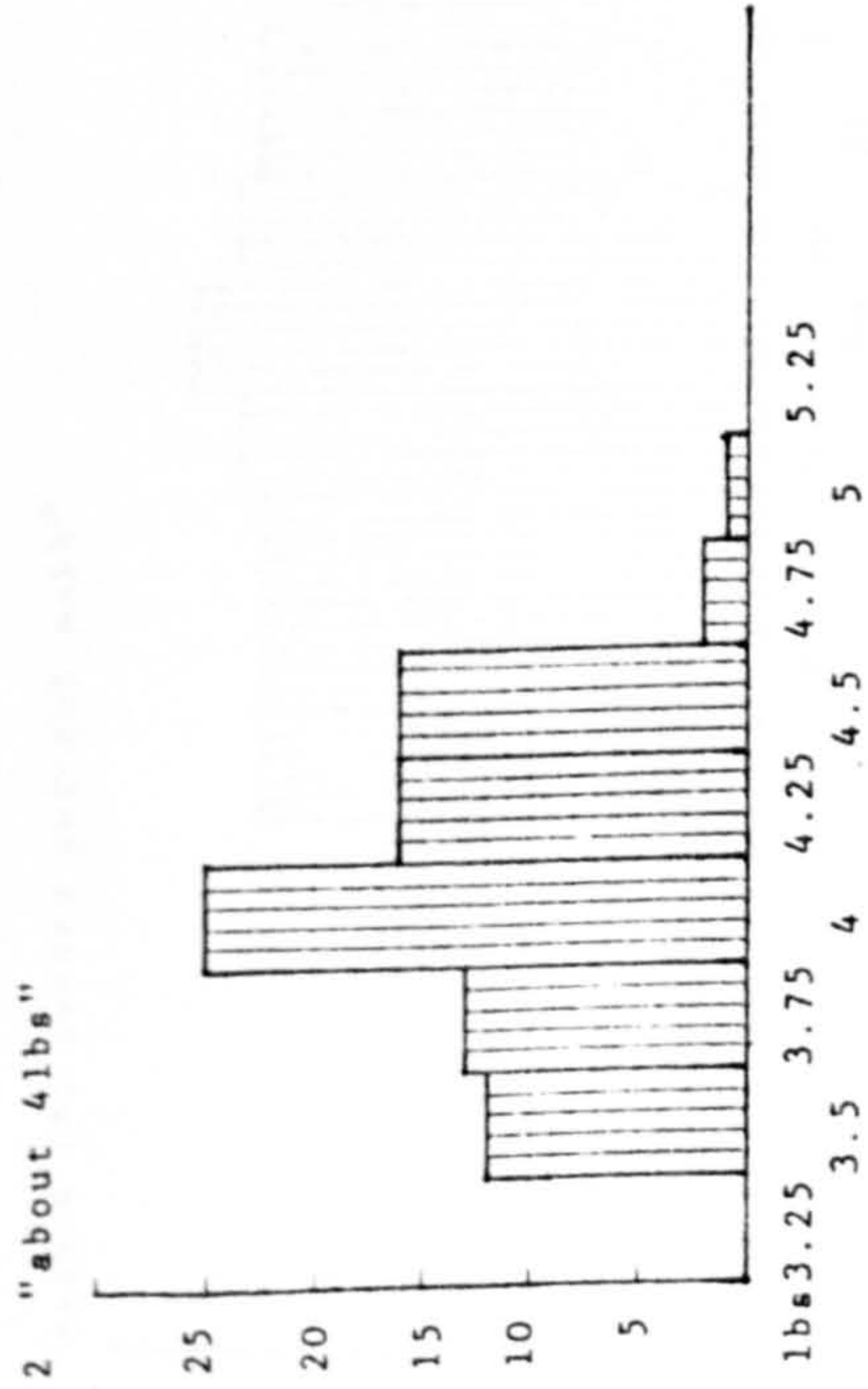
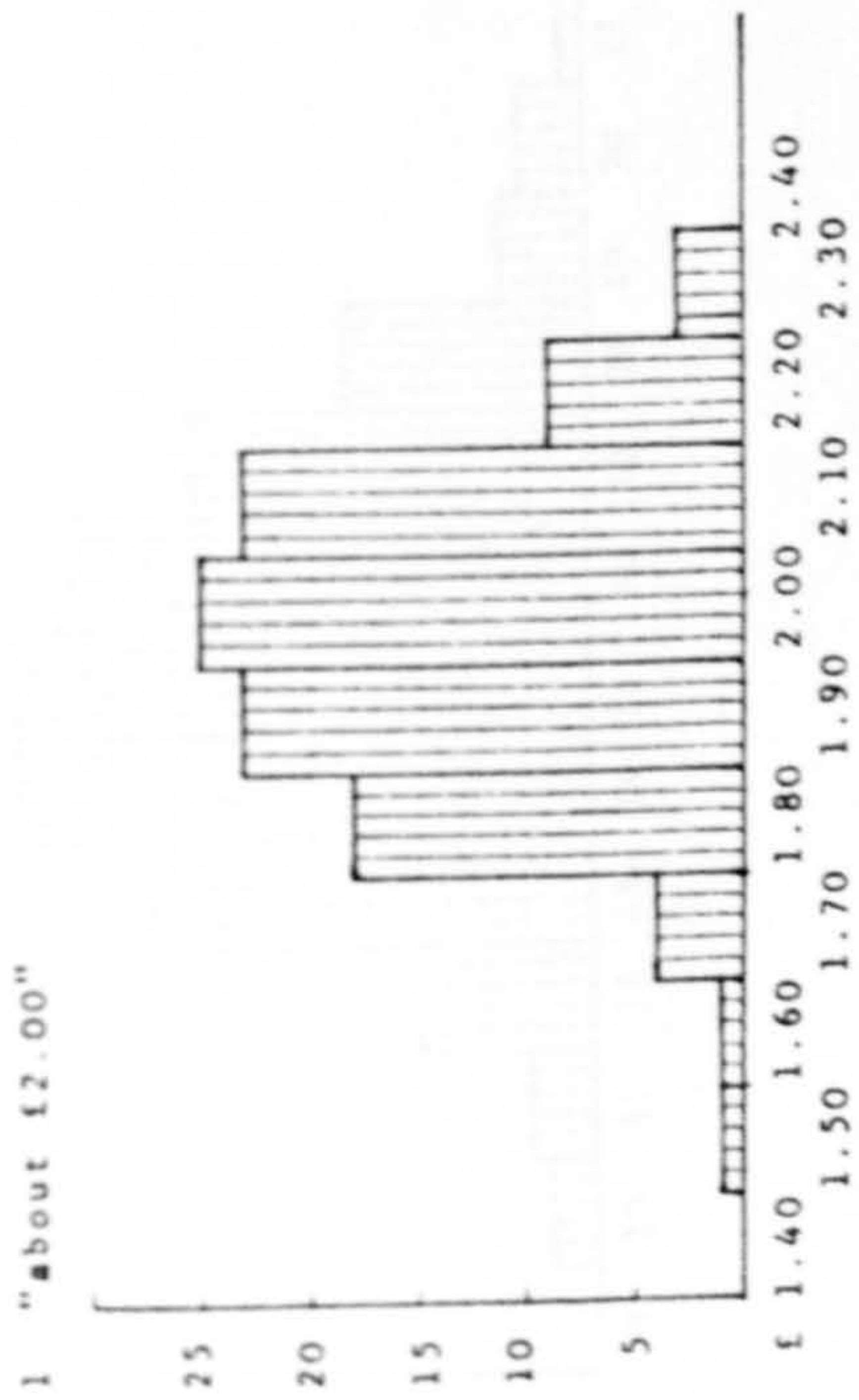
3 For n or m approximations, the mean of the two exemplar numbers was taken as the comparison point for the Mean Interval Length (column 7).

Table 3.3

Frequency Distribution of Informant Responses for ABOUT/AROUND Approximations

Note:

The score at the mode is often 25/26 informants. This is almost always due to the divergent performance of just one informant who consistently gave a low interval relative to each exemplar, or no interval at all (cf note to item 19). He apparently had his own theory of approximations which he was putting into practice. In discussion after the test he said that he thought approximations were always used for exaggeration. A second factor which could account for his different responses is that all the informants except him were in the age range 18-25, while his age was more like 50.

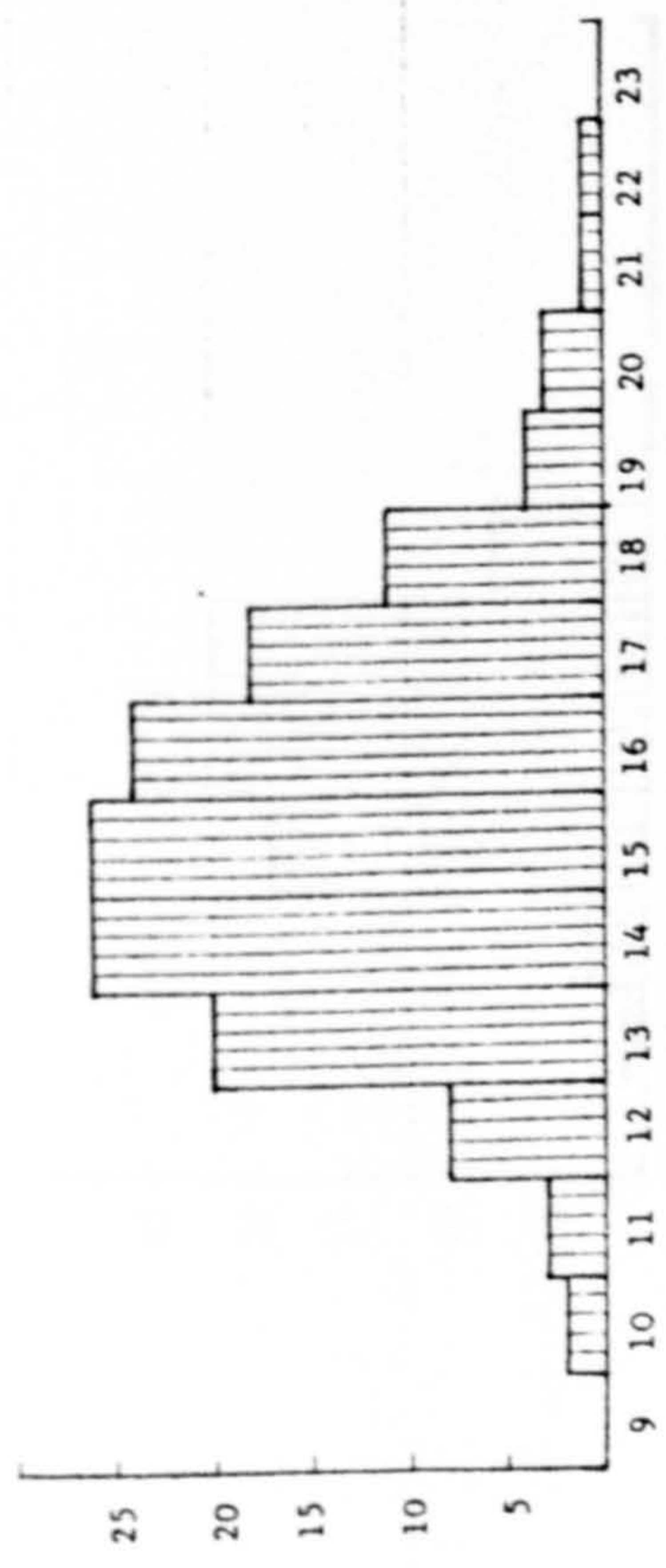


n = 26

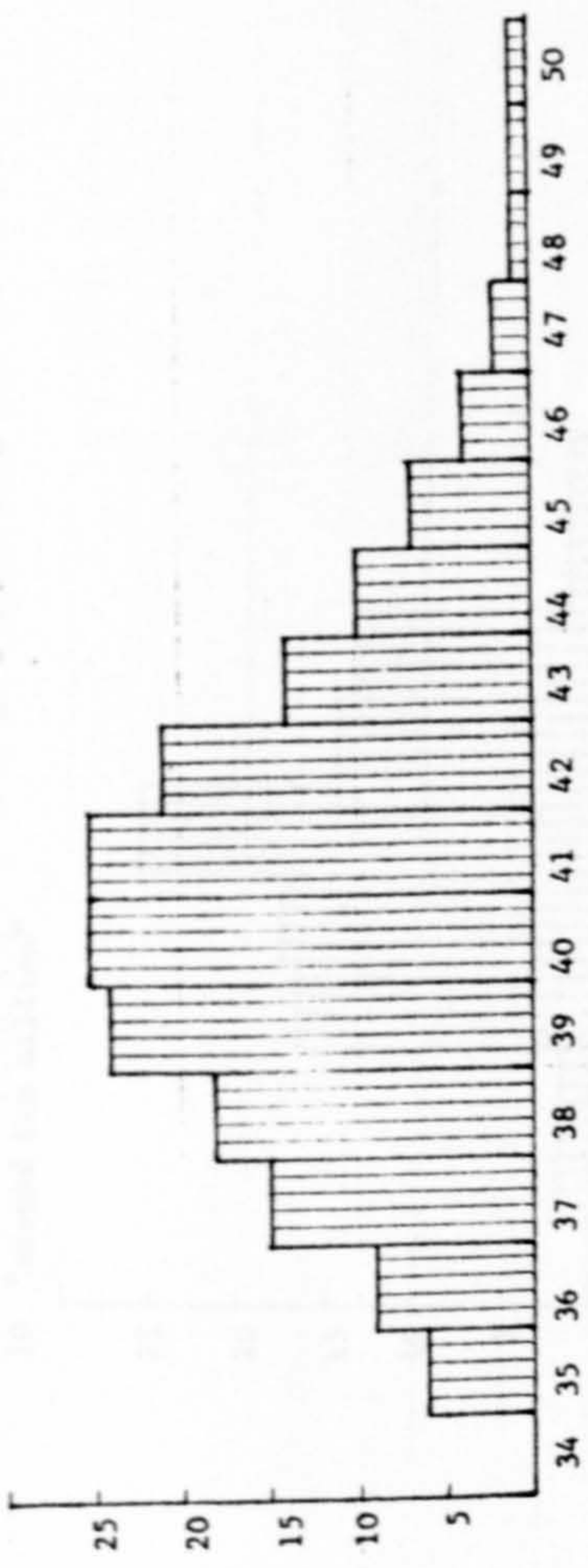
Table 3.3



5 "about fifteen people"



7 "about 40 replies"



6 "around the twenty percent mark"

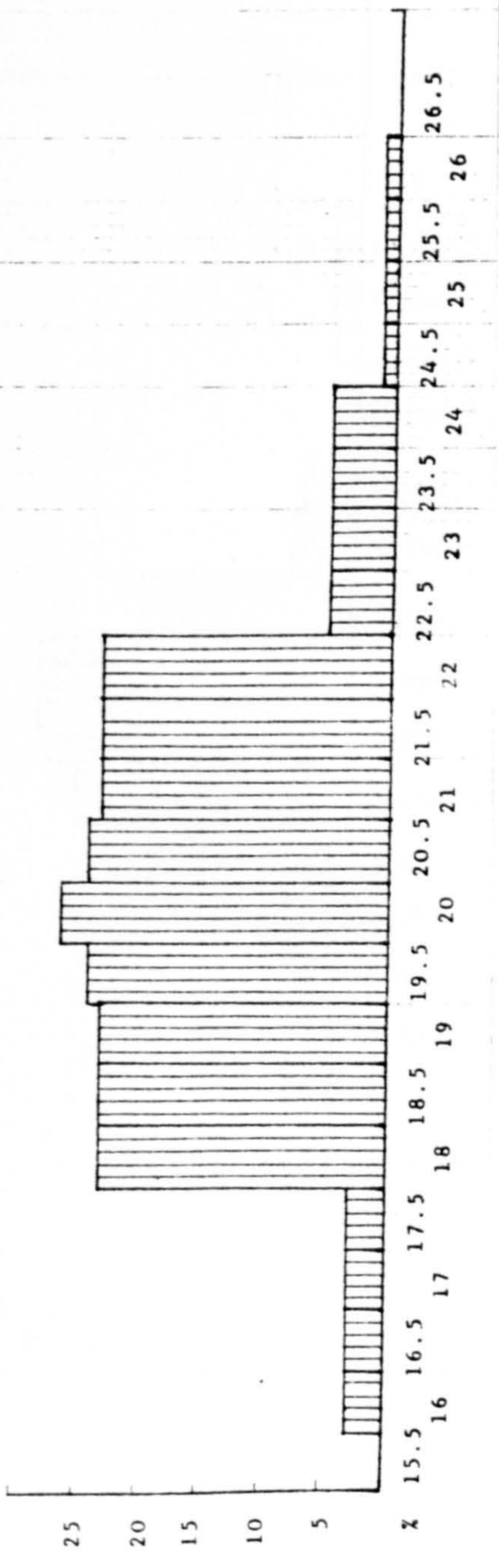


Table 3.3 (continued)

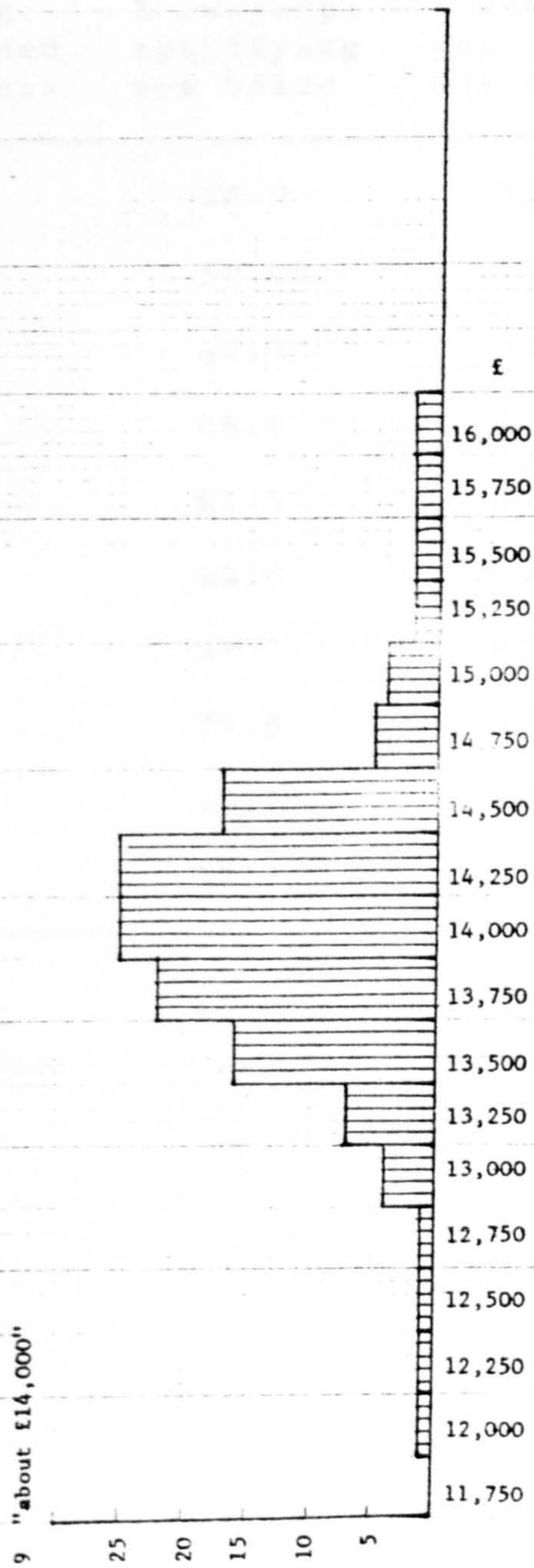
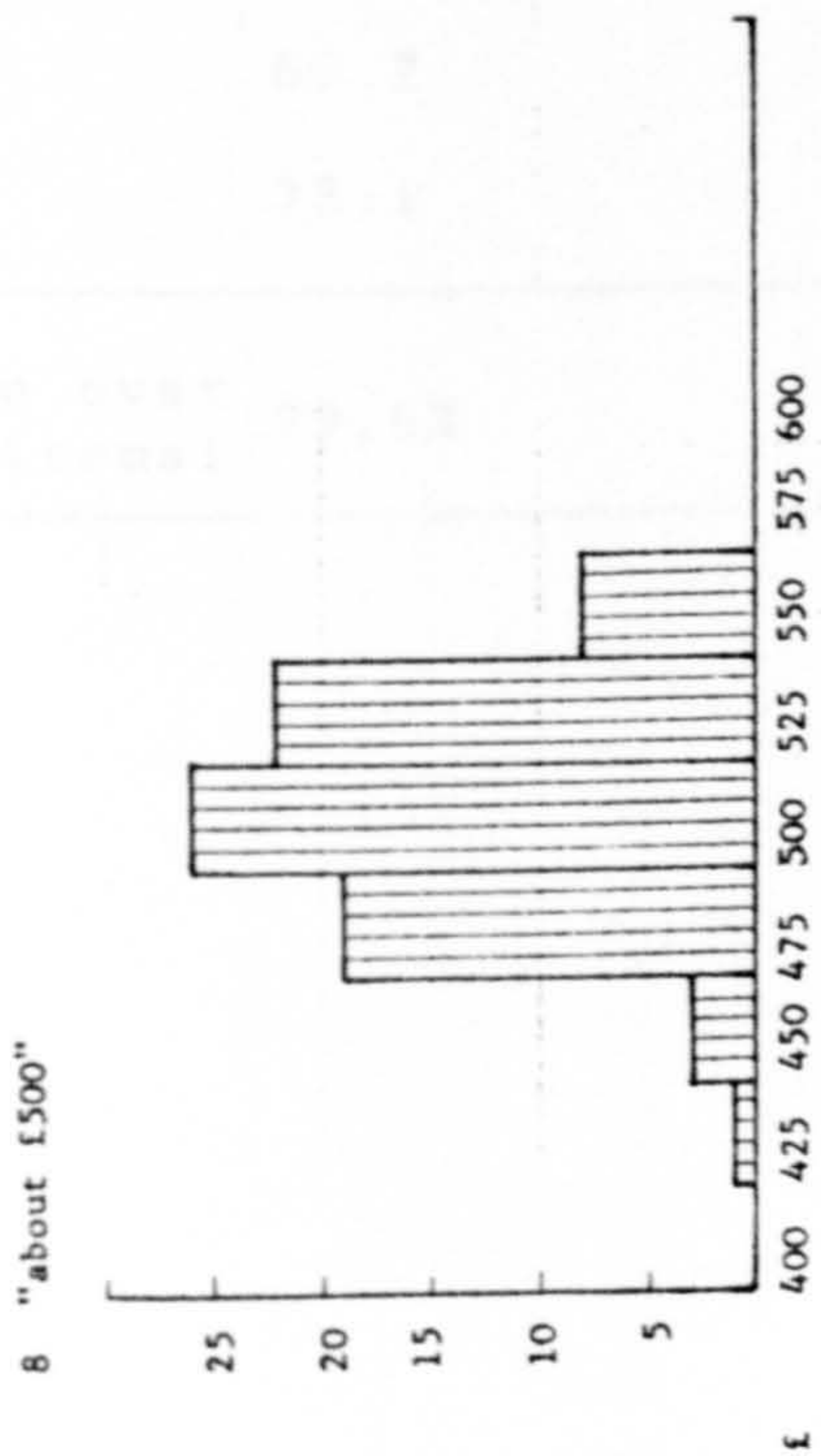
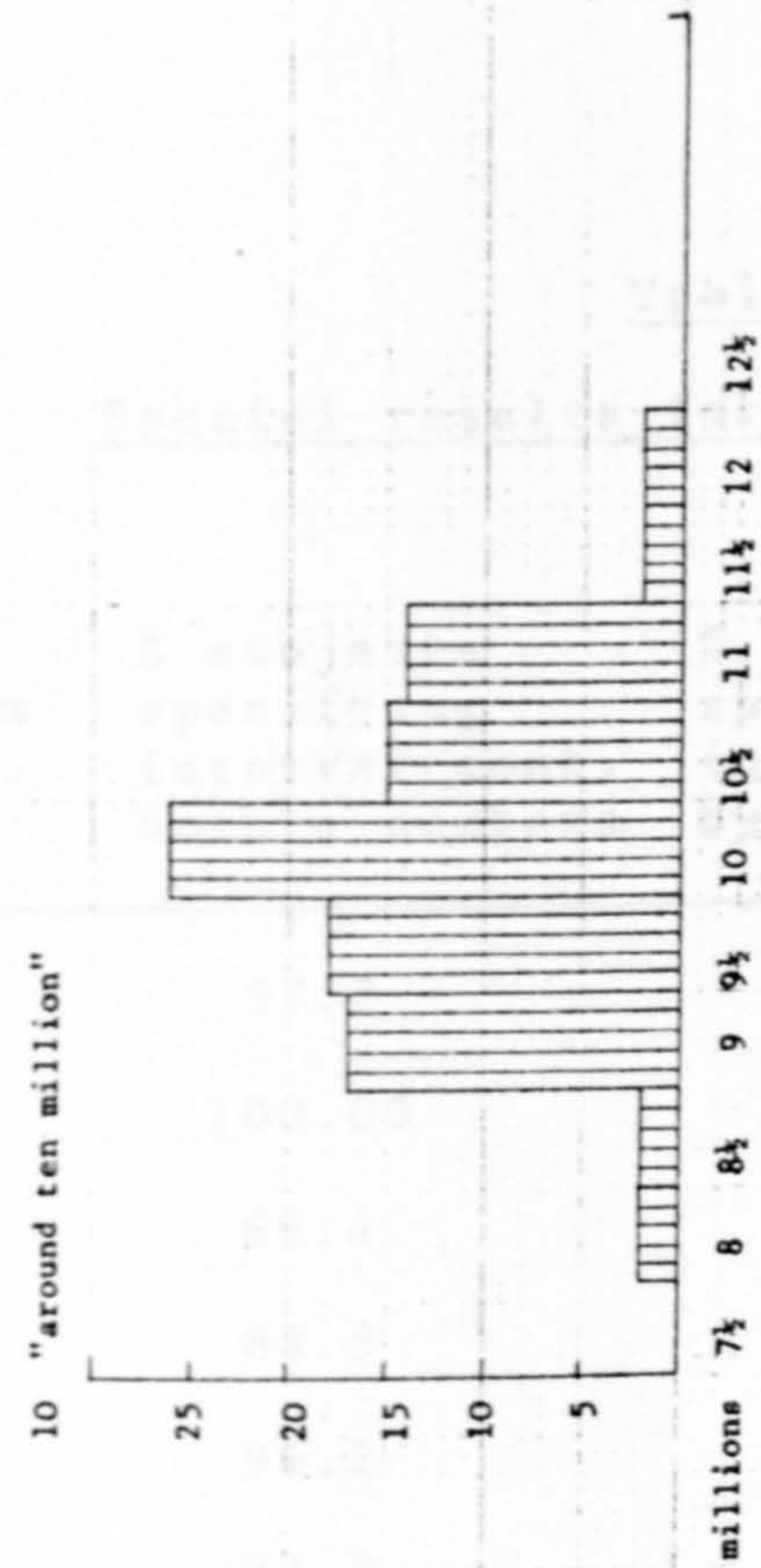
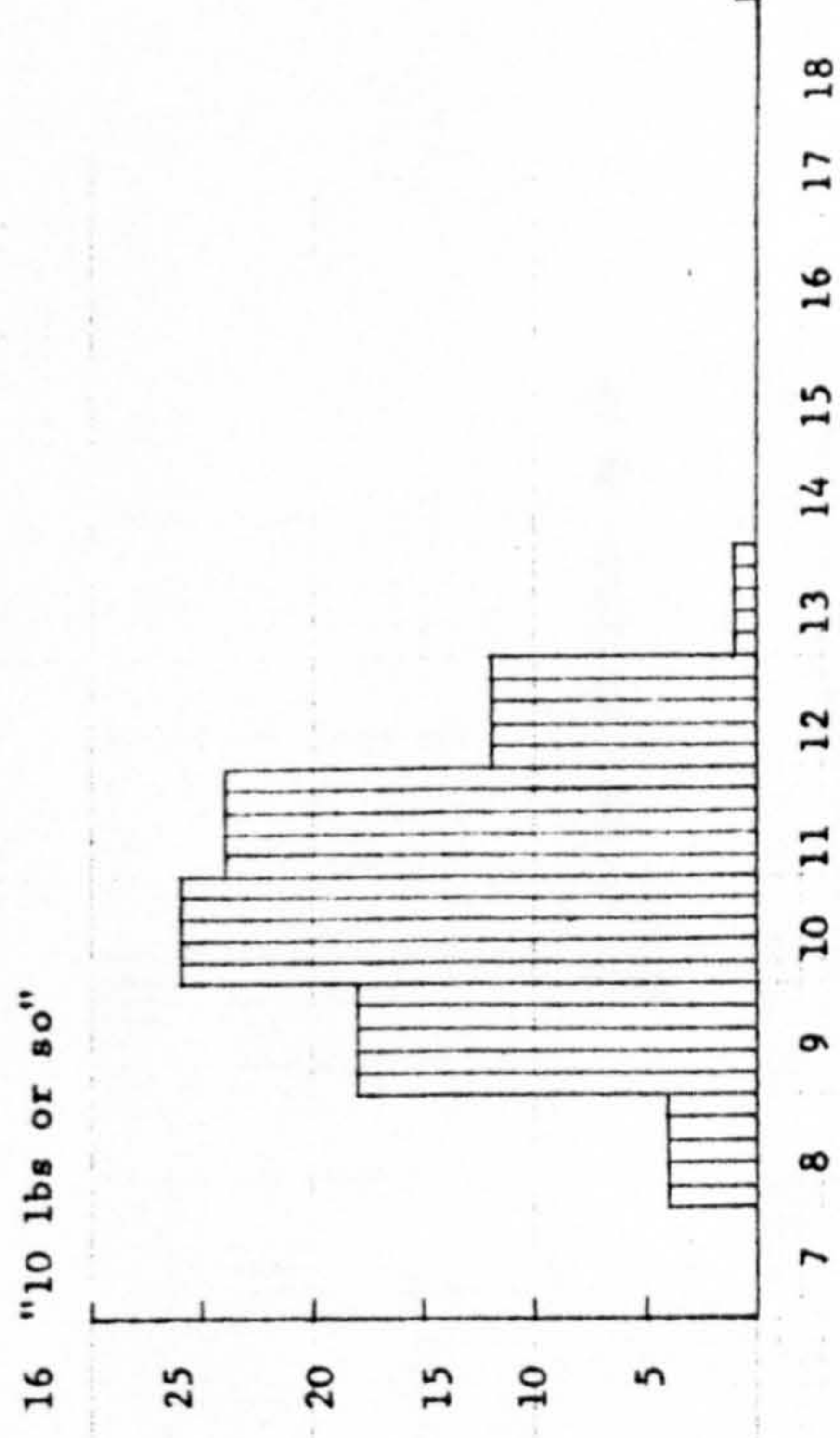
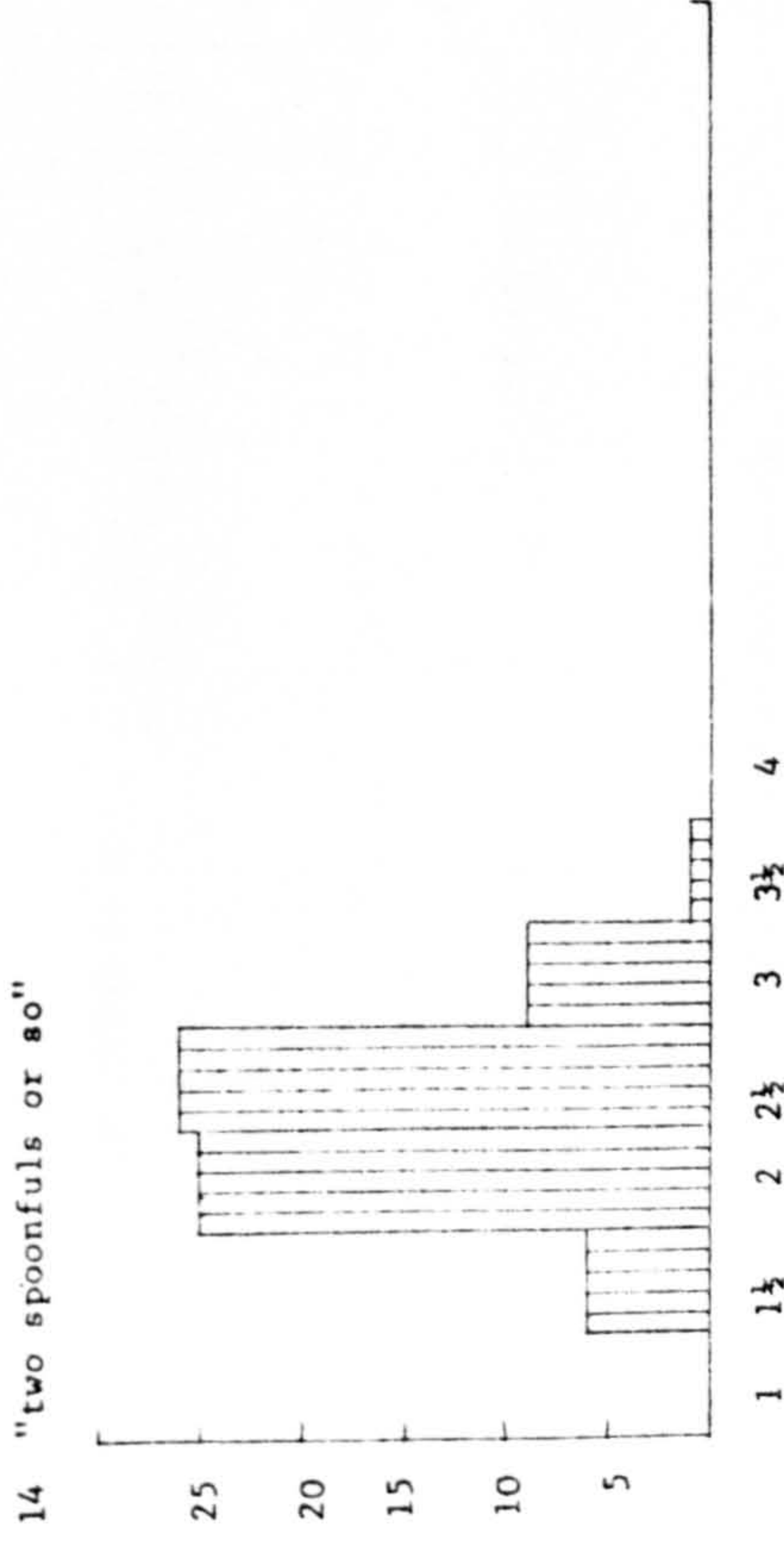
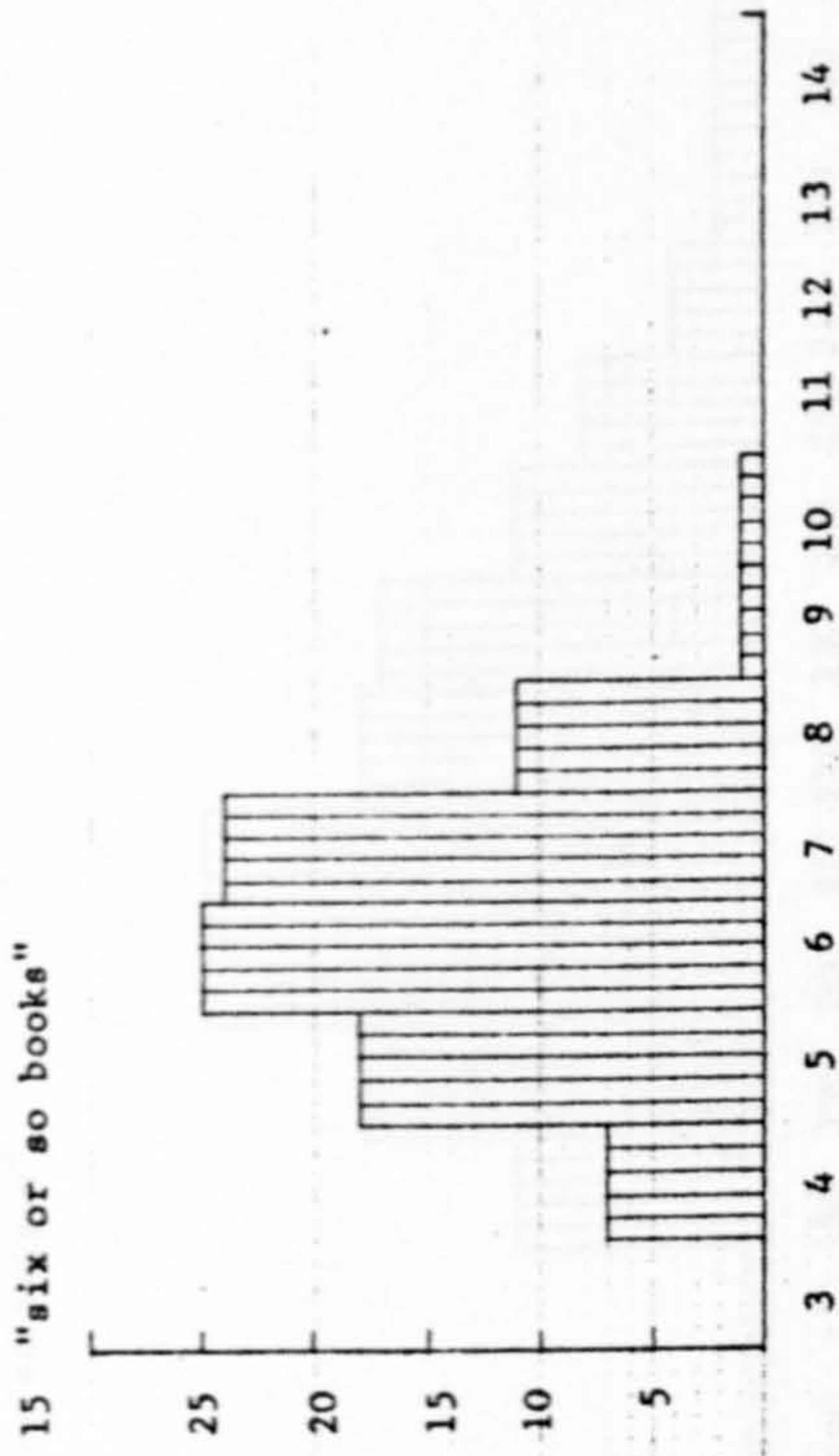
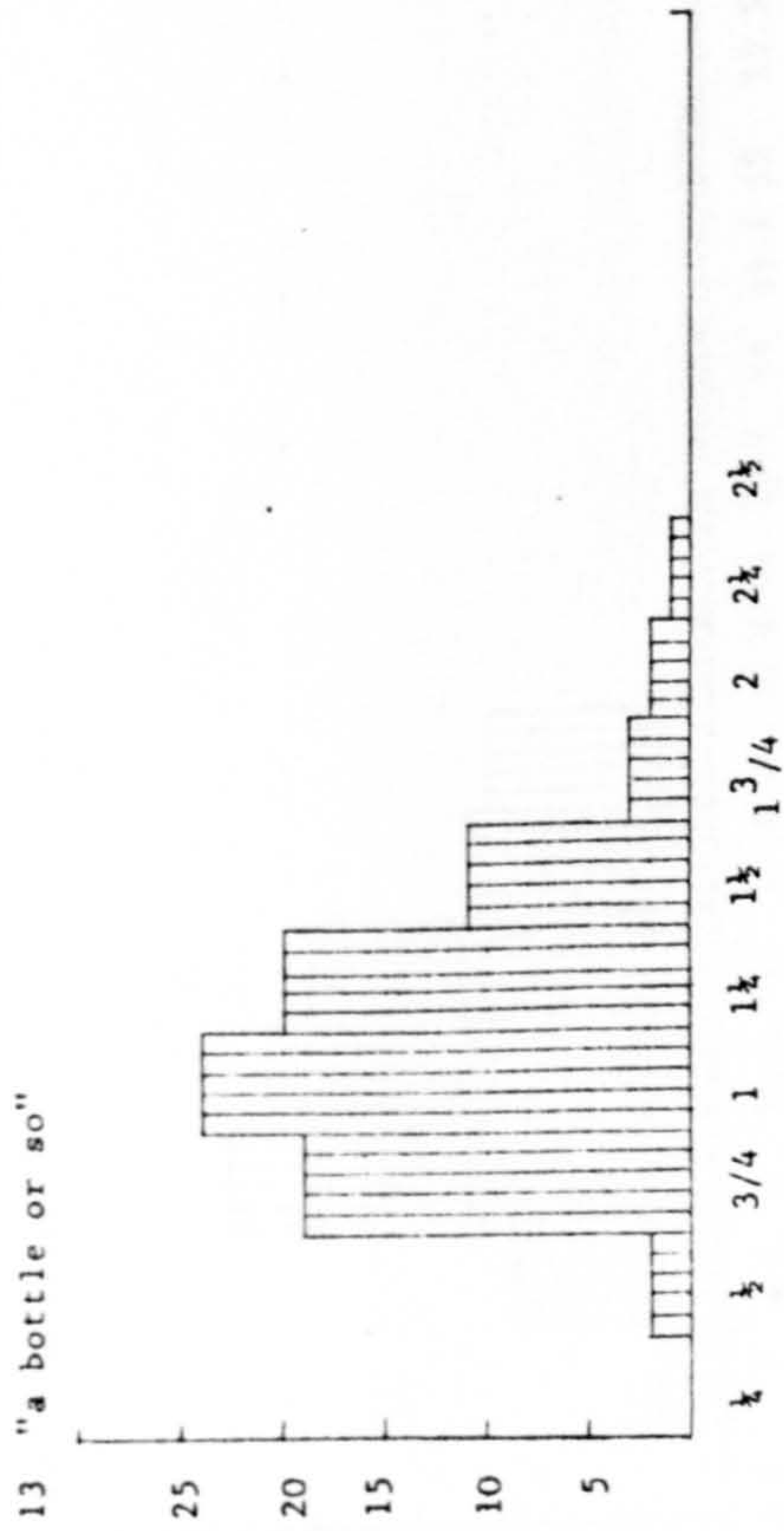


Table 3.3 (continued)

Table 3.4Special results for n or m approximations

Item no.	% subjects specifying interval cont. both e-numbers	% subjects specifying int. bounded by e-numbers	% subjects specifying nos below	% subjects specifying nos above
23	57.7	76.9	30.8	73.1
24	100.00	57.6	50.00	46.1
25	69.4	88.5	42.3	80.8
26	88.5	73.1	46.2	65.4
27	96.2	77.0	61.5	57.7
28	92.3	77.0	65.0	69.2
29	80.8	88.5	57.7	65.4
30	69.2	61.5	30.8	53.8
31	69.2	76.9	41.1	65.4
32	73.1	76.9	57.7	57.7
Mean over 10 items:	79.6%	75.4%	48.8%	63.5%

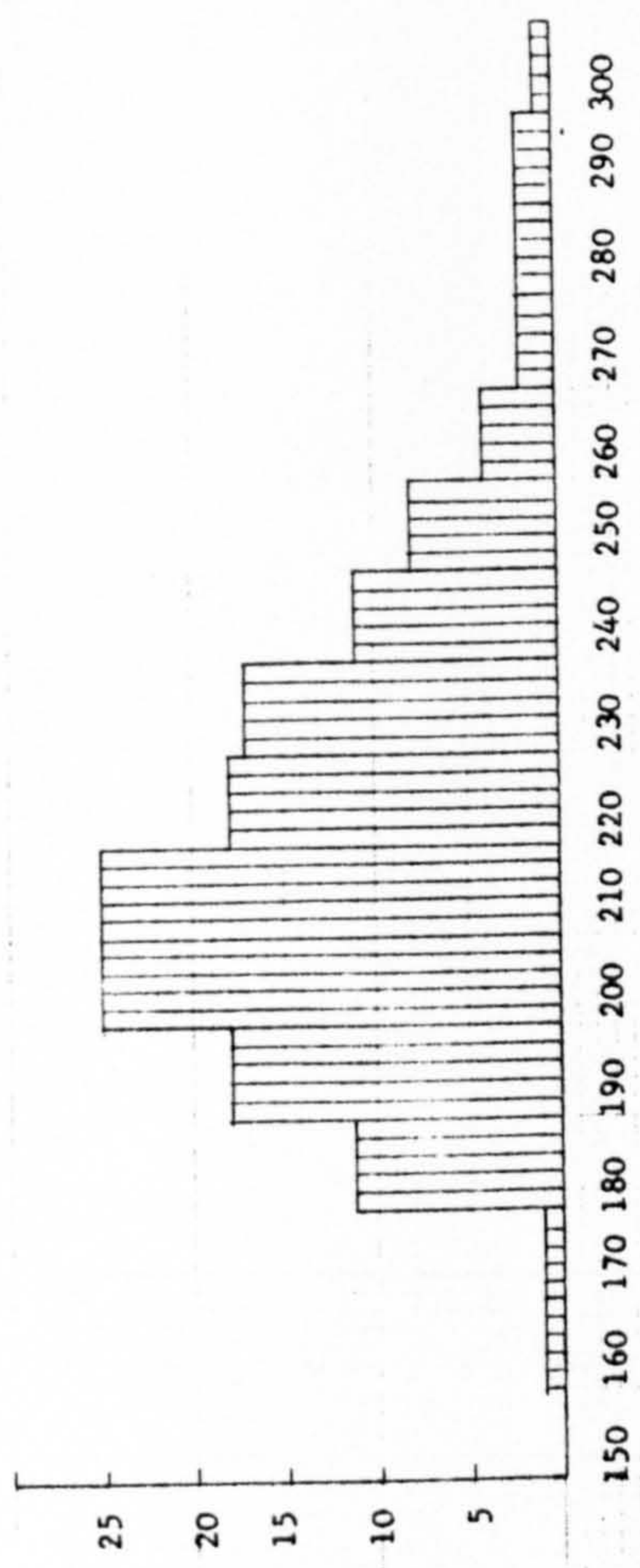


n = 26

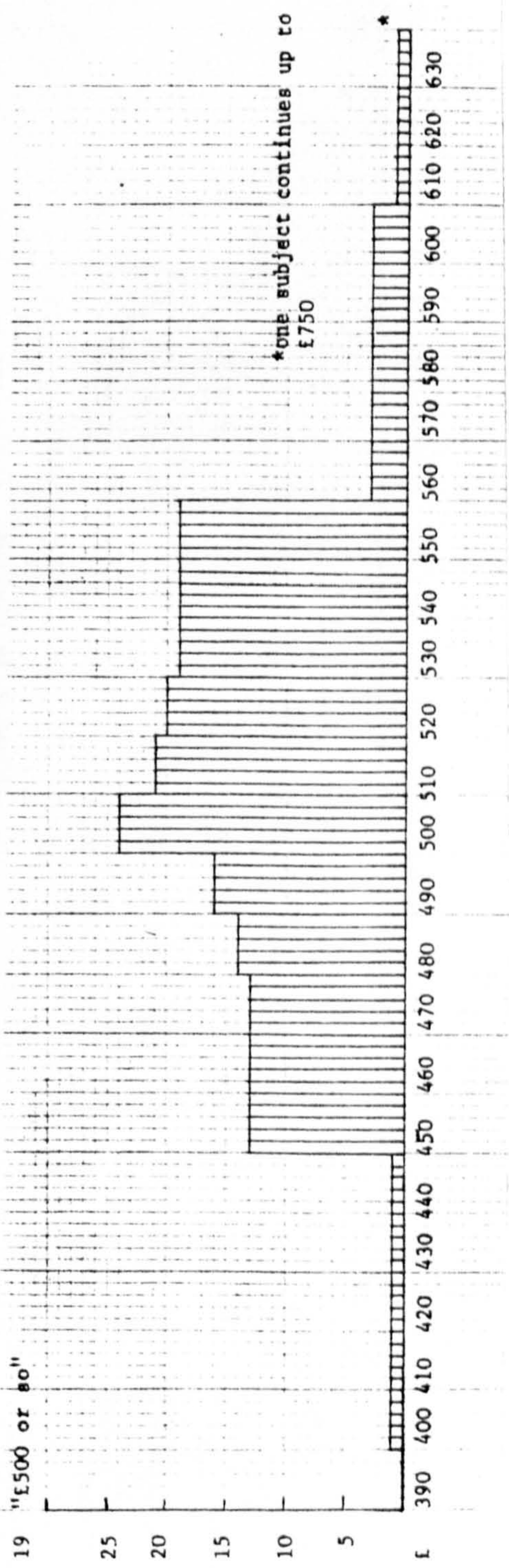
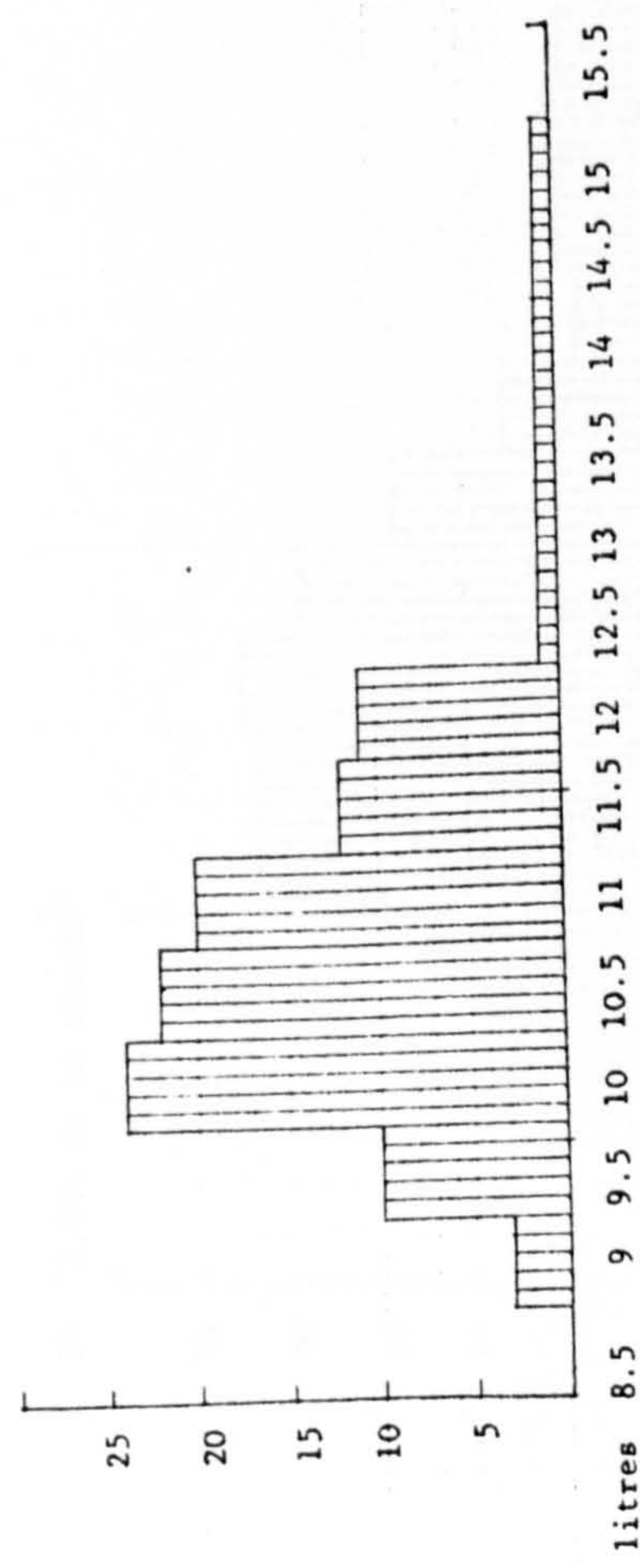
Table 3.5

Frequency Distribution of Informant Responses for N OR SO approximations

18 "200 or so people"



17 "10 or so litres"



\*Note: deviant subject marked only £350

Table 3.5 (continued)

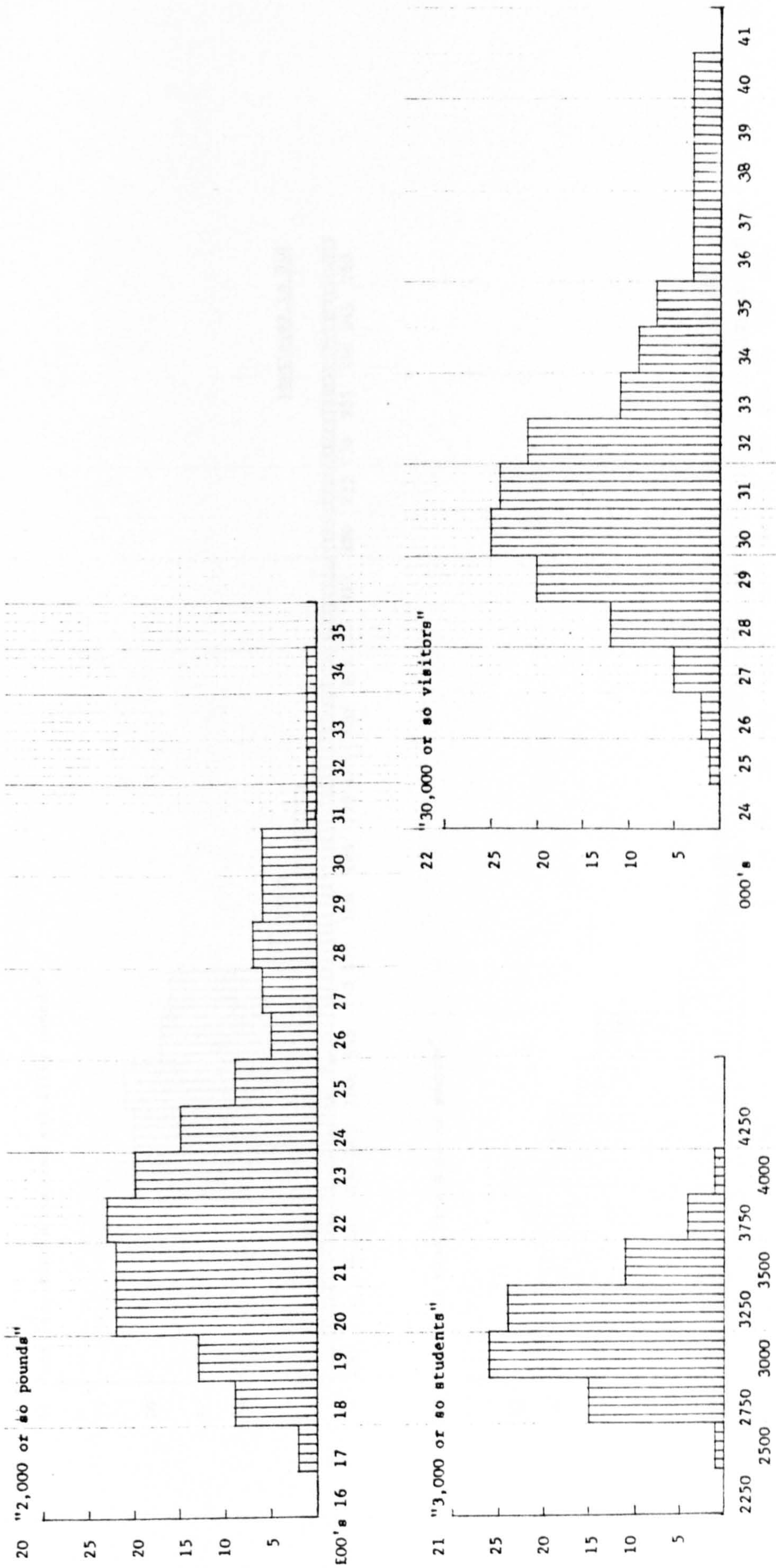


Table 3.5 (continued)

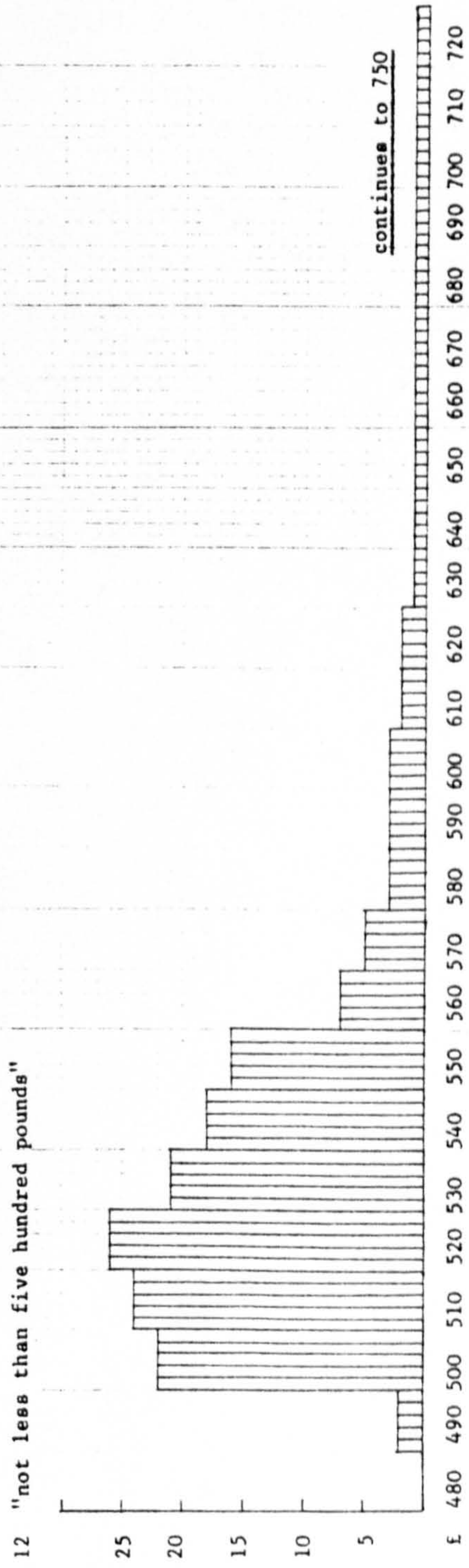
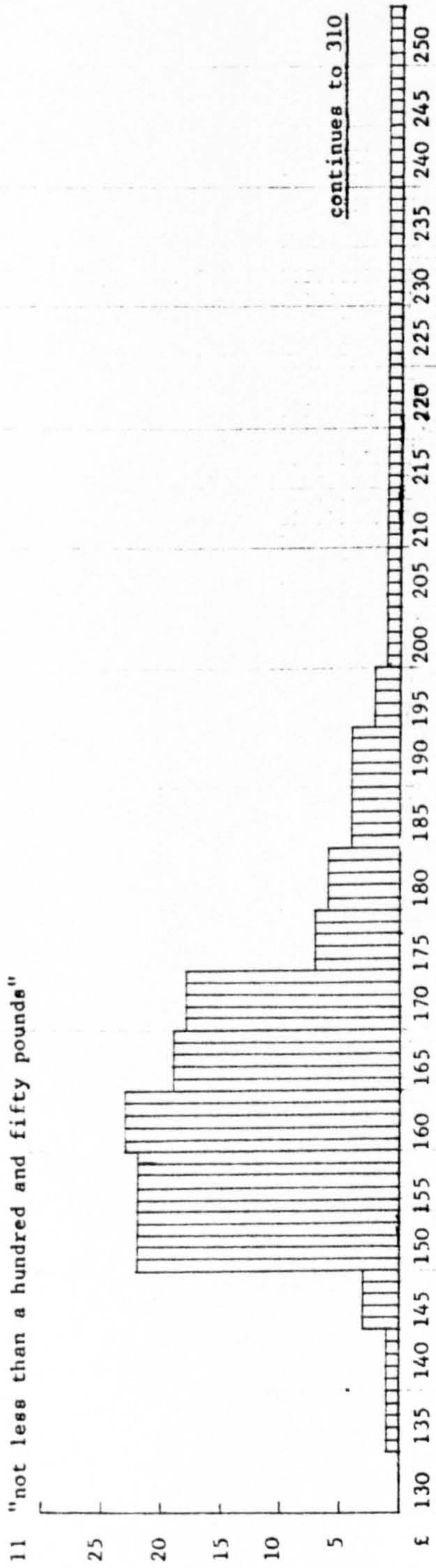


Table 3.6  
Frequency Distribution of informant responses for NOT LESS THAN expressions

## Chapter 4

Vague Category Identifiers

The second type of vague expressions which I have chosen to examine in detail is exemplified in the following:

- (1) +There was no kind of social contact - there was no coffee room or anything (II/21.2)
- (2) +But what about things like when you read sentences or something and then you're asked to reproduce them or something (I/13.2)
- (3) +You can remember four lots of four fairly easily say in the form of dates or something, 1972 or something like that (I/13.2)
- (4) +Lady Arran, who pays for her hobby by 'selling off silver and things' set a world record at Windemere last October (DS/1)
- (5) +I hope we didn't have lots of horrible conversations when you went out of the room in tutorials and things like that (II/14.3)

The structures in the underlined parts of these examples will be referred to, following Dines (1980), as TAGS, because they can be "tagged onto" the end of otherwise more precise statements. They are in the category of vague additives, similar in effect to the number approximators just looked at. The structures which I shall consider here are the following:

or something

or anything

or something like that

or anything like that

and that

and things

and things like that

What are these tags, and how are they used?

In this Chapter, I look in detail at their distribution and structure (4.4 and 4.5), I again draw on the results of an informant test designed to investigate their meaning (4.2 and 4.3 ). Intonation is important here in showing how much of the preceding string the Tag



is operating on, and this is described in 4.6. In Section 4.7 I describe some co-occurrence restrictions which I have observed. Finally, as for the number approximations, I summarise (in 4.8) the propositions relevant to their meaning which a theory of vagueness must account for.

One suggestion for the function of these tags is that they are purely performance 'fillers', introduced to give both speaker, and hearer, additional time for processing. While this may be the case for some occurrences, it is obviously not always so, since removing them makes a difference in meaning :

- (6) You can remember four lots of four fairly easily say  
in the form of dates , 1972

This sentence has lost something which (3) had, and needs additional paraphrase to recover it, cf

- (7) ... say in the form of dates, like 1972

More convincing than juggling around with examples is the following extract which neatly shows that or something is far from empty:

- (8) [Context: A is going to the shops. B asks A to buy him some bread. Just as she leaves]

A: So you'd like some bread?

B: Or something. Anything edible will do. (DS/8/11.9)

If or something were a filler, B would hardly use it to modify what A had said. He is giving additional information. He then clarifies with "anything edible will do" which I take to be a gloss for bread or something. Further evidence that these tags are not empty is presented in Dines (1980) who cites an investigation by Brotherton (1976) in which "the majority of her lay judges classified all the terminal tags as qualifying elements". Dines says "This data suggests that terminal tags out of context are not considered redundant by

middle-class speakers but are salient as elements which qualify the content of the utterance" (:19).

What then do these tags mean? My intuitive analysis, which was the same as the suggestion made independently by Dines (1980) was that these tags "cue the listener to interpret the preceding element as an illustrative example of some more general case" (:22). That is to say, the preceding element, which I shall call an exemplar, directs the hearer to access a set, of which the exemplar is a member whose characteristics will enable the hearer to identify a set. We may note in support of this that speaker B in example (8) goes on to gloss "bread or something" as "anything edible", which suggests that "bread or something" is to be understood in this context as referring to the set of edible things. Thus an exemplar + tag construction functions as a (vague) CATEGORY IDENTIFIER, and this is how I shall now refer to them.

Duncan and Fiske (1977) classify or something as a "sociocentric sequence", in which category they also include but uh and you know. They cite Bernstein (1962) as the source of this attribution, but although Bernstein does use the term in his paper, it is nowhere defined, nor are examples of what it covers given. Duncan and Fiske say that these are "stereotyped expressions" (:185) which "when used, [. . .] typically follow a more substantive statement" (:171). I am worried by the glibness of these assignments of value (what counts as "stereotyped" in language? Do they mean 'idiomatic', or 'frequent'? What would a substantive statement be?). If by substantive statement, they mean 'some language string which does not have explicit vagueness', then it is certainly true for the vague Category Identifiers. Their exemplars are not vague. But Duncan and Fiske

should I think have looked further at the meanings of the various expressions they consigned to the category "sociocentric sequence". As far as or something goes, this will now be done, and it will become apparent that it is rather different from but uh and you know.

## 4.2 The Elicitation Test

### 4.2.1 Objectives

The test had two main objectives:

1. To find out what the Tags mean, and possibly, to confirm the hypothesis outlined above
2. to get some indication of the effect of different exemplars preceding the Tag

### 4.2.2 Method

A paper and pencil test was used to present 31 examples of tags (one item contained two different ones). These consisted of 15 attested examples, and 15 constructed examples using items from Rosch's (1975a) work on prototypicality within categories. The reasons for constructing examples from Rosch's data will be explained below in the general discussion of the results. A pilot study was first carried out using four items, in order to see whether subjects could perform the test, and as a result of this, certain modifications were made, for example, providing longer extracts in some cases. Table 4.1 gives the complete list of test items with their reference numbers, showing in each case the parts of the item that were underlined. The test contained three attested examples of structures which were not eventually selected for detailed analysis herein: no. 5 or anything else, and nos. 10 and 14, or whatever. They are however of interest, in that they appear to be interpreted similarly to the tags under

investigation.

The subjects first read the following instructions:

This is a very simple experiment to investigate the meanings of utterances which occur in ordinary speech. For convenience they are presented in written form, but you should try to think of them as spoken.

Now read what you have to do. DO NOT START UNTIL I TELL YOU TO.

On each page in the answer books is one example of a spoken utterance. In each case, please list at least two items which the speaker could reasonably have been thinking of when he/she said the underlined part of the sentence. Imagine you are trying to understand the speaker.

When I say 'turn to the next page', read the sentence and write your answer as fast as you can until I tell you to turn to the next page again.

Now we're going to do a trial answer, Please do not turn to the next page until I tell you.

The subjects did not see any example answers, and so were free to interpret the test as they chose. I was anxious to avoid any suggestion as to the kind of responses I expected. The test items were presented in reverse order to half of the subjects in each group, to compensate for any practice or fatigue effect across items. Subjects had a timed 60 seconds for each answer, and they had a resting time between each answer book of 10 answers.

#### 4.2.3 Subjects

Subjects were drawn from three groups:

1. first-year language students at University of York 18
2. arts students at the College of Ripon and York, St John 6
3. sixth-formers (age range 16-18) at Nunthorpe Grammar School, York  
and their teacher (age 53) 30

Since, for timetable reasons, it wasn't possible to test the Nunthorpe

subjects on the complete 30 items, they were tested on alternate halves of the test, and their results matched in pairs to give the equivalent of 15 subjects, and thus, a total of 39 subjects' answers was analysed.

#### 4.2.4 General Approach to the Data

The following terminology will be adopted: 'answer' will refer to the whole of what any subject wrote in response to any test item; 'response' will refer to discrete parts of a subject's answer. There were two distinct types of response:

- 1 single-word responses (for example "classes", "lessons")
- 2 phrases (a phrase was taken to be any part of a subject's answer where two or more contiguous words could be syntactically related; for example "formal teaching methods", "anything formal obviously teacher/pupil")

Analysis of the content of these two types of response brought further coding problems. Broadly there were three types of content found in both the two categories:

Type 1: the further example type, that is, naming items belonging to the same category as the exemplar

Type 2: the category identifying type, that is, describing or identifying categories which could reasonably be held to include the exemplar, either by a gloss, or a category name

Type 3: the non-compliant type (in the sense of Greenbaum and Quirk, 1970) where subjects did other things than what they were asked, such as describing the situation where somebody would say the stimulus, or describing the speaker's attitude

These three types of responses, and the problems inherent in categorising them, may be exemplified by examining the responses to one particular stimulus in some detail.

Item 18

Stimulus: A: But when you were an undergraduate, didn't you ever feel you were being taught by people who weren't actually that good?

B: No it didn't seem - I mean, well - we had a very funny undergraduate - there were no lectures or anything like that, it was all sort of seminars. (I/21.2)

Total of responses: 84

Type 1 46.4 percent

Type 2 45.2

Type 3 8.3

Rank Order of Type 1 responses

classes	6
lessons	6
films	3
tutorials	3
discussions	3
talks	2
conferences	2
assessment	
debates	
dictations	
essays	
examinations	
exhibitions	
grading	
groups	
marks	
putting in order, ranking	
practicals	
teachers	
teach-ins	

Type 2 Responses

formal classes	2
formal talks	2
formal teaching sessions	2
anything formal obviously teacher-pupil	
anything that there should have been	
any kind of tuition where you can take notes and are talked to entirely by a professor	
big groups	
big lessons	
discussions apart from seminar	
formal conventional methods	
formal dictation	
formal lessons	

formal situations professor makes a speech  
 formal teaching methods  
 hard work  
 informative talks  
 instruction  
 large formal teaching groups  
 large groups in lessons  
 lessons where no participation expected  
 little teacher participation  
 nothing easy to cope with  
 one-many talks  
 professors teaching in (illegible) intimidating  
 proper teaching  
 serious classes  
 set curriculum  
 set talks  
 talks apart from seminars  
 talks compulsory attendance  
 talks to lots of people  
 teaching  
 teaching without feedback  
 traditional teaching  
 usual expected methods

### Type 3 (other) Responses

at all hardly, means nothing, redundant, to speak of, no formal lectures, no teaching as such

Firstly, we may agree that the type 1 responses clearly share some aspects of meaning. Yet linguistic theory at the present time lacks any tried and tested, and more important, any non-intuitive method of classifying their differences and similarities. Pre-establishing such a method would surely fall outside the scope of the present study, whose objective is to describe an aspect of vague language use, rather than to do lexical semantics. So a 'working solution' must be sought. A useful way of discussing the type 1 responses is in terms of the concept of 'gamelike similarity' invented by Wittgenstein. He gives the example of games which all belong in some sense to a category. Yet we should be hard put to it to actually state what similarity it is that they all share. Perhaps there is none, yet they share a 'category' by virtue of each having something in common with some of the other members. Rosch and Mervis's (1975) study of 'family

resemblances' demonstrated experimentally that subjects could work with this kind of similarity. I suggest that the type 1 responses for each question in this test should be analysed as having gamelike similarity to each other. Clearly, though, decisions about gamelike similarity will largely be intuitive ones. There is however, other evidence available which suggests that the type 1 responses fall into coherent categories, and this is described in 4.3.1.

Secondly, for type 2 responses, which give what I have suggested are category identifying glosses, or superordinate terms, the only way to use these is to subjectively interpret them. We may agree that

s03 Lessons where no participation expected

s04 Any kind of tuition where you can take notes and are  
talked to entirely by a professor

s16 formal situations: professor makes a speech, no  
interaction between students and teachers

for example, are all describing very much the same thing, but it would be quite difficult to say exactly how, since they are in general not using the same words. A possible way to achieve greater objectivity in interpretation of the type 2 responses might be a rank order frequency count of different words used in the responses. From this we could learn that here, for example, 'formal' was used 5 times, and 'talk' 4. Yet I do not believe that this would be a helpful or revealing piece of data, because such an analysis would lack all the semantic import deriving from precisely the combination of lexical items in the phrase responses. Accordingly, analysis was performed as follows: the total number of responses for each item was counted. Where the same word appeared in the singular and the plural these were totalled. Three separate counts were made of type 1, 2 and 3 responses and these are given in Tables 4.4, 4.5 and 4.6. Then,



percentages of each type of response were calculated for each item and these appear in Table 4.2. Assigning responses to type 1 or type 2 was in some cases contentious, and readers may choose to disagree with my decisions for certain responses. Alterations to the categorisation of the few contentious responses would not however alter the general effects which I describe for the test results.

#### Null Answers

A null answer was scored for any item where a subject wrote nothing, or wrote something illegible. 39 subjects responded to 31 stimuli, giving a total of 1209 possible answers. Out of these, there were 58 null answers - 4.83 percent of the total.

Null answers followed a pattern, with certain items attracting significantly more than others. The test items ranked in order of numbers of null answers appear in Table 4.3. No Rosch-type item scored more than 2 null answers (out of a possible total of 39) and most scored none. The three items attracting a lot of null answers were 28, 10, and 19. In addition these items received in total very many fewer responses (46, 56 and 71, respectively) as against, say, 191 responses for item 16 and 200 for item 27. (note also that item 10 contained or whatever, and so might be expected to be different.) When questioned afterwards, many subjects said that they just did not understand what was being talked about in these three items. It is fairly obvious that some specialised knowledge would be required. This probably demonstrates a disadvantage of using real examples in a test - they can be rather complicated, and almost definitely more complicated than invented ones. Thus in this case they detracted from the test results by confusing the subjects.

The second point is that null answers were not distributed evenly across subjects. They were much more frequent among the sixth-former subjects - a mean of 3 per 'subject' as against only 0.5 per subject for the other two groups. This should probably be attributed to two factors. Firstly, the sixth form pupils would have less experience and less world knowledge, which might have led to comprehension difficulties, especially on the three items mentioned above. Item 28 demonstrates especially well the comprehension failure resulting from lack of necessary world knowledge. Supervisors do not form part of school life, so the school subjects did not, presumably, know about them. Thus 12 out of 15 gave a null answer. Lack of knowledge might in turn have given them less confidence, and a fear of giving the wrong answers (even though I had specifically told them that there were no right answers). Secondly the school subjects may have been less motivated to fulfil the task well. The other two groups were volunteers, whereas the Nunthorpe boys had been volunteered by their teacher.

#### 4.3 Results and Discussion

The results show clearly that in the majority of cases subjects judged that the tag was an instruction to think of a category consisting of items similar in meaning to the exemplar. We remember that subjects had no example to suggest a particular answering strategy, yet between 87 and 100 per cent of their responses on every item either named category members, or gave category identifying glosses or category names.

##### 4.3.1 "Rosch" type test items

These used as exemplars items taken from Rosch's (1975) work on category membership and prototypicality. I used these in order to have an independently established measure of category membership with

which to compare my results. Rosch used constructed lists of category members. In her work, categories were initially adopted if at least five items from them appeared in the Kucera and Francis (1967) Frequency List with a frequency of 10 or greater. All the categories she used were also in Battig and Montague's (1969) tabulation of production frequencies for responses to a particular category name. Each of Rosch's categories had 50 or 60 items in it, and her subjects were asked to judge each item for how good an example of the category it was. Drawing on her results, I used some items having a high degree of prototypicality and others have a low degree, in order to see the effect of the difference. We shall now examine the type 1 responses to these "Rosch" test stimuli in some detail.

Rosch's category lists are compared with my subjects' type 1 responses, by obtaining the intersection-union ratio of the two sets. Thus, for item 1 union yields 43 items of which 15 intersected. This gives a percentage overlap of 34.9 percent. The results of doing this for each 'Rosch' test item are presented in Table 4.4. In making the comparison I have felt justified in omitting from Rosch's lists those items which (a) do not exist in Britain, or (b) have different names here, since my subjects could not be expected to mention them. Where translation equivalence exists (eg US slingshot = Br catapult) I treated the equivalents as naming the same item.

The Rosch-type test items fall into two categories. Firstly those with a high percentage overlap with the original Rosch category (upwards of 34 percent), that is, items 1, 3, 6, 14, 16, 22, 27, and 30. In every case the exemplar for these was one having a high degree of prototypicality for its category. Secondly, those having a markedly low percentage overlap (below 13.4 percent), that is, items

4, 9, 17, 20 and 24. In every case (with the exception of item 24, discussed below) the exemplars for these were items having a low degree of prototypicality for the category involved. Of the two remaining items, 11, with a percentage overlap of 27.6, was a bad example, and 25, with 28.2, was a good example.

These results show quite clearly I think, that successful category identification using a tag necessitates giving a prototypical example of the intended category. Giving a 'bad example' as an exemplar results in hearers identifying a category which has little correspondence with the intended category, as shown by the low percentage overlap items listed above.

The idea that hearers take the exemplar as a good example is additionally supported by the results for some of the 'bad examples'. I suggest that where a Rosch 'worst example' may be the worst example for the category she (and her subjects) had in mind, it is, as well, a best example for another category. Taking item 4, necklace was judged by Rosch's subjects as the worst example of the category CLOTHING. The category members given by my subjects in response to this seem fairly obviously to belong to the category JEWELLERY, of which presumably necklace and bracelet are good examples. That is, they took it to be a good example. This is shown also by item 17 where a poor example of the intended category WEAPON was taken by subjects as a good example of the category TOOL (cf their type 2 responses in Table 4.5).

A general question arising from these results is whether we should consider the tag as an instruction to access a semantic category, or to access a non linguistic associational or perceptual category. By 'semantic' I mean one whose members are related by

criteria which are defineable independently of context, for example by entailment: "I bought apples" --> "I bought fruit" and "I bought oranges" --> "I bought fruit". It is of course often the case that semantic and associational categories can coincide, as with the category FRUIT, but by no mean always, since things whose names are not at all semantically close, may be strongly associationally related.

Initially, the results for the 'best examples' items which we have just looked at, suggest that semantic categories are involved. But the results for other items suggest rather the opposite, that in fact it is rather pragmatically established associational categories that are involved. For example, responses to item 9 showed subjects focussing on culturally defined categories:

s05 "vegetarian context" rice beans dried-vegetables

"chinese context" rice chicken green vegetables sweet and sour

"greek context" stuffed pepper pilaf

s16 chinese food exotic vegetables (superordinate term) farinaceous

food potatoes polenta pasta

a27 Eastern foods curry chinese take-away food

The responses occurring more than twice in the rank order of responses of both types are mostly not semantically relatable to rice, the exemplar, but associationally, in terms of what people know about food in the world, they clearly are.

curry(ies)	12
vegetables	7
pasta	4
bread	3
chinese food	3
corn	3
macaroni	3
maize	3
potatoes	3
bamboo shoots	2
beans	2
carbohydrates	2

fish	2
foreign food	2
health foods	2
indian food	2
oats	2
rice	2
spaghetti	2
spices	2
tapioca	2
water	2

Again for item 24, most subjects appeared to put car in the associational category "possessions of affluent persons", rather than in the semantic category "vehicles". Hence the low percentage overlap recorded. Their most frequent type 1 responses were:

caravan	10
washing-machine	8
tv	7
colour tv	6
motor bike	6
boat	5
dishwasher	5
house	5
trailer	5
freezer	4
big house	3
nice house	3
record player	3
scooter	3
bicycle	2
bike	2
fridge	2
mortgage	2
stereo	2

Subject 11's response is especially telling:

washing machine, dishwasher, 3-bedroomed semidetached, 2 children,  
dog, cat, mortgage, steady income

Their type 2 responses also show the same idea, for example:

s02 expensive things

s24 everything you could wish for

b31 any material goods of a middle class nature

(these are given in full in Table 4.5)

### Contextualisation

Another effect which is important is the effect on the responses of the contexts which subjects attributed to the different items. This is especially clear where a word occurred in two different test items. For example, car appeared as an exemplar in both 16 and 24. From the type 1 responses listed in Table 4.4 we can see that subjects interpreted the two items very differently, because of the context imposed by the surrounding language. In one case(16), they judged car to be an exemplar of the set of wheeled vehicles which go on roads, and in the other (24), as a member of the set of desirable material goods.

#### 4.3.2 Attested Test Items

The Rosch-type test items were included in the test, as I said, to provide an independent measure of categorial similarity. We have seen that where the exemplar was prototypical of the intended category, there was a very marked similarity between Rosch's ranked category, and the rank order frequency count of my subjects' responses. This was taken to demonstrate that what subjects did for those items was to access a category consisting of items they judged to be similar to the exemplar given, and a category for which the exemplar was prototypical.

When it comes to interpreting the results for the attested items, no independent evidence for the categories is available. It seems more than reasonable, however to assume that what the subjects did for the attested items was the same as what they did for the Rosch items, and that therefore they again provided answers which either gave category members, or category names.

It is, of course, only possible to evaluate these data subjectively, but it is the case for each attested item that the responses show quite convincingly a majority of these two types of response. The full rank order frequency count of responses for these 15 items is given in Table 4.6. In addition, the answers to individual items show particular factors at work, as follows:

Item 2: "One of the secretaries was saying there was a film or something. (B: really?) Last Thursday we were all down in 2017 and the lecture was actually in Vanbrugh so I went to the secretary and said where is everyone, and she got out this book and said its in Vanbrugh but some weeks there's a film ...." can you have films in linguistics?"

The responses to this item demonstrate particularly well the influence of given linguistic context on subjects' interpretation of the exemplar + tag. The seven most frequent responses, in rank order, were lecture, slides, talk, video, play, show, discussion. Now I do not think that out of context lecture would normally be considered to be most similar to film - T.V. and video are much closer. What brings lecture, talk and discussion into prominence is the context provided which suggests that academic teaching is what is being talked about. In this particular context, lecture, talk etc are likely members of the category understood.

In the pilot study for this test, item 2 appeared with only the speaker's first remark (up to B's interjection), and subjects responded with slides and video. These pilot informants suggested longer extracts should be given, since they found the short ones difficult to interpret.

Item 19: "I'm talking about acceptable middle class language and sort of working class language - the thing that Bernstein, you know, sort of - elaborated code and things like that"

This shows I think how important it is in comprehension to understand the topic that is being spoken about. Many subjects commented



afterwards that this was among the items which were difficult to answer. This is reflected firstly in the high number of null answers (viz 7 out of 39). Secondly it is reflected in the low degree of sharedness of responses. Only 5 response tokens out of a total of 72 were shared at all, and then only by a maximum of 3 subjects.

The smaller quantity of responses, and greater frequency of null answers for the items where subjects, on their own admission, did not understand what was being talked about, shows, I would judge, the same effect as that demonstrated experimentally by Bransford and Johnson (1972). This work showed that their subjects experienced considerable difficulty in assigning meaning to, and recalling, stimulus material which had been artificially contrived to omit suitable contextual cues.

Item 23: "You can remember four lots of four fairly easily - say in the form of dates or something - 1972 or something like that"

Because the exemplar consisted of a number, these answers show especially well the difference between type 1 (further example) and type 2 (category identifier) responses. By subject, they were as follows:

s01 ymca ucca  
s02 1974 1979 a recent date, a used date, a reoccurring date  
s03 [null]  
s04 some type of group of numbers/figures, various other dates  
s05 16 4x4x4x4 etc significant year names eg 2000 1984 1000  
s06 four-syllable words  
s07 sequence, year  
s08 1970 1971 2000 4000 1000 6000 9000 7000 1001  
s09 other similar dates, other relevant dates  
s10 1843 1652 1004 5302 6392  
s11 1875 1066  
s12 1973 2001 8.8.60 any year  
s13 1066 and all that, 1945, numbers of relative importance for historic or personal reasons  
s14 phone numbers, mnemonics, paradigms  
s15 1968 1964 the olympics  
s16 don't know [null]  
s17 for example, that's a date isn't it? the full date I mean, 1948 1976 etc  
s18 another year

s19 1810 2001  
 s20 1843 1764  
 s21 1971 1973 1974  
 s22 1973 1974 1975 1976 1977 1978 1979 1800 1801 1802 1926 1923  
 1921 1851 1854 1960 1901 1700  
 s23 1066 1666 1665 1969  
 s24 telephone numbers, birthdays  
 b25 mnemonic, catchphrase, cliché  
 b26 [null]  
 b27 other easily remembered numbers  
 b28 1971 1970 1969 1968 1967  
 b29 1976 1980 1984 1988  
 b30 early 70s 62 72 82 years of the Olympic games, years of the  
 European soccer championship  
 b31 any other relative date, any other mnemonic  
 b32 1968  
 b33 [null]  
 b34 [null]  
 b35 1976  
 b36 Boycott's run total for season  
 b37 1973 1977  
 b38 16  
 b39 ABCD

The type 2 responses show subjects imposing different recontextualisations as they try to identify likely categories. Many of them concentrate on the remembering aspect, eg subject 13, 14, 24, b27 and b31. Several subjects saw 1972 as an exemplar of a category consisting of years when particular events took place: s15 the Olympics, suggested again by s30, who also tried "years of the European Soccer Championship". Subject 6's response is unexpected, given that 1972 is not a four syllable word. I wonder whether subject b36 was being non-compliant, or whether he sees the world entirely in terms of cricket?

Item 26: "Could we, when you give us our essays back, and give us titles, could we sort of meet or something because, I mean, there might be things we want to ask"

This item shows the influence of the subjects' perception of purpose - in this case the purpose of the event proposed by the speaker. Equally ranked in first place were both get together, and discuss, with 11 occurrences each. There were many responses containing phrasal equivalents to discuss (see Table 4.6). Discuss is not

however semantically close to meet and not always associationally close. One can discuss without meeting, and meet without discussing. Yet here the subjects judged that the purpose of the meeting, which they interpreted as "to discuss", was highly salient. It is of course specified by the speaker: "there might be things we want to ask".

To sum up, then, the answers given for the attested test stimuli show (a) subjects interpreting the tags as instructions to access categories, and (b) that the characteristics of the categories they fixed on are determined not only by the given exemplar, but also by linguistic context, situation and pragmatic knowledge. I asked some of the university test subjects what they thought the function of the exemplar word was. Two of them suggested:

B: It's a member of the class of objects

C: and it's got - it calls up associations with it...

#### 4.3.3 General Conclusions from the Results

The observations above lead me to propose that the correct way to interpret these data is as follows. The exemplar + tag construction is understood as an instruction to access an associational category, whose characteristics are defined for the hearer by the exemplar provided, taken in conjunction with relevant pragmatic information. It is for this reason that I have called the exemplar + tag construction a (vague) CATEGORY IDENTIFIER. The associational category may be coterminous with a semantic set to which the exemplar-word belongs (if it is a word). This is expected, since words which are semantically related often refer to entities which are associationally related, at least in some contexts. It appears, as we have seen, to be the associational relationships which are most important in determining the categories hearers think of.

I think the categories hearers use are probably those identified by Klatsky and Stoy (1978) as 'higher order categories'. In their experiments, they found that knowledge of category membership had an effect on subjects' performance in a simple visual task of comparing pictures. Klatsky and Stoy state that their results indicate subjects using a higher order category (not necessarily a namable one) to compare instances.

The general meaning effect described above is the one I shall work with in subsequent chapters.

#### 4.4 The Structure of the Tags

These tags contain either and or or:

or something/anything (like that)

{things  
and {things like that  
{that

The test results and data examples both indicate that there is no difference in the way that the tags containing like that and those without are understood. It is reasonable to see the shorter tags as ellipted or shortened variations of the full ones.

Secondly or something (like that) and or anything (like that) are found in complementary distribution as between assertive and non-assertive contexts, thus:

(9) There was no coffee room or anything (II/21.2)

(10) \*There was no coffee room or something [1]

(11) One of the secretaries was saying there was a film or something

(12) \*One of the secretaries was saying there was a film or anything

In this they follow a rather general rule of special marking in non-assertive contexts, (cf Quirk et al, 1972, pp 376ff, for discussion).

Thus there are really just three tags under consideration:

or {something} like that  
     {anything }

and things (like that)

and that

The relationship between the meaning of the words which constitute the tags, and the meanings of the tags in use, is discussed in Chapter 6.

#### 4.5 Structure of Exemplar + Tag Constructions

The exemplar always precedes the tag. In my data I have examples of the following syntactic types of exemplars, shown here with the tags they occurred with:

NP:     and things like that  
           and things  
           and that  
           or something  
           or something like that  
           or anything like that

VP:     or something  
           and things like that

Adverbial phrase: or something  
                                   or somewhere  
                                   or something like that

In each case, intonation makes it clear which constituent is being tagged, as I describe in Section 4.6.

1 (10) is not asteriskable if the tag applies to the whole sentence, rather than just to coffee room

## 4.5.1 NP + Tag

In the category NP + Tag, the three possibilities countable singular, countable plural, and uncountable N all occur, thus:

(13) [tutorial discussion]

+I'm talking about acceptable middle class language and sort of working class language the thing that Bernstein you know sort of elaborated code and things like that [II,8/3]

(14) [title of children's book]

+All about cuckoos and robins and things

(15) +Lady Arran, who pays for her hobby by 'selling off silver and things', set a world record of 96 mph at Windemere last October [DM,17.5.80]

But there are far more examples of countables. I cannot see any immediate reason for this. The examples I have with uncountables sound quite normal, and I would have expected as many of these as of countables. Possibly they do not occur because many uncountables are also abstract. An uncountable abstract exemplar is perhaps not felt to be able to exemplify a category. Made-up examples seem acceptable, though:

(16) He's studying syntax {or something  
                                          {and things like that

(17) I don't like Peregrine, I think its his  
      bumptiousness {or something  
                          {\*and things

NPs with tags tend not to be subjects (I have no examples). Some made-up examples seem acceptable:

(18) A pub or something in the next few miles would be most welcome

In this case, however, the exemplar is grammatical subject, but semantic object (ie 'we' would welcome a pub). More importantly, it is the 'new' information in the utterance (as opposed to given). I suspect that tags on 'given' information are virtually ruled out by the fact that speakers cannot be uncertain about something which is

being considered as given in a conversation. Since grammatical subjects often embody the 'given' information in an utterance, tags are not found with them.

#### 4.5.2 VP + Tag

(19) +Could we, when you give us our essays back, and give us titles could we sort of meet or something ...

(20) +"that most people" they're three words that fit together and could fit into the sentence and things like that [I,13.2]

(21) [J. MacEnroe's father in TV interview]

+He's a bit impish or scampish or something like that [DS/9]

(21) looks as if the tag might be attached to the adjective, but it is not, since it is not possible to move in into attributive position:

(21') \*He's an impish or scampish or something tennis player

There don't appear to be any restrictions structurally on what VPs can be tagged, although very long ones are avoided because they give rise to problems for the speaker when he tries to provide the appropriate intonation (see 4.6 below, test item 21).

#### 4.5.3 Adverbial + Tag

My examples are adverbial strings:

(22) [magazine]

+It comes out every four months or something like that [DS/7]

(23) [eye pain]

+I happen to have that when my - when I menstruate or just before my period or something [Cicourel, 1974]

#### 4.6 Intonation and Vague Tagging

As noted in the previous section, these tags may be adjoined to an NP or to a VP. In the case that a VP has the structure

[V NP]  
VP

there may be a structural ambiguity as to whether the tag applies to

the NP, or to the whole VP. The recorded examples show that this ambiguity is not present in speech because it is avoided by use of intonation.

The material to which the tag applies (ie, the exemplar), and the tag, always appear in the same tone group (except obviously where the tag has been added by another speaker). Usually the tone group beginning shows where the material to which the tag applies begins. The nucleus is carried by the principal item of the material to which the tag applies, and the tag appears as a tail. This tail has either a level intonation or in some cases a slight rise. A straightforward example is:

You can remember |four| lots of |four| fairly easily |i~| in the form  
of |dates or something| nineteen seventy two or something like that |

where or something tags dates, with the nucleus, a fall, on dates and or something with a level pitch. Nineteen seventy two or something like that shows the other pattern observed, with a very slight rise on something. The usual pattern is \~~~~/ , with a fall on the tagged material paired with a rise on the tag.

In the case of a VP the same thing occurs:

and |then you're asked to sort of reproduce them or something|  
and[2]

with the nucleus - a fall - on reproduce and a level pitch on the tag.

2 apostrophes have been omitted in this section, in order not to interfere with the transcription of intonation



A structurally ambiguous case is:

(24) What about things like when you read sentences or something where the tag could apply to the full NP things...., or to the VP read...., or to sentences. In speech, however, it is clear that the VP read sentences is being tagged.

But | what about things like | when you're | when you | read sentences or  
 something || and | then you're asked to sort of reproduce them or  
 something || and | you reproduce them || in the way that it struck you  
 most ||

Another structurally ambiguous example (from the same speaker, but on a different occasion), is:

It was 'really difficult (.) because they'd | read these 'words in a  
 book or 'something || and they'd | come to me and say what does this  
 'mean

where the tag applies to the whole VP read....

Speakers may use other very clearly observable prosodic features to delimit the exemplar + tag structure. For example in:

I had to give them all these different sort of meanings || like  
 (.) | 'sentences w/ with it in and things like that || and it was  
 really difficult for them to grasp it || <sup>low accel.</sup>

to mark the beginning, there is a tone group boundary after meanings, then a very discernible pause after like, and a clearly stressed onset on the first syllable of sentences. To mark the end, as well as the

tone group boundary, there is also a marked drop to low pitch, plus acceleration on and it was. It is apparent that speakers go to quite some lengths, prosodically, to ensure that the reading NP + tag, in the situation like this where the NP is in a VP, cannot be misunderstood as a VP + tag reading, seen so clearly in the previous two examples.

This example is additionally interesting because it appears to show the speaker getting into slight difficulties, due I think to the NP sentences with it in being a bit long or "heavy" and thus making its tag (with its rise) rather uncomfortably far away from the nuclear fall which it pairs with. Having placed a fall in the expected position on sentences, the repetition wi with shows something going wrong. The repair seems to be to copy the fall on sentences exactly onto in and then bring the tag in normally with a rise on things.

Given this differentiation by intonation alone, when these structures are written, ambiguity can arise. As we might expect, this showed up in some of the responses to the test stimuli, which were presented in written form. This occurred with Test item 21:

+I hope we didn't have lots of horrible conversations when you went out of the room in the tutorials and things like that  
[II,8.3]

In written form, the tag could apply either to tutorials, or to the adverbial phrase when you went out of the room or to the VP part of it, or even the NP the room or to horrible conversations. Test answers among the 39 subjects divided as follows:

conversations	12
went out of the room	3
tutorials	21
other (null, deviant etc)	4
	<hr/>
	40*

\*because one subject spotted the ambiguity and gave two sorts of content answers

Although tutorials was favoured, there are enough answers choosing the other options to show that the ambiguity is present. The fact that the test stimuli were presented written is thus an advantage and a disadvantage. The division of answers into broadly two content types is useful evidence for the structural ambiguity I am claiming. Secondly (by their absence in the test), it is shown that phonological features must be responsible for clarifying the ambiguity. The disadvantage is, of course, to withhold from the test subjects an important piece of information which they would have had as hearers.

The prosodies for this example actually were:

I | hope we didnt have lots of horrible conversations when you went  
 out of the room | in the tu<sup>r</sup>tutorials | and things like that ||

This shows again the problem of interposed material. In the tutorials is prosodically subordinated, so as not to interfere with the fall-rise pattern on room and things. This rules out tutorials as the exemplar for the tag.

Something noticeable about this utterance is that the whole thing is one quite unusually long tone group. Given the syntactic arrangement, this is actually non-optional, if the speaker wanted to link the tag to the whole VP

[have lots of horrible conversations when you went out of the room]  
VP

A boundary after conversations would have tagged only the adverbial phrase. I'd argue that the former account is the correct interpretation of the prosodic evidence on two grounds. Firstly, situational factors; given the context, there is not any set of events that could reasonably be intended by the exemplar when you went out of the room. The tutor is either in, or out, and that's it. Secondly, the way this utterance is understood by subsequent speakers. They focus on thinking of whether or not A did actually leave the room during any of the tutorials or not, and she states that she did not. Thus when you went out of the room is seen by them not as vague, but as precise.

Among the test subjects, the favoured exemplar was tutorials. It might be thought that this was purely because of its contiguity to the tag. However another test item, 13, shows that contiguity cannot be the only factor in play.

### Test Item 13

+But lots of big sort of important numbers that you have to remember and things, I'm sure they're made into a pattern that you can remember them by...

In this case, the relative clause on numbers creates several possible scopes for the tag, as follows:

NP + tag: [big sort of important numbers and things]  
NP [that you have to remember]  
S

VP + tag: [have to [remember] and things]  
VP S

VP + tag: [remember and things]  
VP

The spoken example had the the following intonation:

But | lots of big sort of (.) important numbers || that | that you have  
to ring and things || and they Im sure theyre made into a kind of  
| pattern || that you can remember them by || [3]

The tag thus applies unambiguously to ring.

Without knowing the prosody, the 39 subjects again divided between the different possibilities, as follows:

numbers	26
have to remember	1
remember (= "ring")	9
null	4

The favoured interpretation is numbers, a long way back from the tag, thus suggesting that contiguity is not guiding the subjects' interpretation. Probably the informational importance of numbers as the head of the relative clause, led them to focus on it.

#### 4.7 Co-occurrence restrictions

Apart from the syntactic distributional constraints described in 4.5, there are also co-occurrence constraints related to meaning. The constraints I have observed are however explained quite naturally by the meaning specification for tags which has been provided in 4.3.

Here are two instances reported to me as violations of proper vague tagging[4]:

3 Reexamination of this example showed that it had originally been transcribed wrong, with remember for ring. But this fact does not alter the import of the test result.

(25) [Context: a baby has just been born, someone is asked what sex it is]

+It's a boy or a girl or something

(26) [Context: Chairman of a Linguistics Department is looking for part-time tutorial staff; what will they have to teach?]

+Syntax and phonology and things like that

The explanation for these strange sounding combinations lies in what has been observed of the way people understand exemplar + tag constructions. We have seen that they are understood as designating an associational category whose characteristics are defined in part by the situation involved. The exemplar(s)(a) are taken as good example(s) of the set, and (b) must be capable of being members of some reasonable set. Example (25) names both members of the set of possible human offspring, so there are no other members which the or something can be standing for. Therefore it sounds wrong.

The second example is a bit more complicated. It is not so much a violation of vagueness tagging, as a failure to give expected information. I take syntax and phonology and things like that to be a direction to the set whose cover-term is Linguistics. Given that here we have two linguistics Professors in conversation, the questioner knows that teaching linguistics is involved, he wanted to know, as he reported, which branches of linguistics were required. He gave the reply the reading I've suggested, and thus found it less than informative. If we assume the speaker intended to be informative, another permissible reading of (26) is "the core areas of linguistics" (as opposed to sociolinguistics, stylistics, textlinguistics etc).

4 I am grateful to Patrick Griffiths and Bob Le Page respectively for these examples.

Here then we see two pragmatically determined conditions on successful vague tagging:

1 There must be other members of the set which the tag can stand for

2 The hearer must make the relevant category boundaries at least similarly to the speaker

1 is a powerful influence on interpretation of these structures, such that if an exemplar which is a member of a category of only 1 is used, the interpretation preferred will be that the reference is to a larger category of which the exemplar is also a "good example" member.

Imagine, for example:

(27) She wants to become Prime Minister or something

There is a way in which prime minister belongs to a category with only one member: the category of current Prime Ministers of the U.K. If one is trying to refer to that particular category, (27) will not be acceptable. The interpretation given to (27) is rather that it refers to a category such as "important people in Government", or "the Cabinet".

A different type of constraint is on which kinds of exemplars can be used. The following sound odd, although I would not want to suggest that there might not be contexts in which they would be suitable.

(28) It was a freestone peach or something

(29) It was a metallic finish 1975 Renault 5TL or something

Regrettably I have no examples of violations of this type, and so was forced to invent. If (28) is intended to designate members of the category of fruits (apple, orange etc), or (29) the category of small, fuel economic cars, then it is apparent that too much information is being given. These are simple violations of the conversational rule

described by Grice as the Maxim of Quantity. This indicates that one rule relevant to category reference by tags is that only sufficient information to identify the exemplar as a member of the category need be given. The over-specifications in (28) and (29) leave the hearer I think searching for a smaller, more specific category, of which the exemplar could be a good example.

At the other end of the scale, superordinates do not make good exemplars either, so:

(30) ?\*She went by plane or something

is odd. The only category which plane can plausibly be an exemplar for is METHOD OF TRANSPORT. Since a hearer knows from she went, that transport is involved, plane or something fails to be informative, again violating the Maxim of Quantity. Contrast:

(31) She went by 747 or something

which acceptably suggests, perhaps, the set of large modern planes[5].

The constraints on what can be suitably tagged, then, interact with the principles of categorization outlined in the work of Rosch (see Rosch 1978:28-49). Rosch observed that given the existence of taxonomic relationships of the type:

superordinate	basic level	subordinate
furniture	chair	kitchen chair

the basic level is the one usually used in referring to objects which could be included in the taxonomy, instead of either the subordinate, or the superordinate. It looks as though the basic level is most likely also to be used with tags.

5 I am indebted to Michael Lumsden for this point



Of course, Rosch was only working on taxonomies of concrete objects. We do not yet know whether the principles of categorisation she proposed are applicable to terms designating non-concrete things. A study carried out by Pulman (1983) indicated that subjects could judge prototypicality within given sets of verbs, but it is not known whether a 'basic level' can be identified for referring to actions and abstracts.

In support of her claim for the salience of the basic level in communication, Rosch cites what she claims are two different types of deviations from it. Firstly the experiments conducted by Bransford and Johnson (1972), referred to above, in which they omitted context cues. Rosch suggests that context cues are actually "basic level events". The effect of missing them out of a text is to impede or block comprehension. Secondly, "substitution of subordinate terms for basic-level object names in scripts gives the effect of satire or snobbery" (1978:45). She quotes a book review:

"And so, after putting away my 10-year old Royal 479 manual and lining up my Mongol number 3 pencils on my Goldsmiths Brothers Formica imitation-wood desk, I slide into my oversize squirrel-skin L.L. Bean slippers and shuffle off to the kitchen. There, holding Decades in my trembling hand, I drop it, plunk into my new Sears 20-gallon celadon-green Permanex trash-can."

in which the effects are, I would judge, similar to those in (28) and (29).

As far as the tag constructions are concerned; the examples show, I would hold, that you can tag at any of Rosch's levels, but that the general rule is the one given with a picturesque analogy by Miller and Johnson-Laird (1976:259):

"treat your hearer like the tax-man, give him no more than you have to."

#### 4.8 Summary

In this chapter I have described a second type of vagueness arising from the use of vagueness-bringing additives. I have called this set of additives TAGS, and the resulting exemplar and tag combinations, (vague) CATEGORY IDENTIFIERS. We have seen that the tags are combined freely by speakers with a variety of grammatical categories. In particular we have looked at evidence of how hearers interpret these tags. The set of propositions relevant to their meaning, which the theory of vagueness must account for, includes the following:

1 Vague tags are understood to designate categories, either conjunctively or disjunctively, consisting of either concrete ("bread", "silver") or abstract ("meet", "elaborated code") entities.

2 These categories are associationally rather than semantically defined

3 Several factors establish for the hearer the characteristics determining membership of the category. They are (a) the exemplar, which is understood to be a "good example" of the intended category; (b) the surrounding linguistic context; (c) the purpose of the conversation; and (d) the hearer's world knowledge which he brings to bear as relevant to the linguistic context and conversational setting.

4 There is some evidence to suggest that these expressions cause particular comprehension problems for hearers who lack specific world knowledge of the conversational topic. That is to say, more problems than non-vague expressions in the same situation.

In the next chapter, I shall look at attested examples of these vague tags (with other examples of vagueness) in order to ascertain the conversational purposes which speakers use them to achieve. Then in Chapters 7 and 8 I discuss theoretical considerations relevant to accounting for the observations in 1,2,3 and 4 above.

Table 4.1

Stimulus Items used in Tag Informant Test, in Order A

Notes:

- (a) half the subjects responded to these in reverse order (B)
- (b) 'R' denotes an invented 'Rosch' item

1. "Could you get me some oranges or something at the market?"[R]
2. A: One of the secretaries was saying there was a film or something. (B: really?) Last thursday we were all down in 2017 and the lecture was actually in Vanbrugh so I went to the secretary and said where is everyone, and she got out this book and said its in Vanbrugh but some weeks there's a film .. can you have films in linguistics?
3. "I love peas and things like that"[R]
4. "... and when you think of necklaces and things like that, the possibilities are endless"[R]
5. "I think its just sort of learning ability that's sort of there, you've got sort of sponge waiting to soak things up and whether it be language or anything else - "
6. "What about if you carry a gun or something like that"[R]
7. "...and they're much easier to remember than say your friend's telephone number because they give you something like 23578 or something like that which is much easier to remember"
8. "and I just could not translate it and I had to give them all these different sort of meanings like sentences with it it and things like that and it was really difficult for them to grasp it"
9. "She said they eat rice and that, didn't she"[R]
10. "Maybe its just because you're so ... its not exactly innate but its just because at the start you realise you're so dependent or whatever on ... I mean human babies particlarly are so dependent that they need communication so much that they have to somehow get it over to someone that what they want is what they need or whatever"
11. "She said it was olives or something"[R]
12. "Well she felt a bit out of it all ... you know she saw her supervisor during the week whenever it was and they had these sort of lectures and that, and that was it. There was no kind of social contact ... there was no coffee room or anything"
13. "But lots of big sort of important numbers that you have to remember and things, I'm sure they're made into a pattern that you can remember them by..."

14. "okay so you take the trousers or whatever and you spray them with this spray..."[R]
15. "But what about things like when you read sentences or something, and then you're asked to sort of reproduce them or something, you reproduce them in the way that it struck you most - its the meaning that's the most important in reproducing what's there"
16. "I stopped my bike by the verge, then a car or something came along and splashed me all over with water"[R]
17. "He used a screwdriver or something"[R]
18. A: "but when you were an undergraduate, didn't you ever feel you were being taught by people who weren't actually that good?"  
B: "No, it didn't seem - I mean, well - we had a very funny undergraduate - there were no lectures or anything like that, it was all sort of seminars"
19. "I'm talking about acceptable middle class language and sort of working class language - the thing that Bernstein, you know, sort of - elaborated code and things like that"
20. "Have you got a wheelbarrow or anything like that which we could borrow?"[R]
21. "I hope we didn't have lots of horrible conversations when you went out of the room in tutorials and things like that..."
22. "She's mad, she has no money - but she bought some new trousers or something only yesterday..."[R]
23. You can remember four lots of four fairly easily - say in the form of dates or something - 1972 or something like that"
24. "They've got a car and that"[R]
25. "You had to hand in guns and things like that"[R]
26. "Could we, when you give us our essays back, and give us titles, could we sort of meet or something because, I mean, there might be things we want to ask"
27. "...they don't need a dessert, they can eat oranges and things like that"[R]
28. A: "What else do we want to talk about on friday?"  
B: "Well, wait a minute, what are we doing, we're having second supervisors - "  
A: " - or something - "  
B: "subsidiary -"
29. "When I was trying to teach them certain words it was really difficult because they'd read these words in a book or something and they'd come to me and say what does this mean"
30. "They never give us peas or anything"[R]

Table 4.2

Tag Informant Test: Summary of Results

Item no.	Title	Total Responses	Type 1 (further example) %	Type 2 (category identifier) %	Type 3 (other) %
<u>or something/anything:</u>					
1	oranges	165	77.0	21.8	1.2
2	film	86	86.0	9.3	4.7
11	olives	106	79.2	17.9	2.8
12b	coffee room	75	64.0	30.7	5.3
15	read sentences	133	94.0	3.0	3.0
16	car	191	86.4	7.9	5.8
17	screwdriver	128	83.6	11.7	4.7
22	new trousers	189	81.5	14.8	3.7
26	meet	99	85.9	8.1	6.1
28	supervisors	46	60.9	26.1	13.0
29	book	129	96.1	3.9	0.0
30	peas	161	82.0	17.4	0.6
<u>or something like that/anything like that:</u>					
6	gun	153	75.2	20.3	4.6
7	23578	119	61.4	37.8	0.8
18	lectures	84	46.4	45.2	8.3
20	wheelbarrow	110	85.5	11.8	2.7
23	1972	109	71.6	24.8	3.7
<u>or anything else:</u>					
5	language	127	85.0	13.4	1.6
<u>or whatever:</u>					
10	need	56	50.0	35.7	14.3
14	trousers	167	80.8	15.0	4.2
<u>and that:</u>					
9	rice	123	50.4	45.5	7.4
12a	lectures	76	80.3	17.1	2.6
24	car	144	84.0	8.3	7.6

and things like that:

3	peas	164	73.8	25.6	0.6
4	necklaces	166	80.7	19.3	0.0
8	sentences	78	76.9	14.1	9.0
19	elaborated code	71	57.7	33.8	8.5
21	horrible conversations	92	84.8	7.6	7.6
25	guns	176	73.9	24.4	1.7
27	oranges	200	85.0	14.5	0.5

and things:

13	numbers	91	85.7	12.1	2.2
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Table 4.3Test Items arranged according to frequency of Null Responses

Item No.	Title		No. of Nulls	Total Responses
28	supervisors		14	46
10	need or whatv		10	56
19	elaborated code		7	71
12a	lectures		5	76
13	numbers you		4	91
23	dates		4	109
21	conv/tutorials		3	92
2	film		2	86
8	sentences		2	78
9	rice	R	2	123
11	olives	R	2	106
14	trousers	R	2	167
20	wheelbarrow	R	2	110
24	car	R	2	144
12b	coffee-room		1	75
15	read sentences		1	133
1	oranges	R	0	165
3	peas	R	0	164
4	necklaces	R	0	166
5	language		0	127
6	gun	R	0	153
7	23578		0	119
16	car	R	0	191
17	screwdriver	R	0	128
18	lectures		0	84
22	new trousers	R	0	189
25	guns and things	R	0	176
26	meet or somethg		0	99
27	oranges	R	0	200
29	book or sth		0	129
30	peas	R	0	161

Table 4.4

Rosch-type test items:

Type 1 responses compared to Rosch's category ranking

1 "Could you get me some oranges or something at the market?"

Responses

Rosch's category ranking

apples	27	[orange]	date
pears	18	apple	raisin
bananas	12	banana	coconut
grapes	8	peach	avocado
tangerines	8	pear	tomato
lemon(s)	7	apricot	nut
satsumas	6	tangerine	olive
grapefruit(s)	6	plum	pickle
mandarins	5	grapes	
peaches	5	nectarine	
plums	4	strawberry	
cabbages	2	grapefruit	
carrots	2	cherry	
oranges	2	pineapple	
potatoes	2	blackberry	
(water)melon	2	melon	
tomatoes	2	raspberry	
pineapples	2	lemon	
clementines		lime	
greengages		fig	
lime		mango	
mushrooms		pomegranate	
nuts		cranberry	
quince		prunes	
Xmas trees		gooseberry	

intersection: 15                  Union: 43

percentage overlap: 34.9



3 "I love peas and things like that"

Responses

beans	24
sprouts	20
carrots	15
cabbage	14
cauliflower	7
broccoli	5
french beans	3
greens	3
green beans	3
lettuce	3
potatoes	3
broad beans	2
sweetcorn	2
turnips	2
beetroot	
celery	
finocchio	
lentils	
meat	
mushy peas	
onions	
peppers	
pulses	
pumpkin	
runner beans	
silver beet	
spinach	
tomatoes	
zucchini	

Rosch

[pea]	
carrot	
green beans	parsley
string beans	mushroom
spinach	avocado
broccoli	rhubarb
asparagus	kale
corn	pickles
cauliflower	baked beans
brussels sprouts	pumpkin
lettuce	seaweed
celery	garlic
cucumber	dandelion
beets	rice
greens	
tomato	
artichokes	
turnip	
eggplant (= aubergine)	
peppers	
radishes	
onions	
bean	
potato	
parsnip	
watercress	
leek	
sweet potato	

Intersection: 21    Union: 47

percentage overlap: 44.7

4 "...and when you think of necklaces and things like that, the possibilities are endless"

<u>Responses</u>		<u>Rosch</u>	
bracelets	27	pants (= trousers, Br.E)	
rings	24	shirt	stockings
earrings	16	dress	vest (= jacket)
brooches	11	skirt	nylons
pendants	10	blouse	cape
watches	6	suit	boots
chains	5	slacks	sandals
anklets	4		
beads	3	jacket	tie
pearls	3	coat	girdle
bangles	2	sweater	belt
charms	2	sweatshirt	scarf
perfumes	2	underpants	mittens
tiaras	2	sports jacket	slippers
trinkets	2	jumper	hat
beetlecrushers		panties	gloves
choker		socks	apron
cufflinks		parka	earmuffs
diamonds		pajamas	handkerchief
diamond rings		undershirt (= vest)	purse (= handbag)
drainpipes		overcoat	hairband
hairslides		nightgown	ring
hair decorations		raincoat	earrings
head bands		bathing suit	watch
home made pottery		bathrobe	cufflinks
mugs			
loquets		slip	[necklace]
papier mache		bra	bracelet
flowers			
pieces of string		shoes	cane
rosaries			
scarves			

Intersection: 7    Union: 76

percentage overlap: 9.2

6 "What about if you carry a gun or something like that?"

<u>Responses</u>			<u>Rosch</u>
knife(s)	27	[gun]	ice pick
pistol	10	pistol	hatchet
dagger	6	revolver	slingshot (= catapult)
sword	6	machine gun	fists
revolver	5	rifle	axe
rifle	5	knife	bow
axe	4	dagger	razor
club	4	shotgun	razor blade
truncheon	4	sword	rocket
bow and arrow	3	bomb	judo
cosh	3	hand grenade	stick
spear	3	A-bomb	poison
chain	2	bayonet	rock
crossbow	2	spear	stone
dart	2	bazooka	gas
razor	2	cannon	chain
addresses of terrorists		bow and arrow	scissors
aerosol		club	bricks
baton		lance	pitchfork
bludgeon		brass knuckles	hammer
bottle		bullet	words
brick		mortar	hand
catapult		arrow	pipe
false passport		tank	rope
hand grenade		teargas	airplane
hat pin		missile	foot
hatchet		whip	car
knuckleduster			screwdriver
lead-filled cosh			glass
lead pipe			shoes
light sabre			
mortar			
phial of poison gas			
pickaxe handle			
poison			
rope			
sharp stick			
shield			
staff			
stake			
stick			
weight			
whip			

Intersection: 27      Union: 77

percentage overlap: 35.1

9 "She said they eat rice and that, didn't she?"

Responses

Rosch

curry(ies)	12	pea	potato
bread	3	carrot	parsnip
corn	3	green beans	watercress
macaroni	3	string beans	leek
maize	3	spinach	sweet potato
potatoes	3	broccoli	parsley
bamboo shoots	2	asparagus	mushroom
beans	2	corn	avocado
fish	2	cauliflower	rhubarb
oats	2	brussels sprouts	kale
rice	2	lettuce	pickles
spaghetti	2	celery	baked beans
tapioca	2	cucumber	pumpkin
water	2	beets	seaweed
barley		greens	garlic
bran		tomato	dandelion
chicken		artichokes	[rice]
chow mein		turnip	
dogs		eggplant (= aubergine)	
dried fish		peppers	
flies		radishes	
lentils		onions	
mangoes		bean	
meal			
pepper			
pilaf			
polenta			
semolina			
soya beans			
stuffed pepper			
sweet and sour			
sweet potatoes			
wheat			

Intersection: 7    Union: 66

percentage overlap: 10.6

11 "She said it was olives or something"

<u>Responses</u>		<u>Rosch</u>
cherries	7	orange
gherkins	7	apple
grapes	7	banana
figs	6	peach
pickled onions	4	pear
plums	4	apricot
anchovies	3	tangerine
dates	3	plum
garlic	3	grapes
onions	3	nectarine
peppers	3	strawberry
chives	2	grapefruit
pickle(s)	2	
prunes	2	cherry
stuffed olives	2	pineapple
almonds		blackberry
aubergines		melon
biscuits		raspberry
broccoli		lemon
brown olives		lime
carrots		fig
cashew nuts		mango
courgettes		pomegranate
crisps		cranberry
cucumbers		prunes
gherkin		gooseberry
gooseberries		date
green olives		raisin
lemons		coconut
nuts		avocado
okra		tomato
peanuts		nut
pickled cucumbers		[olive]
pimentoes		pickle
pineapple		
pomegranates		
sheeps eyes		
stuffed baby egg plants		
sultanas		
tomatoes		
vol-au-vent		

Intersection: 16 Union: 58

percentage overlap: 27.6

14 "Okay so you take the trousers or whatever and you spray them with this spray"

Responses

Rosch

shirt(s)	17	[pants (= trousers)]	handkerchief
coat(s)	13	shirt	purse (= handbag)
jacket(s)	13	dress	hairband
skirt(s)	13	skirt	ring
shorts	8	blouse	earrings
jumper(s)	8	suit	watch
jeans	5	slacks	cuff links
socks	5	jacket	necklace
dress(es)	5	coat	bracelet
blouse(s)	2	sweatshirt	
boots	2	underpants	
hat	2	sports jacket	
pants	2	jumper	
pullover	2	panties	
shoes	2	socks	
suit	2	parka	
underpants	2	pajamas	
waistcoat	2	undershirt (= vest)	
vest(s)	2	overcoat	
cagoule		nightgown	
cloth bag		raincoat	
cloth		bathing suit	
costume		bathrobe	
culottes		slip	
drain-pipes		bra	
dungarees		shoes	
gloves		stockings	
handbag		vest (= jacket, Br)	
mack		nylons	
material		cape	
overalls		boots	
rucksack		sandals	
sacks		tie	
short trousers		girdle	
sleeping bag		belt	
suede shoes		scarf	
swimming-trunks		mittens	
tent		slippers	
tie		hat	
towel		gloves	
trousers		apron	
trunks		earmuffs	

Intersection: 26    Union: 66

percentage overlap: 39.4

16 "...a car or something came by..."

Responses

Rosch

lorry	31	automobile	trailer
van	29	station wagon	cart
bus	23	truck (= lorry)	wheelchair
motor-bike	17	[car]	yacht
truck	9	bus	tank
coach	7	taxi	go-cart
bicycle	5	jeep	rowboat
taxi	3	ambulance	dogsled
wagon	3	van	tricycle
articulated lorry	2	Honda	canoe
dustbin lorry	2	cable car	raft
juggernaut	2	train	submarine
milk cart	2	trolley (car)	sled
moped	2	bicycle	horse
small van	2	carriage	rocket
ambulance		airplane	skates
armoured car		bike	camel
bike with side-car attached		boat	feet
boy		jet	skis
car		ship	skateboard
caravan		scooter	wheelbarrow
cattletruck		tractor	surfboard
cement mixer		wagon	
donkey			
dormobile			
fire engine			
girl			
heavy goods vehicle			
horse			
invalid-car			
man			
motorcycle with sidecar			
police-van			
racing car			
small truck			
station wagon			
steam-roller			
three-wheel-car			
traction engine			
tractor			
woman			

Intersection: 24    Union: 61

percentage overlap: 39.3

17 "He used a screwdriver or something"

Responses

Rosch

spanner	12	gun	gas
knife	11	pistol	chain
hammer	10	revolver	scissors
chisel	9	rifle	bricks
nailfile	9	knife	pitchfork
wrench	4	dagger	hammer
bradawl	3	shotgun	words
pliers	3	sword	hand
hairclip	3		
crowbar	3	bomb	pipe
drill	2	hand grenade	rope
file	2	A-bomb	airplane
pen	2	bayonet	foot
pencil	2	spear	car
penknife	2	bazooka	[screwdriver]
rod	2	cannon	glass
stick	2	bow and arrow	shoes
allen key		club	
awl		lance	
crow bar		brass knuckles	
edge of a coin		bullet	
finger		mortar	
gimlet		arrow	
high-power drill		tank	
iron rod		teargas	
jack		missile	
knife blade		whip	
lever		ice pick	
mallet		hatchet	
metal rod		slingshot (= catapult	
nail		fists	
penknife blade		axe	
ratchet		bow	
scissors		razor	
screwdriver		razor blade	
screwed		rocket	
sixpence		judo	
small file		stick	
strong finger nail		poison	
toe tap		rock	
turned		stone	
twig			
vice			

Intersection: 7    Union: 90

percentage overlap: 7.8



20 "Have you got a wheelbarrow or anything like that which we could borrow?"

Responses

Rosch

cart 14  
 trolley 13  
 trailer 7  
 bucket 5  
 pram 3  
 spade 3  
 truck 3  
 old pram 2  
 rake 2  
 sack 2  
 shovel(s) 2  
 van 2  
 box(es) 2  
 articulated lorry  
 barrel  
 barrow  
 basket  
 bogey  
 box cart  
 box on wheels  
 carrier  
 carrier-bag  
 car, boot of which can be used  
 dumper  
 fork  
 hand-truck  
 hand cart  
 hand trailer  
 hob  
 hod  
 hoe  
 large box  
 lawn mower  
 little truck  
 push chair  
 scythe  
 shopping jeep  
 shopping trolley  
 skip if it is big rubbish  
 sled  
 tractor  
 tractorlette with wagon  
 transporter  
 tray for carrying rubbish  
 trowel  
 wheelbarrow  
 wheels on a base

automobile  
 station wagon  
 truck  
 car  
 bus  
 taxi  
 jeep  
 ambulance  
 motorcycle  
 van  
 Honda  
 cable car  
 train  
 trolley (car)  
 bicycle  
 carriage  
 airplane  
 bike  
 boat  
 jet  
 ship  
 scooter  
 tractor  
 wagon  
 trailer  
 cart  
 wheelchair  
 yacht  
 tank  
 go-cart  
 rowboat  
 dogsled  
 tricycle  
 canoe  
 raft  
 submarine  
 sled  
 horse  
 rocket  
 skates  
 camel  
 feet  
 skis  
 skateboard  
 [wheelbarrow]  
 surfboard

Intersection: 11 Union: 82

percentage overlap: 13.4

22 "... some new trousers or something..."

<u>Responses</u>		<u>Rosch</u>	
skirt(s)	20	[pants (= trousers)]	hat
dress	15	shirt	gloves
shoes	12	dress	apron
coat	11	skirt	earmuffs
blouse(s)	11	blouse	handkerchief
jumper(s)	11	suit	purse (= handbag)
jeans	9	slacks	hairband
shirt	9	jacket	ring
jacket	6	coat	earrings
hat	4	sweater	watch
socks	4	sweatshirt	cuff links
boots	3	underpants	necklace
dungarees	3	sports jacket	bracelet
slacks	3	jumper	cane
tights	3	panties	
bra	2	socks	
cardigan	2	parka	
culottes	2	pajamas	
new shoes	2	undershirt (= vest)	
stockings	2	overcoat	
vest	2	nightgown	
corset		raincoat	
handbag		bathing suit	
jersey		bathrobe	
jump suit		slip	
new blouse		bra	
new dress		shoes	
pants		stockings	
record		vest (= jacket)	
scarf		nylons	
shorts		cape	
ski outfit		boots	
suit		sandals	
suspenders		tie	
suspender belt		girdle	
tee-shirts		belt	
tie		scarf	
track suit		mittens	
trouser suit		slippers	

Intersection: 25    Union: 65

percentage overlap: 38.5

## 24 "They've got a car and that"

ResponsesRosch

caravan	10	automobile
washing-machine	8	station wagon
tv	7	truck
colour tv	6	[car]
motor-bike	6	bus
boat	5	taxi
dishwasher	5	jeep
house	5	ambulance
trailer	5	motorcycle
freezer (deep-freeze)	4	
nice house	4	van
big house	3	Honda
record player	3	cable car
scooter	3	train
bicycle	2	trolley (car)
bike	2	bicycle
fridge	2	carriage
mortgage	2	airplane
stereo	2	bike
annual holidays		boat
automatic washer		jet
bus		ship
canoe		scooter
carpets		tractor
car accessories		wagon
cassette player		trailer
cat		cart
decent looking garden		wheelchair
dog		yacht
expensive house		tank
fitted carpets		go-cart
garage		rowboat
good job		dogsled
holiday bungalow		tricycle
income		canoe
money		raft
moped		submarine
two children		sled
music centre		horse
outboard motor		rocket
posh car		skates
pots of money		camel
private house		feet
roofrack		skis
servants		skateboard
steady income		wheelbarrow
swimming-pool		surfboard
telephone		
tent		
three bedrooms		
transport		
two toilets		
vacuum		
washing up machine		
water skis		
3- bedroomed semidetached		

Intersection: 9 Union: 93

percentage overlap: 9.7

25 "...guns and things like that"

Responses

Rosch

knives	27	[gun]	rope
pistols	10	pistol	airplane
rifles	9	revolver	foot
ammunition	5	machine gun	car
chains	5	rifle	screwdriver
hand grenades	5	knife	glass
bullets	4	dagger	shoes
revolvers	4	shotgun	
swords	4	sword	
clubs	3	bomb	
coshes	3	hand grenade	
daggers	3	A-bomb	
grenades	3	bayonet	
bombs	2	spear	
bottles	2	bazooka	
cameras	2	cannon	
bows and arrows	2	bow and arrow	
gun powder	2	club	
tanks	2	lance	
pen knives	2		
airguns		brass knuckles	
atom-bombs		bullet	
big sharpened sticks		mortar	
bomb-making equipment		arrow	
Boyes anti-tank rifles		tank	
cans		teargas	
cassettes		missile	
contraband		whip	
cut throat razors		ice pick	
dangerous drugs		hatchet	
explosives		slingshot (= catapult)	
flamethrowers		fists	
gelignite		axe	
hatchets		bow	
flammable liquids		razor	
keys		razor blade	
knitting needles		rocket	
knuckle dusters		judo	
mortars		stick	
nuclear weapons		poison	
razors		rock	
razor blades		stone	
rockets		gas	
sawn-off shotguns		chain	
sharpened scythes		scissors	
shells		bricks	
stakes		pitchfork	
sticks		hammer	
taperecorders		words	
tapes		hand	
truncheons		pipe	

Intersection: 24    Union: 85

percentage overlap: 28.2

27 "oranges and things like that"  
Responses

Rosch

apples 31  
bananas 23  
pears 23  
grapes 17  
peaches 11  
tangerines 6  
plums 6  
cheese and biscuits 5  
melons 5  
apricots 4  
pineapples 4  
satsumas 4  
cheese 3  
lemons 3  
mandarins 3  
nuts 3  
pomegranates 3  
sweets 3  
biscuits 2  
grapefruit 2  
cake(s) 2  
avocado pear  
citrus fruits  
damsons  
dates  
fresh fruit salad  
mars bars  
strawberries

[orange]  
apple  
banana  
peach  
pear  
apricot  
tangerine  
plum  
grapes  
nectarine  
strawberry  
grapefruit  
cherry  
pineapple  
blackberry  
melon  
raspberry  
lemon  
lime  
fig  
mango  
cranberry  
prunes  
gooseberry  
date  
raisin  
coconut  
avocado  
tomato  
nut  
olive  
pickle

Intersection: 17    Union: 43

percentage overlap: 39.5

30 "They never give us peas or anything"

Responses

Rosch

beans	21	[pea]	baked beans
carrots	21	carrot	pumpkin
cabbage	19	green beans	seaweed
sprouts	14	string beans	garlic
cauliflower	8	spinach	dandelion
potatoes	8	broccoli	rice
broccoli	6	asparagus	
greens	3	corn	
spinach	3	cauliflower	
turnip(s)	3	brussels sprouts	
green beans	2	lettuce	
tomatoes	2	celery	
asparagus		cucumber	
aubergine		beets	
baked beans		greens	
beetroot		tomato	
beets		artichokes	
bread		turnip	
broad beans		eggplant (= aubergine)	
corn		peppers	
cucumber		radishes	
finocchio		onions	
jam tarts		bean	
kale		potato	
lentils		parsnip	
marrow		watercress	
onions		leek	
paprika		sweet potato	
peppers		parsley	
runner beans		mushroom	
silver beet		avocado	
swede		rhubarb	
sweetcorn		kale	
water		pickles	

Intersection: 24    Union: 49

percentage overlap: 49.0

Table 4.5

Rosch-type test items:

Type 2 (Category Identifying) Responses in Rank Order

1 "Could you get me some oranges or something at the market?"

fruit	5
any fruit	4
food	3
another type of fruit	
anything juicy	
anything round	
any other fruit	
a food containing vitamin C	
citrus fruits	
food of some kind	
fresh fruit	
fruit containing vitamin C	
grub	
oranges if you can anything if not	
oranges or some other fruit	
or something to have for a certain meal	
similar fruit	
something else to eat	
something for colds	
something for dessert	
something similar	
some fruit similar to oranges	
some other thing which will give pleasure	
some other types of fruit	
some other type of fruit	
some table fruit	
vegetables	

3 "I love peas and things like that"

No. of subjects

vegetables	9
green vegetables	3
small vegetables	2
and all vegetables	
and other green foods	
and other green vegetables	
and other round vegetables	
any green vegetable	
any vegetable (s)	3
brightly coloured food	
dishes made from or with peas	
fresh goods in general	
green cooked vegetables	
green vegetables in general, excluding that is turnips	
most vegetables	
natural goods	
non-tastable foods	
other vegetables	2
other vegetables like peas, beans etc	
pulses	
small foods	
small round objects	
small spherical objects	
some vegetables	
sweet things	
tasty things	
things coming in pods	
vegetables like that	

Note: number of mentions of word "vegetable(s)" 28

4 "... necklaces and things like that..."

jewelry	13
other jewelry	2
any jewelry	
baubles	
body adornments	
decoration	
even items other than jewelry	
expensive	
hand-made decorations	
jewelry in general	
necklaces and other expensive items	
neckwear	
only necklaces	
other jewels	
precious objects	
similar jewelry	
valuables	
valuable items	
valuable objects	



6 "What about if you carry a gun or something like that?"

	<u>No. of Subjects</u>
weapon	12
firearm	3
another weapon	2
dangerous weapon	2
another firearm	
another metal object	
any implement which could be put to violent (illegible)	
any weapon	
dangerous implement	
defence	
something else dangerous	
something else illegal	
something heavy and or lethal	
something metal	
something to frighten assailants	
sup term: deadly weapon	

9 "She said they eat rice and that, didn't she?"

vegetables	6	
pasta	4	
chinese food	3	
carbohydrates	2	
foreign food	2	
health foods	2	
Indian food	2	
spices	2	
and all the other things that group is known to eat		
= dal, chapattis etc		
carbohydrates common to those people being spoken about		
cereal		
cereals		
Chinese take-way food		
dried vegetables		
Eastern foods		
exotic vegetables		
foodstuff		
food grown in the area		
green vegetables		starchy stuff
little meat		third world diet
other carbohydrates		vegetables only
other Chinese food		vegetarian food
other dry crops grown		sup term: farinaceous food
other things like rice		
polysaccharides		
poorer grain		
pulses		
rice dishes		
roots		
simple food		
small hard starchy food		
some vegetables		
spaghetti, pasta. generally		
spicy foods		
staples like rice		
starch		

11 "She said it was olives or something"

No. of subjects

something similar  
 some other food  
 drink situation goodies  
 foreign fruit  
 fruit  
 hors d'oeuvre  
 other sharp fruit  
 small savoury objects: vegetables  
 something edible  
 something equally exotic, strange, rare etc  
 something irrelevant  
 something like olives  
 something salty  
 some other food similar to olives  
 some type of exotic foodstuff  
 spices  
 uncommon fruit with strange taste

2  
2

14 "Okay so you take the trousers or whatever and you spray them with this spray"

clothes  
 clothing  
 garment(s)  
 anything you want waterproofing  
 any material  
 any similar clothing to trousers  
 any soiled (emph) garment  
 article needing to be ironed  
 article of clothing  
 article of outside clothing  
 material  
 other clothes  
 other clothing  
 underwear  
 whatever else you fancy spraying  
 whatever modesty forbids my particularizing  
 whatever they're wearing  
 whatever you're using the material from  
 (gloss) other garment

3  
3  
3

16 "... a car or something came by..."

vehicle  
 some other vehicle  
 another vehicle  
 any other road-using motorised vehicle  
 any relatively fast vehicle  
 motor vehicle  
 not bus not motor-bike, wants to indicate nots  
 something moving fast and close to me  
 some moving object

6  
2

17 "He used a screwdriver or something"

No. of subjects

tool  
another tool  
implement  
instrument  
other tool same shape  
something long and thin  
something of the same shaped end as a screwdriver ie could  
turn screws equally well  
something that undoes screws similar job as screwdriver  
some kind of tool  
some long thin object

5

20 "Have you got a wheelbarrow or anything like that which we could  
borrow?"

anything which I could move something in like the loan of you car  
or perhaps yourself  
any garden equipment (eg for an exhibition)  
a large 'container'  
a large container which has wheels and can be pushed or drawn  
small garden vehicle with room to put things  
something for transporting things  
something I can carry things in  
something mobile  
something that can carry heavy bricks  
something to carry things in  
something very large  
something with wheels  
useful receptacle

22 "some new trousers or something..."

clothes  
clothing  
anything new  
anything not necessarily clothing  
any small article which costs money  
article of clothing  
clothing that she didn't really need  
expensive items of clothing  
extravagant impractical garment  
fashionable garment  
'has to include trouser element'  
items of clothing of any size  
luxuries  
Piece of clothing  
other article of clothing  
other items of clothing as well  
other purchases  
something expensive  
something new  
some article of clothing  
some new clothes  
some weird stype of trousers  
things from shop

5  
2

24 "They've got a car and that"

No. of subjects

other luxuries  
any material goods of a middle-class nature  
children at good schools  
double garage and semi-detached house  
everything you could wish for  
expensive things  
good jobs or professions  
large house and garage  
other modern assets eg fridge, tv, spindryer, phone, etc  
other things in same category  
trappings of the bourgeoisie

2

25 " ... guns and things like that"

weapons  
dangerous weapons  
offensive weapons  
any weapons  
arms  
dangerous objects  
metal objects  
sharp objects  
all metal objects  
all other army gear  
all weapons  
any dangerous weapon  
dangerous things  
explosives etc  
firearms  
forbidden articles: weapons, firearms etc  
heavy things  
implements  
objects  
only firearms  
other offensive weapons  
other service and military equipment  
other weapons  
other weapons any kind  
sharp implements

11  
3  
3  
2  
2  
2  
2

27 "... oranges and things like that"

fruit  
all other fruit, ie mixed bowl of fruit  
any fruit  
any kind of fresh fruit  
citrus fruits  
different kinds of fruit  
food from home  
fresh fruit  
ie fresh fruit  
larger fruits in general  
other fresh fruit  
other fruit  
other fruit in season  
pudding

9

(27 continued)

simple dessert without preparation  
something uncooked  
sup term: fruit  
things that are good for you  
things that don't need cooking  
things we've got lying around anyway  
unprepared dessert

30 "They never give us peas or anything"

No. of subjects

7

vegetables  
all green vegetables  
another vegetable  
anything 'colourful' to eat  
anything good for us  
anything to supplement a meal  
anything with vitamins  
any food at all  
any kind of vegetables  
any other green vegetable  
any other vegetable  
any other vegetables  
cooked vegetables to supplement the meal  
good food  
green vegetables  
interesting vegetables  
never give us green vegetables  
not potatoes or farinaceous vegetables  
salad  
school meals vegetables  
something besides meat and potatoes  
something else they like as well as peas

Table 4.6

Attested Test Items: Results

2 "One of the secretaries was saying there was a film or something..."

<u>Type 1 Responses</u>	<u>No of subjects</u>
lecture	15
slides (inc. slide show)	9
talk	6
video (video programme, video showing, video tape)	6
play	4
show	4
discussion	3
seminar	2
tape recording	2
TV programme	2
audio-visual tape	
cabaret	
cartoon	
concert	
dance	
demonstration	
disco	
display	
documentary	
film of experimental programme	
film show	
illustrated lecture	
illustrated talk	
open class	
photograph slides	
production	
radio broadcast	
slides and commentary	
slides and recorded speech	
strip	
tape session	

Type 2 Responses

agreeable pastime relevant to course  
entertainment  
film or something like a film  
night entertainment  
not a lecture, informal situation  
other entertainment  
something to see, watch  
something unusual

7 "... 23578 or something like that"

22 subjects (out of 39) gave at least one 5-figure combination in their answer

The other responses were all type 2 (except for one type 3), as follows:

numbers	3
sequences	2
in sequence of 4	
in sequence of 3	
in sequence of 2	
in sequence of 1	

abbreviations  
another easily remembered sequence  
any five figure number  
any number beginning and ending with two consecutives  
any unknown previously number  
an easy combination  
any easy string of numbers  
ascending numbers  
a logical sequence of numbers  
a simple sequence  
calculation  
consecutive numbers  
21488 etc, rhythm  
letters  
numbers related to make them easier to remember

numbers in order  
numbers in the right order  
number in order  
number plate  
only five numbers  
ordered according to size  
other numbers with five digits  
pattern  
predictability  
relationship - measurable  
series of numbers  
set patterns  
short numbers  
similar number  
something similar to example  
something which sticks in the mind  
some range of figures  
some sort of aid to memory  
some sort of code  
5 numbers the same

5 "...whether it be language or anything else..."

Type 1

maths	13
science(s) (etc)	10
history	8
geography	8
physics	6
ideas	4
riding a bike	3
art	2
arts	2
biology	2
chemistry	2
English	2
information	2
literature	2
philosophy	2
skills	2
sport	2
walking	2
crafts	2
Arabic	
arithmetical knowledge	
art appreciation	
basket weaving	
black hole	
Celtic studies	
codes	
concepts of space	
concepts of time	
cultural attitudes	
dancing	
experience	
French	
how to get home from school	
job	
knowledge	
learning	
life	
living	
music history	
music	
psychology	
R.E.	
skill at sports	
skill	
social learning	
sociology	
technique	
theology	
thinking	
tissue	
who is related to who	



5 continued

Type 2

another subject  
anything humans do  
any other activity  
any other kind of learning  
any subject  
any subjects requiring learning of facts  
educational subjects  
facts and figures  
general cognitive requirements  
general knowledge  
humanities  
material picked up from environment  
other subject  
recognition of people and places  
scientific knowledge  
something else we don't know about  
subjects

---

8 "... sentences with it and things like that..."

Type 1

phrases	12
examples	8
clauses	3
paragraphs	3
explanations	2
words	2
approximations	
circumlocutions	
clarifying examples	
complicated explanations	
context	
contrasting words	
current usage	
demonstrations	
demonstrations with mime	
diagrams	
drawing in the air	
expressions	
generalisations	
hand waving and gestures	
its meaning	
lines	
long-winded complex explanations	
miming	
paraphrases	
passages	
physical examples	
physics	
pronouns	
roundabout definitions	
situations	

8 continued

sketches  
stories  
this booklet  
this word  
usages

Type 2

and all that stuff  
anywhere this thing cropped up  
different words to explain it  
examples of how it's used  
other examples  
other exercises of the same kind  
other types of speech  
other words  
phrases with it in  
roundabout ways of saying it  
words without visible objects

---

10 "... what they want is what they need or whatever"

Type 1

desire	6
food	3
require	3
feel	2
lack	2
attention	
comfort	
drink	
intelligent	
meaning	
milk	
response	
satisfaction of curiosity	
socialisation	
their desires	
to have	
wrong	

Type 2

anything	2
cannot do without	
have to have	
or seem to need	
perhaps something else	
stimulating change of environment	
that they need it	
whatever they want	
what they'd like	
what they desire	
what they dislike	
what they think they need	

10 continued

what they want  
what they want is to be fed  
what they want is to be held  
what they want is to be noticed  
will need  
wish to get rid of  
would like to make them comfortable

---

12a "...they had these sort of lectures and that..."

Type 1

seminars	13
tutorials	9
talks	7
discussions	6
lessons	5
meetings	5
classes	4
chats	
confrontations	
films	
information	
little talks	
periods	
sermons	
study	
teachers	
tete-a-tete	
work	

Type 2

formal teaching	2
contact	
etc	
formal classes, distance maintained between them	
formal talks	
impersonal teaching methods	
other forms of teaching	
similar lessons	
stern chats	
things like lectures	
things one is obliged to attend	
whatever	

12b "...there was no coffee room or anything"

<u>Type 1</u>	<u>No. of Subjects</u>
common room	12
bar	9
canteen	4
lounge	4
games room	2
snack bar	2
cafe	2
rest room	2
JCR	
quiet room	
reading room	
recreation room	
refectory	
staffroom	
tea room	
toilet	
tv room	
union bar	
 <u>Type 2</u>	
meeting place	4
social room (social area, social base)	4
anything which promoted contact	
any communal life (or possibility for)	
any communal room	
any other facility	
discussion	
facilities	
fellow students	
informal contact	
informal contact, not friends	
nothing comfortable	
no food	
no place to sit	
place to meet	
relaxation	
room for relaxation	

13 "But lots of big sort of important numbers that you have to remember and things, I'm sure..."

Type 1 No. of Subjects

(where set exemplar appears to be important numbers)

dates	7
formulas	7
figures	4
letters	3
names	3
words	3
facts	
amounts	
car number plates	
chemical symbols	
data	
dates of births	
demographic calculations	
diagrams	
equations	
exams	
grammatical rules	
historical events	
important dates	
important words	
lists	
long quotations	
mathematical data	
oil tanker crashes	
percentages of the population	
phone numbers	
places	
series	
shapes	
statistics	
tables	
telephone numbers	
dates to learn	

Type 2

(where set exemplar appears to be important numbers)

information	
anything hard to remember	
numbers to be used without reference	
other facts	
other important things	
other numbers	2
other things (facts) to be remembered	
patterns	
things containing the important number	
which are important to you	

13 continued

Type 1

(where set exemplar appears to be remember)

recall	2
repeat	2
understand	2
learn	
and do things with	
and have at hand	
and learn	
call to mind at will	
deduce	
differentiate between	
distinguish from one another	
identify	
know	
manipulate	
refer to	
state	
store in memory	
to use in calculations	
to work with	
use	
utilize	

Type 2

(where set exemplar appears to be remember)

none

15 "But what about things like when you read sentences or something..."

Type 1

(where set exemplar appears to be sentences)

paragraphs	25
phrases	24
passages	8
words	7
articles	5
chapters	4
books	4
clauses	2
expressions	2
poems	2
quotations	2
addresses	
argumentative articles	
descriptions	
digest	
document	
essays	2
experiment	
extracts	
given piece of reading material	
groups of words	
half sentences	
histories	
holophrases	
jokes	
lines of verse	
lines	
lists	
meaning	
meaningful groups of words	
notes	
pages	
paraphrasing	
quotes	
reports	
sections or units of a dialogue	
sentences	
statements	
stories	
summaries	
syllables	
telephone numbers	
texts	

Type 2

(where set exemplar appears to be sentences)

anything written  
do similar comprehension tests  
instructions ie road signs  
some written work

15 continued

Type 1

(where set exemplar appeared to be read...)

learn  
listen to sentences  
look at something  
read anything  
read unrelated words  
say  
sort passages

---

18 "...there were no lectures or anything like that..."

Type 1

classes	6
lessons	6
films	3
tutorials	3
discussions	3
talks	2
conferences	2
assessment	
debates	
dictations	
essays	
examinations	
exhibitions	
grading	
groups	
marks	
practicals	
putting in order, ranking	
teachers	
teach-ins	

Type 2

formal classes	2
formal talks	2
formal teaching sessions	2
anything formal, obviously teacher-pupil	
anything that there should have been	
any kind of tuition where you can take notes and are talked to entirely by a professor	
big groups	
big lessons	
discussions apart from seminar	
formal conventional methods	
formal dictation	
formal lessons	
formal situations, professor makes a speech	
formal teaching methods	
hard work	
informative talks	



18 continued

instruction  
 large formal teaching groups  
 large groups in lessons  
 lessons where no participation expected  
 little teacher participation  
 nothing easy to cope with  
 one-many talks  
 professors teaching in (illegible) intimidating  
 proper teaching  
 serious classes  
 set curriculum  
 set talks  
 talks apart from seminars  
 talks compulsory attendance  
 talks to lots of people  
 teaching  
 teaching without feedback  
 traditional teaching  
 usual expected methods

19 "elaborated code and things like that"

Type 1

slang	3
accent(s)	3
class dialect	2
jargon	2
regional dialect	2
academic language	
articulate speech	
believed	
body language	
class accent	
"clean" language	
clear speech	
colour dialect	
customs	
cycles	
dialect	
diglossia	
grammar	
identify	
individuality	
jargons of particular jobs	
language of a clique	
local language	
local phrases	
methods	
morse	
new language	
punctuation	
regional accent	
semaphore	
sign	
superior dialect	
theories	

19 continued

updated slang

Type 2

language  
and all those other indefinable linguistic terms  
black English not applicable  
complex sentence structures  
conforming language  
correct English  
elegant speech  
exclusive vocabularies  
linguistic attitudes  
or something  
other experiments  
other kinds of code  
own language  
pedantic language  
pish words  
secret verbal communication systems  
similar things  
sociolinguistic patterns  
speech forms  
types of language  
usual writing language  
various formulas  
vocabulary  
ways of speaking

---

21 "I hope we didn't have lots of horrible conversations when you went out of the room in tutorials and things like that..."

<u>Type 1</u>	<u>No. of subjects</u>
seminars	13
lectures	9
lessons	5
gossip	4
discussions	3
meetings	3
arguments	2
calumny	
chats	
class discussion	
courses	
daming conclusions	
dentist	
difference of opinion	
English	
fights	
form period	
geography	
get togethers	
had fights	
history	
jeering talk	
jokes	
library monitors' duty	
maths	
mutterings	
personality destruction	
played silly games	
prefect duty	
private meetings	
private study	
R E	
rude jokes	
rumours	
scandal	
small lectures	
small seminars	
sneaky remarks	
snide remarks	
swearing	
T D	
when out of hearing range	
when we were in a group with you	
when we were talking all together	
whispering	
<u>Type 2</u>	
classes	2
anything like a horrible conversation	
informative classes	
in classes	
meetings where both staff and students were present	
other conversations	

23 "...1972 or something like that"

Type 1

68 responses were four-figure year dates

Other type 1 responses:

ABCD

16

8.8.60

a recent date

a reoccurring date

a used date

catchphrase

cliche

UCCA

YMCA

Type 2

mnemonics

4 x 4 x 4 x 4 etc

1948, 1976 etc

another year

any other mnemonic

any other relative date

any year

birthdays

early 70's

figures

four syllable words

numbers of relative importance for historic or personal reasons

other easily remembered numbers

other relevant dates

other similar dates

paradigms

phone numbers

sequence

significant year names, eg 2000, 1984, 1000

some type of group of numbers

telephone numbers

the Olympics

various other dates

years of the European soccer championship

years of the Olympic Games

1066 and all that

26 "... could we sort of meet or something..."

<u>Type 1</u>	<u>No. of Subjects</u>
get together	11
discuss (discussions)	11
talk	7
have a chat	4
have a discussion	3
chat	2
confer	2
have a class	2
have a tutorial	2
rendezvous	2
see each other	2
and talk	
arrange a rendezvous	
arrange a time to discuss them	
a revision period	
be given instructions	
collect a t a certain place	
come and see you	
congregate	
could I visit you	
debate	
discuss privately	
extra classes	
gather	
gather together	
gossip .	
go round to teacher's house	
go through them	
have a chance to talk them over	
have a class discussion	
have a conversation	
have a general meeting to see about and problems arising from the essay	
have a talk	
have individual meetings	
hold a discussion	
join together	
liaise	
phone each other up	
private appointment between teacher and student	
private discussion	
see you if we have any problem	
seminars	
speak at the end of the lesson	
talk about it	
talk informally about the essay	
talk to you about them	
write a letter	
write a note	
<u>Type 2</u>	
arrange somehow to see each other	
be in contact	
find time to discuss them	
get a message round	
get in touch by phone or letter	

26 continued

give me a chance to ask you what you meant  
informal discussion  
or get together some time

---

28 "... we're having second supervisors"  
" or something"

Type 1

inspectors	2
organisers	2
tutors	2
advisers	2
assistants	
bosses	
deputy supervisors	
elected tutors	
essays	
examinations	
extra teacher	
fifth supervisors	
fourth supervisors	
helpers	
obligatory classes	
observation	
observers	
optional classes	
or third supervisors	
porters	
somebody	
student teacher	
student help	
undergraduates	

Type 2

a different professor again  
equivalent of second supervisors  
other people in the same category  
other supervisors  
overlookers  
something like that  
some change in normal routine  
some other person in authority  
some people  
stand-ins  
supervisors  
teachers

29 "... they'd read these words in a book or something"

Type 1

No. of Subjects

magazine	34
newspaper	24
comic	19
television	5
article	3
advertisement	2
journal	2
letter	2
poster	3
pamphlet	2
paper	2
story	2
be shown these words	
book in a foreign language	
brand names on packages	
brochure	
brother or sister's school report	
description of scientific experiment	
dictionary	
essay	
exercise (grammar)	
heard or seen on tv or radio	
heard them in conversation	
history book	
hoarding	
in the street	
minutes of the AGM	
newspaper article	
on a card	
on the radio	
public sign	
record	
shop window	
signpost	
they'd hear them	
toilet door	

Type 2

came across them in reading  
other methods of communication  
perhaps they'd hear the words in speech  
seen these words written down somewhere  
magazine etc

## Chapter 5

Being Vague5.1 Introduction

In previous chapters I have introduced the idea of vague language use, and have looked in detail at the structure and meaning of two particular types of vague expressions from the set of those I have called vague additives. Having established for both types of expressions a set of observations about what they mean, I now go on to describe and discuss, in this chapter, the way that speakers use these expressions in conversations. In particular what conversational effects arise from using such vague expressions, and what goals do speakers use them to achieve?

5.2 Analytical Approach

The approach taken is broadly in the spirit of the work on conversational interaction known as CONVERSATION ANALYSIS (hereinafter CA), as summarised for example in Wootton, 1981:

"In approaching interaction, then, it is the problems confronting participants which are of interest in CA, and the systematic procedures and designs through which such problems are displayed and resolved. There is no prior analytic 'theory' of interaction being applied."  
(:103)

Thus I would share the analytic predilection sketched by Schenkein (1978:2) - that is to "take[ing] seriously the details of the natural interactions themselves". and I try to be as true to the data as possible by validating the analyses and categories I propose solely by reference to what is observable within the conversational extracts[1].



This general approach means that the material in this Chapter has the appearance of being somewhat random, in the sense that I just set out to describe the observations I have made of the data I have. It is only at the end that I try to link these observations together in any schematic way. In addition, many examples show either a number of different conversational effects, or else it is impossible to sort out quite what the effect is. The fact that hearers may themselves quite often be in this position is itself of interest.

One difference between my work and CA is that I look at written examples as well as spoken, especially written examples which seek, for particular effects, to imitate or be associated with spoken discourse. These are useful because they can show up those aspects of spoken discourse which language users judge to particularly identify its "spokenness".

I begin by looking in some detail at three different kinds of extracts. These serve to introduce both the complexity of the effects under observation, and the kinds of categories I want to suggest.

### 5.3 Three scenarios for vagueness

#### 5.3.1 "Eighty or so pence" - see Figure 5

In this example taken from an advertisement, it is not really possible to observe what communicative effects are understood by its readers. But it is possible, as a reader oneself, to list what they might be.

1 This is not unfortunately always possible. For examples where the data is incomplete (eg no recording, only a short extract), assumptions based on analogy have had to be made.

**BEST COPY  
AVAILABLE**

**Variable print  
quality**



# The importance of clean skin.

DN/8

## Let Vichy explain.

Vichy dedicate themselves solely to the care of the skin. For a clean, healthy skin is where beauty begins.

It is essential that you cleanse your face night and morning—but equally important that you cleanse it gently.

That is why the laboratories at Vichy have produced Vichy Cleansing Milk and Vichy Tonic Lotion.

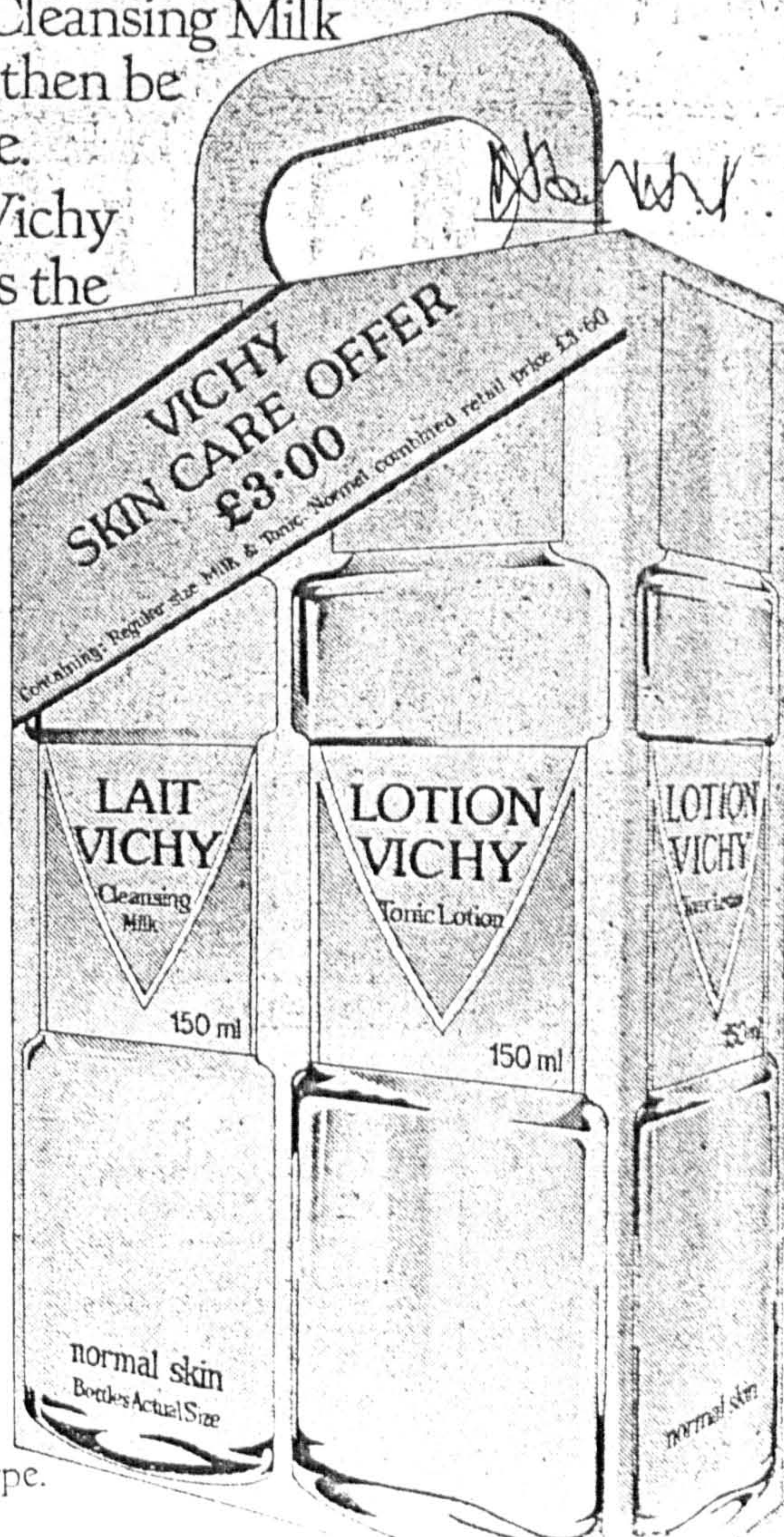
Applied with the fingertips and lightly massaged into your skin, the mild ingredients in Vichy Cleansing Milk gently absorb impurities. These can then be removed with cotton wool or tissue.

After this, an application of Vichy Tonic Lotion seeks out and removes the last traces of the Cleansing Milk, leaving your skin clean, soft and refreshed.

More clean, soft and refreshed, perhaps, than it has ever been.

As your introduction to their way of skin care, Vichy would like you to receive this pack of their Cleansing Milk and Tonic Lotion for £3.

This does save you eighty or so pence. But it is as nothing to the kindness you will be showing your skin.



**VICHY** SKINCARE

Lait et Lotion. Formulated for your skin type.  
Only at your chemist.

Figure 15

Now, presumably Vichy know the retail prices of the products referred to. Brands of this up-market type do not normally allow shops to vary the prices of their products. Therefore they know exactly how much "you" are saving. The copywriter must have deliberately included an approximation to achieve one, or several, particular effects.

1 The actual number is lower, say 77p. Rounding up to 80, and approximating, implicates to the naive, or hasty, a greater saving than is really the case. (This is similar to the price tag ploy: "only £4.99".)

2 For the purpose of the advertisement, the actual saving is not very important. This approximation gives as much information as is necessary, and knowing the exact figure won't give the reader information he needs to know, it will be redundant. The relative unimportance of the sum of money involved is confirmed by the content of the next sentence.

3 It is for self-protection. Retail prices do vary, so savings will be different in different shops. The advertiser ensures he is telling the truth ("legal, honest, decent and truthful") by using a hedge.[2]

4 It sets a tone of chatty informality - phatic communion between advertiser and reader. Test informants who were asked about use of vagueness (in semi-formal group discussions conducted at the conclusion of the tests described in Chapters 3 and 4) suggested that tags are not used in formal types of writing, or in more formal

2 I once wrote to the Advertising Standards Authority suggesting that they should employ a person trained in linguistics to uncover all the misleading statements which are systematically perpetrated by implicatures in advertisements. Regrettably, but unsurprisingly, they weren't interested.

conversations (the sixth-formers' example was "not in an interview"). The copywriter is trying here to render the effect of informal conversation.

Any or maybe all of these effects could be understood by readers of this advertisement.

### 5.3.2 "Elaborated code and things like that"

#### II,8.3

#### Extract 1[3]

[Tutorial discussion on innateness of language capacity in humans]  
note: A, the tutor, is me

A: What about this business about

[  
E: (laughs)

[  
it doesn't matter how intelligent the individual is - they all manage to achieve the same "level of linguistic competence

E: do they

D: "a level anyway

A: well everyone achieves intelligibility

[  
E: yeah yeah okay - within a set

group  
~~~~~I mean you~~~~~

[  
A: †there's been a lot of work done to show that there's no difference in sophistication between one language variety and another

E: I'm talking about you know sort of acceptable middle class language and (.) sort of working class language you know Bernstein and mm you know sort of elaborated code and things like that

C: well that's more environment is'nt it

[  
E: yeah

3 Since almost all the extracts in this Chapter are attested, I have not thought it necessary to mark them with a '+'.  
[

C: it's the way you  
 you're~~~~~  
 [ ]  
 D: most people achieve competence  
 [ ]  
 E: yeah yeah a lot of the time (.) a lot of the time it's linked to intelligence as well  
 [ ]  
 A: but is it  
 E: at least it is in schools - if you can "sound more intelligent by the way you speak you are categorised as being intelligent  
 A: well yes but never mind about "categorised as being more intelligent - you "aren't more intelligent are you  
 B: but what do you mean by intelligent  
 C: its a very good question  
 E: yeah by middle class based intelligence tests  
 A: because if you use "other intelligence tests  
 [ ]  
 E: which is what the elaborated code proved

[continues]

Speaker E precedes her vague exemplar and tag ("elaborated code and things like that") with considerable hesitation - a pause, two sort ofs, two you knows and an "mm". These are indications that (among other things) she is not sure what she's talking about. The subsequent turns all feel able to treat what she's said as wrong, and they are permitted to do this by her unsureness. Speakers D and A, and B, all disagree in some way with her. Duncan and Fiske (1977) in their work on turn-taking, think that expressions like or something facilitate hearer interruption, but they do not show enough data to test this assignment. I would say that my data do not show this, what they do show in some instances is increased possibility for hearer disagreement/criticism, as, for example, I discuss below for this extract.

Later in the same discussion, E makes explicit that (a) she doesn't know or understand the subject matter of the talk very well, and (b) that she does not command with any certainty the language necessary for the topic of discussion, as we can see from the following extract.

Extract 2

[later in same discussion, talking about an article by Putnam]

E: I'll tell you what I found difficult in this - all these different symbols - I didn't know what they meant

A: where

E: in this Putnam thing

[  
C: ~~~~~~

[  
B: ~~~~~~

E: that I class as being sigma - the sum of

A: [reading] a highly restrictive sigma class of grammars -  
↓I don't think you need to worry about that

E: but I did - I mean I just sort of worried about it

[ . . . continues with details of losing first page, worrying etc]

A: you mean this bit at the beginning where he says [reading] we should assume that the speaker has a built-in function which assigns weights to grammars G1 G2 and G3 /E:mm hhh/ to a certain class sigma of transformational grammars

[  
E: and immediately I thought [loud] don't understand this put it down (laugh)

A: I hope you went on reading that because it becomes "much clearer after that

E: no - I get terrified

[continues with details of nervousness amid general laughter]

[conversation continues]

On this basis, I suggest that one use of vague additives is to enable a speaker in fact to talk about a subject he is not very knowledgeable

about, or a subject where he does not know the necessary vocabulary.

On this last point, elaborated code and things like that directs hearers to access a category. It may well be that there is no clear superordinate term for this category. Certainly there was no particular sign of agreement as to what it would be, among the test subjects (cf results, Table 4.6, Test Item 19). If there is one, E didn't know it, so her vagueness may show her finding a way of actually talking about something she does not quite have the vocabulary to express.

There is a way in which E works around what she means to say, using items of vocabulary relevant to her point. It is interesting that speaker C does not appear to be bothered by the multiple uncertainties in what E has said. She refers back to it with a definite that. The subsequent turns show I think that all the speakers decide that what is being talked about is different language varieties and their relationship to measures of intelligence.

There is another point about what E says. She uses, as noted, a lot of vagueness. Yet there is evidence that she does not feel that uncertain about what she is saying. Notice her refusing to give up the turn to either C or D. As she goes on there is a noticeable absence of vagueness. Leaving aside the sort ofs for a moment, it seems she could have rather successfully defined a category (?or two) - middle class language and working class language, without the vagueness, and without her very unclear "elaborated code and things like that". It is also the case, as I noted, that her hearers react to what she says as definite. So perhaps this vagueness is for something else.



Notice that the purpose of E's turn in which the vague tag occurs is to disagree with what A has said about everyone achieving competence. We can see that A (who is the tutor) takes an assertive role in changing the direction of the conversation (by her question on a new topic, and in asking a direct question to the tutorial group (and, as usual with teachers, one to which she already knows several answers; cf Coulthard, 1977:104 for this observation)). Given A's assertive behaviour, E's vagueness may be a marker of deference to someone established as superior in the context of this discussion, (cf Schenkein, 1978, 'Identity Negotiations in Conversation'). E is clearly quite determined to get her point out. She resists all interruptions, including A's very firm attempt to cut her off ("there's been a lot of work done...") and other interruptions. Yet she must continue to mark deference to A, even while disagreeing with her.

A general aspect of the two extracts is that they show speakers under some kind of stress, arising from, perhaps, uncertainty of the subject, lack of knowledge, and the unequal relationship of the tutees to the tutor.

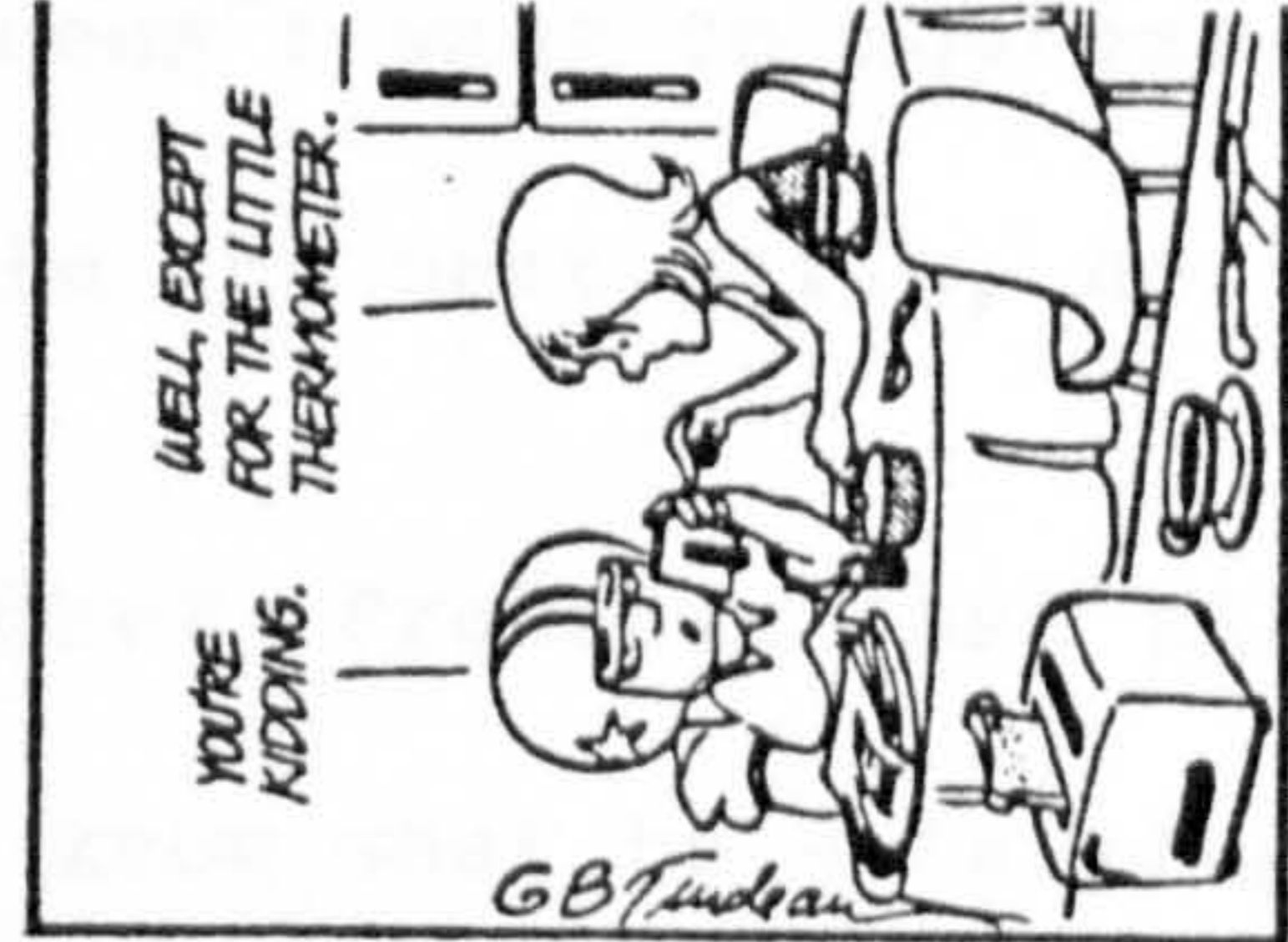
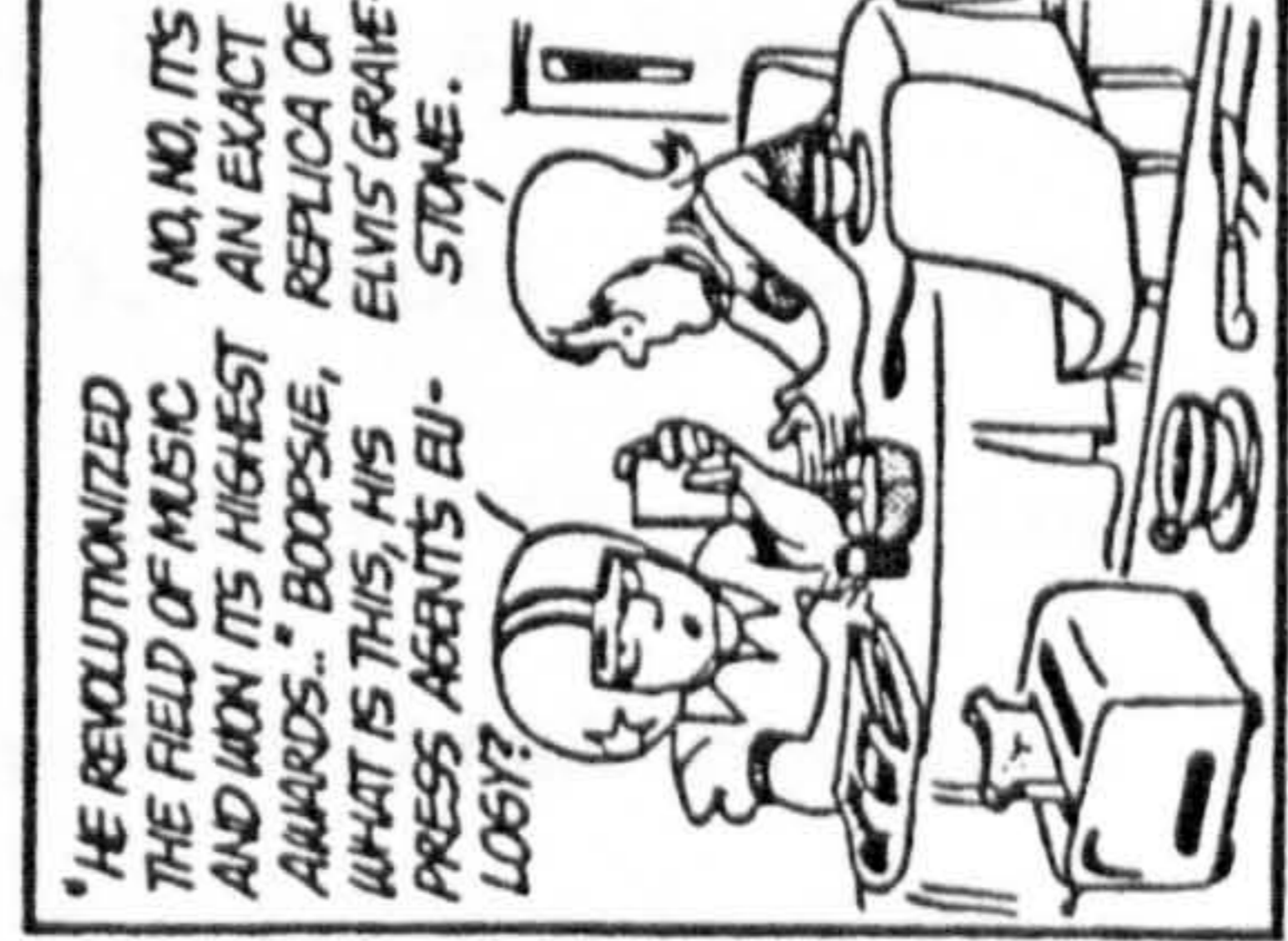
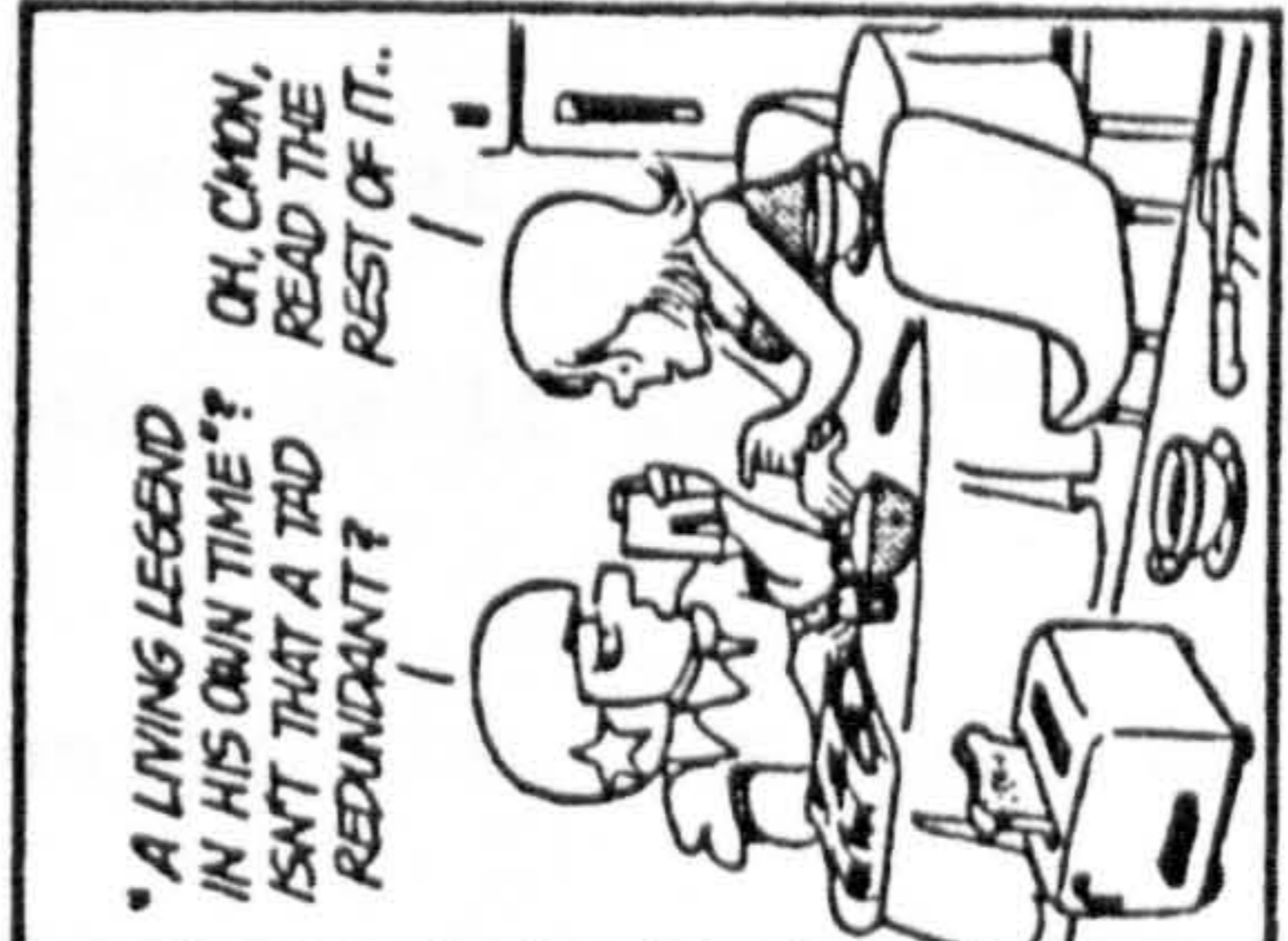
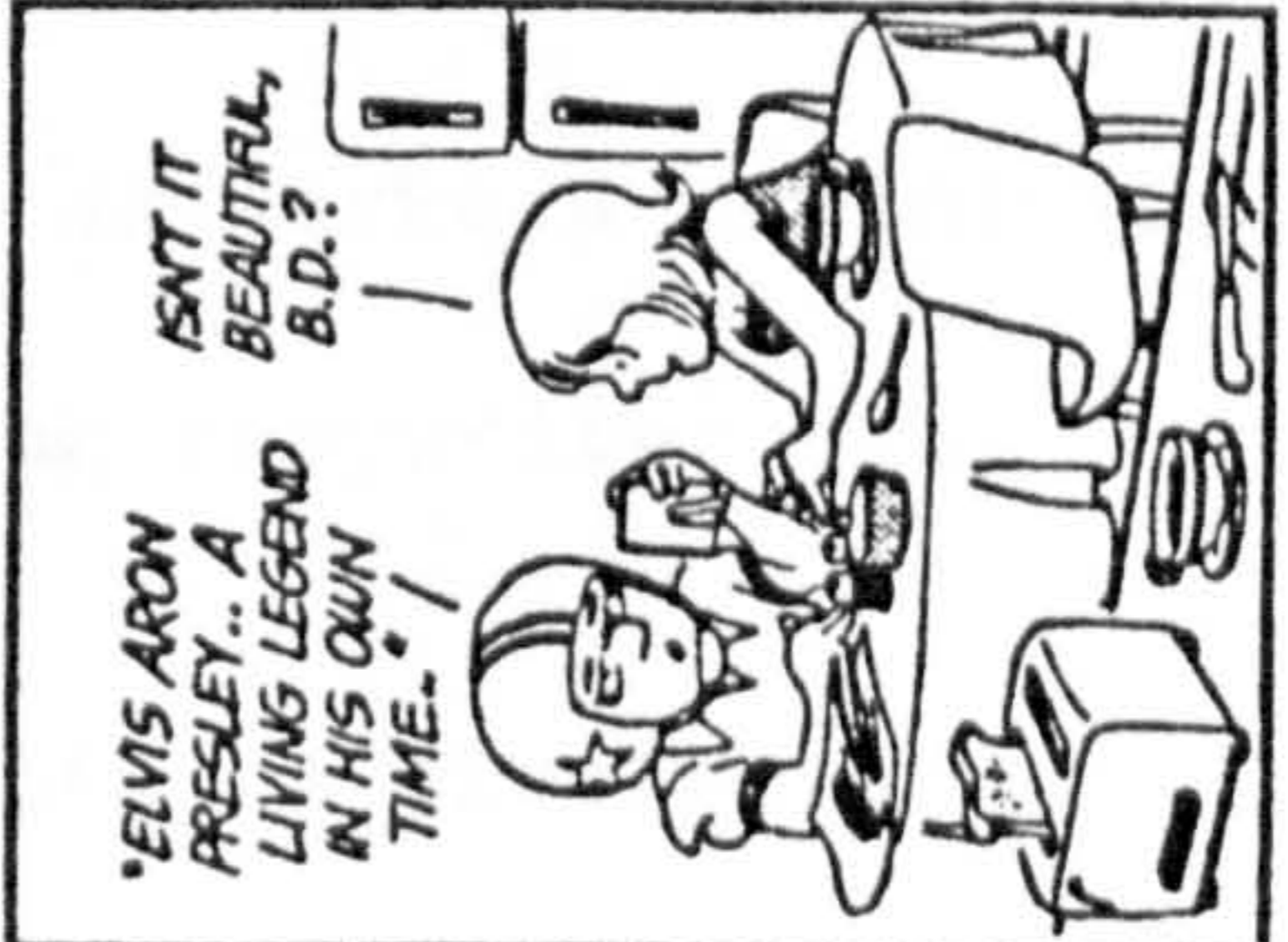
### 5.3.3 Humorous Effects

The 'punchline' of cartoon strip no. 1 is provided by a vague tag. By analysing the source of the humorous effect, it is possible to deduce how the vague tag itself works. First a 'gloss' of the story: Boopsie has been to Graceland and loaded herself up with what looks like a pile of varied Elvis memorabilia. BD asks her if she has bought any souvenirs. We see that she has, in fact she has bought a ludicrous quantity of them. "A postcard or something" would be a bad description of what she has bought. Hence the humour. The joke provides independent evidence for the assignment of meaning to

1.



2.



3.

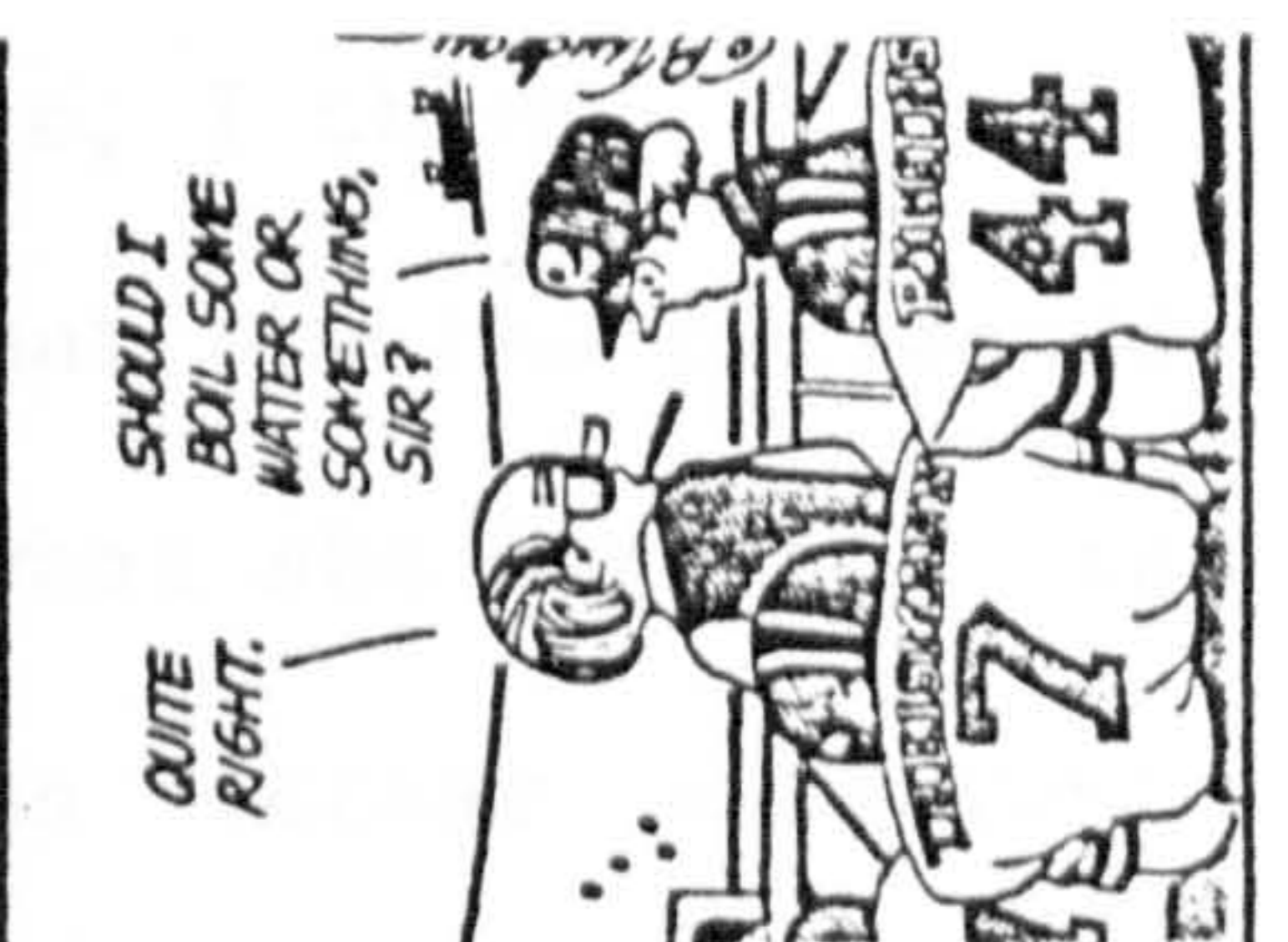
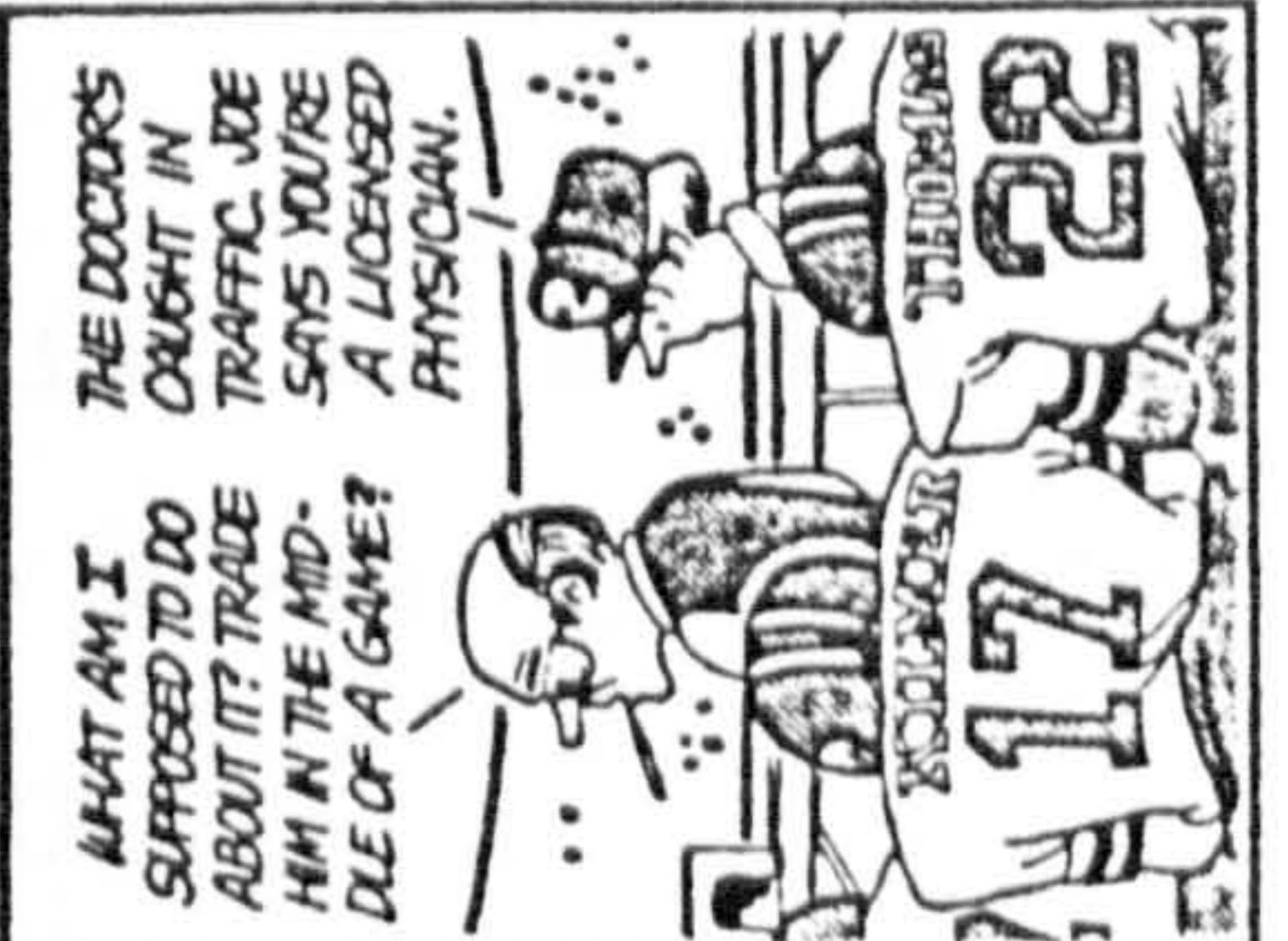
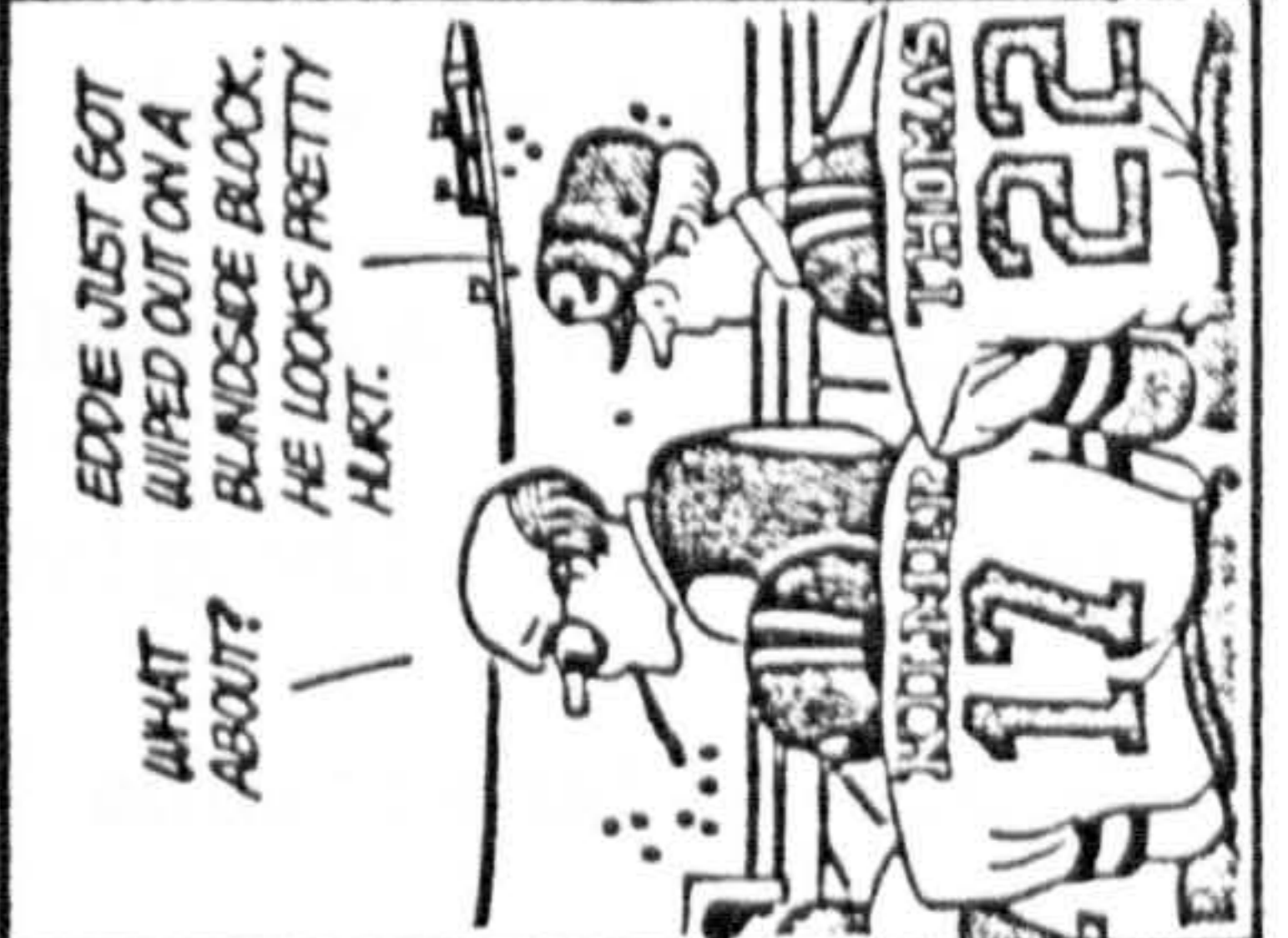
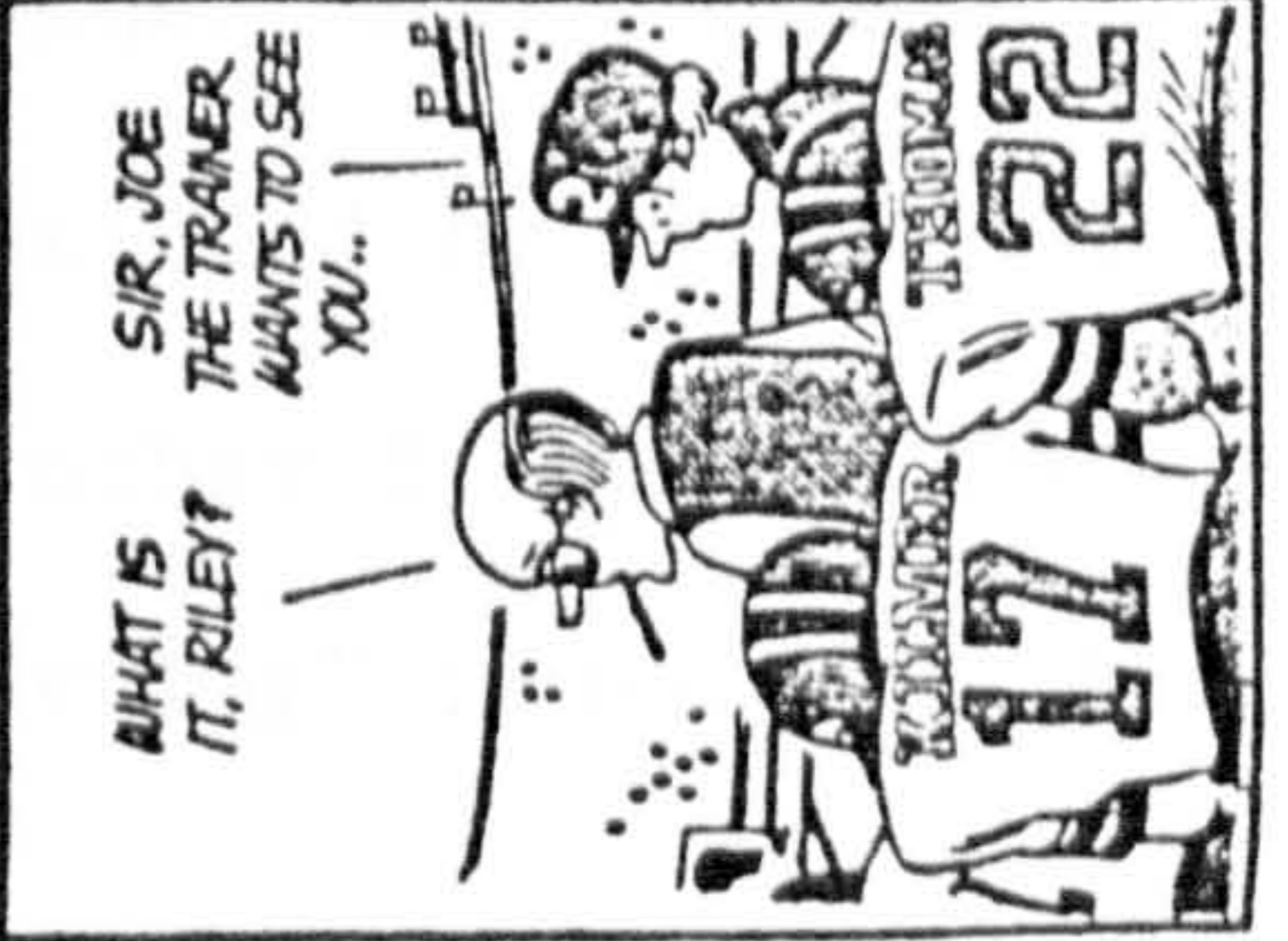


Figure 6

exemplar + tag constructions given in Chapter 4 - that they designate a category of which the exemplar is understood as a good example. If that wasn't the meaning, the joke would not work. Boopsie uses just "or something" as her (agreeing) reply. That works, I think, to tell us that although the collection of Elvis tat that she has collected could be described by "a postcard or something", what she has got is anything but a postcard, and indeed has rather different characteristics from a postcard.

Con conversationally we may understand the punchline as a form of withholding - Boopsie doesn't want to confess to BD exactly what she has got (cf his reaction in the next strip, no. 2).

What makes no. 3 funny? Probably that Riley shows by his use of vagueness that he doesn't know what he's talking about in the field of medical care (neither does Duke, as fans of the strip will know, but that isn't evidenced here). "Boil some water" is additionally funny, because it occurs classically in 'anxious father at emergency delivery' jokes. The associational category identified by "boil some water or something" would include, on my reading, other items of folk medical knowledge. Notice that this "or something" could also be deference behaviour, followed as it is by "sir".

One thing a cartoonist is anxious to do is to create a naturalistic conversation effect. Two tags on one page suggests that he judges them as salient as markers of informal conversation, in the same way as the advertising copywriter did.

In these three extracts, a diversity of conversational effects has been observed. I'd like to now firm up these observations by looking at further examples which will serve to substantiate the

categories suggested, and also to add some others.

## 5.4

### 5.4.1 Giving the right amount of information

We saw in the Vichy example that one possible use of vague additives is to tailor an utterance such that the right amount of information is given.

Grice (1975) noticed that speakers appear to tailor their contributions in particular ways, and he suggested that two important rules of conversation are what he termed the two Maxims of Quantity:

1 Make your contribution as informative as is required (for the current purposes of the exchange)

2 Do not make your contribution more informative than is required (:45)

The examples in this section show these rules being used, and show that vague additives are a device which speakers use to tailor their contributions such that they give the right amount of information for the purpose of the conversation.

Grice notes that his second maxim is disputable - "it might be said that to be overinformative is not a transgression of the CP but merely a waste of time". I think the evidence from data is that the second maxim of quantity is indeed a rule of conversation, the transgressing of which produces, as predicted by the Grice account, particular implicatures. We saw in the previous chapter the text cited by Rosch, containing many overspecifications and producing a humorous or ironic effect. We saw also that my made-up examples:

(28) It was a freestone peach or something

(29) It was a metallic finish 1975 Renault 5TL or something

would probably also produce bizarre effects in many circumstances.

Some informants recognise this consciously. When I asked the informants in the number approximation test (reported in Chapter 3) about the use of approximations, one of them said:

"I think it's more used because it doesn't convey more information than if you knew the exact figure - if you say to someone 'it cost five hundred or so pounds' - if they know it cost five hundred and thirty nine it's not going to get them any further."

Clearly, though, we must add 'for the purpose of that conversation', because there are obviously occasions when knowing it was exactly £539 would be necessary, for example in a banking or accounting context. Sadock and Wachtel in their writing on number approximations both notice that approximations can be used to vary the amount of information given. Crystal and Davy (1975:111-114) observe that vagueness is quite appropriate in some conversations. I asked one of the test subjects why a speaker would not give the exact amount, even if he knew it; he said "because in casual conversation like that you don't go into details like that". We have seen this as one possible effect involved in the advertising copy "eighty or so pence".

A less complex example is

[geraniums]

Theres a room downstairs you see which is only one floor and gets really cold and I lost two or three with the frost [Camb 13A180/36]

In this example, so few geraniums are in question that a hearer may well conclude that S must know how many he/she lost. Notice that being told the exact number will not contribute anything of useful interest to H: S could equally have said some or a few. S has avoided being precise, in view of the purpose of the conversation, and its possible informal setting.

[paper reporting informant work at LAGB]

Weve got about five or six of them but I'm only going to talk about three of them today [LAGB 9,81]

Clearly a linguist engaged in phonetics research must know how many informants he has. But it is not relevant to the audience to know this for the purpose of the paper he is about to give. The information which is important to them is that they are going to be told about three informants. Tailoring the amount of information by using an approximation in direct contrast with an exact number ("three") may have the effect of focussing attention towards, or foregrounding, what is considered most important in the utterance. Using an approximation here communicates something like "don't pay too much attention to this, it's not very important".

In order to observe the converse, use of precision in contexts which demand it, I looked at data from three BBC Radio 4 programmes on financial topics: Money Box, The Financial World Tonight, and It's a Bargain. There were overall very few examples of any kind of vagueness. There was a noticeable absence of vague tags - one occurrence of and the like in an interview. It might be thought that this was because vagueness is unacceptable altogether on Radio 4. However, this is not the case, since vague expressions did in fact occur in a particular context: that of making predictions about the future, and I shall discuss some examples in the section below on "Talking about things you aren't sure about".

Two extracts will show the salience of precision for the purposes of these sorts of programmes. The first is from The Financial World Tonight, stock market report:

and on the immediate issue Dalgety gained six to two eighty after those figures (.) otherwise "firm best describes the way the market traded with the F T index up three point eight at four hundred and eighty nine point three - gains among leading shares ranged from two to four pence (.) like Beecham up three at one hundred and eighty - blue circle up four at three hundred and eighty six and Grand Met up four at one hundred and sixty six

Here the changes in share prices must be provided exactly for those who listen to them.

The second extract is from It's a Bargain, a programme with a very different purpose from that of The Financial World Tonight, since it is to tell listeners the usual prices of consumer goods at the bottom end of the market, and perhaps thus also with, socially, a very different target audience.

The BBC guide price works out at one hundred and ninety nine pounds (.) cheaper than guide price we discovered two models at a hundred and seventy five pounds [...] cheaper still we found a cooker with a small oven and push button ignition to the hot plate only (.) and this was the "Valor Corvette (.) it's on special offer from North Thames Gas at a hundred and sixty two pounds and seven pence - but from the Comet Discount Shops it's a hundred and fifty four pounds ninety "excluding their delivery charge which is two pounds seventy five

In this context precise prices are given.

In these two cases, it certainly does "get you further" to be told the exact numbers. These comparisons show (a) that the amount of information given is dictated by the perceived purposes of the interaction and, (b) that vague additives are used where less precision is judged to be required.

#### 5.4.2 Withholding

Many (non-linguist) English speakers who have talked to me about vague language use have emphasised the extent to which vagueness is deployed deliberately. They suggest that they often use it to withhold information which in some sense might be expected by their hearers in a given situation. We saw an example which I suggested might show this, where Boopsie in the Doonesbury cartoon gives only an inexplicit indication of what she has bought.

Another example which might be heard as withholding is the time estimate example from Chapter 3.

B: could you give me some idea of how long it would take

C: well the quote might be done within three or four days but the job won't be done for at least five weeks [Camb 11B1058]

This three or four days can be seen as unhelpful and insufficiently informative. On the other hand, it could be that the speaker really does not want to commit himself on when the estimate will be done, so this would be a defensive tactic, like those described in section 5.4.5.

An example reported to me was the following:

She's about 29 years old

This appears to be withholding of the exact age, since when questioned the speaker claimed she had used this form because <sup>young</sup> women don't like to be said to be 30.

#### 5.4.3 Saying what you don't know how to say

One conversational goal which a speaker uses vagueness to achieve is to get across a meaning where he does not have at his disposal the necessary words or expressions which he needs to associate with the concepts he is forming. Notice that to be convinced by this account, you have to accept that there is a level of cognitive activity/representation which precedes words and is independent of them (for arguments for this view, see eg, Fodor, 1976 The Language of Thought). I would think that the data in this chapter offer substantial evidence that people can and often do think about concepts which they can't really talk about, ie that there is a pre-lexical/pre-language cognitive level.



A clear example of a speaker with a word-finding problem is the following, taken from my transcription of the students in Extracts 1 and 2, and myself, in a tutorial earlier in the same term:

B: that it is very hard is really interesting where you've got virtually every word you've got somebody stopping somewhere

E: cos it doesn't flow /B: yeah/ (.) its difficult to sort of say it in sounds /A: uh hu/ its sort of difficult to sort of

A: on the other hand its still very few people

[I,13.2]

It is plausible (at least) to suggest that the word the speaker would have been happy to use was articulate. She either did not know this word, or under the strain of trying to express ideas about unfamiliar topics in a tutorial, she had forgotten it. Such examples arise both where the speaker does not know the necessary word, and where he has forgotten it, since in both cases, for the purpose of the utterance in hand, the speaker lacks knowledge of the word.

Another example, later in the same tutorial is:

A: . . .if we're trying to find out how they take it in which is what as you say this thing was trying to do then I think that shows that the syntactic element is important in structuring - in helping you to decode what you've got more important than the semantic - well the thing is they're interlinked - you can't separate them out

C: but there's also things like when you're talking and you take information in when you - when you're talking its just words that you pick up - its not whole strings of sentences and verbs and things - its just the sort of main meaning

E: yeah right

C: [ because people don't talk in sentences

E: [ if somebody tells you a full story then you don't remember every word they said but you do remember the general gist of it /mm/

Here, the expression which the participants can't use, but need, I

think, is syntactic structure. A had introduced this earlier, and had used "syntactic element" in her turn preceding Cs, but it is clear that at this stage neither of the tutees has mastered the use of the word syntax.

A related but different situation in which use of vagueness arises is where the language in question does not have the lexical items necessary for precise expression. An example from later in the above tutorial discussion is:

C:but lots of big sort of important numbers that you have to ring and things I'm sure they're made into a kind of pattern that you can remember them by - say your friend's telephone number because they give you something like two three five seven eight or something like that which is much easier to remember than - and - I know - I'm sure they do it into patterns so that you can remember them

Here, firstly, "ring and things" does not have any obvious lexical superordinate. C succeeds in referring to her set of 'ringing activities', by using a vague expression. Her subsequent use is the same: "something like two three five seven eight or something like that". There isn't any readily available superordinate to refer to the category. She clarifies in her final point by using patterns, and this is taken up by subsequent speakers who refer to: "patterns", "next number", "double four double two double four which is a sort of pattern".

Again, some test subjects were aware of this. In discussion after the test one said that vague tags were used "if you're thinking of something and you don't know the words for it". Others said:

You might not have had the time to think of the exact thing you wanted to say (.) if you say something ~~~~~~ like it or say or something like that then people /mm.mm/

B: and sometimes you don't know (.) like that Bernstein one I mean (.) I don't know (.) I would have said something that I knew about him and then

[

C: get yourself out of it

B: get myself out of it by saying...

Finally, they suggested that such vague tags would not be used in writing because,

you've got more time to think, so you can pick one that (.) a word that really does represent the things you want to say

This supports my observation that vagueness is a ploy speakers use when they can't find the words they need.

The two types, word-finding difficulty, and lexical lack in the language, are seen here as different. However, they are, from the point of view of the speaker producing an utterance, the same, in the sense that either way, he does not have the necessary word(s) at his disposal. More importantly, from the point of view of the hearer's understanding, they are probably the same. since he must go through the inferential procedure of identifying an appropriate associational category from the exemplar given.

However, at the level of conversational effect, they may be different. In the situation of unequal knowledge of the topic of discussion, for example, that which is usually found in a tutorial, the tutor takes the tutees' use of vagueness partly as a confirmation that they don't know as much about the topic or know its vocabulary as well as she does. Hence her frequent use of certain pertinent vocabulary items ("syntax", "syntactic structure", "semantic"), perhaps to try to get their meaning over.

#### 5.4.4 Talking about things you aren't sure about

As I mentioned in relation to Extract 1, an observable ploy for a speaker who lacks specific knowledge is to use vagueness. A clear

example of this is:

[percentage of university students coming from working class backgrounds]

B: I can't remember what the figures are but it's something around the twenty per cent mark and it's never changed (II,21.2)

where B's admission of memory failure ("I can't remember") provides clear evidence that his vagueness is obligatory - he simply does not know the exact figure.

Examples like these illustrate the working of what Grice (1975) formulated as the Maxim of Quality - part of which is the rule:

"2 Do not say that for which you lack sufficient evidence" (:46)

In another similar example, a speaker giving a talk referred to a visit to a country abroad as having taken place "about ten or so years ago". When questioned afterwards, he said it was "about 1969, I would have to look it up", thus confirming that he actually did not know when it had occurred.

In a written report on student accommodation in York, the following appeared:

I have assembled a list of student addresses in York from the registration cards in the Undergraduate Office. The Students' Union did not collect housing information in the usual way this year (NUS card returns) and although the registration questionnaire was designed to fill the gap, the poor response rather nullified the attempt. Around 600 students found private rented accommodation in York and district this October - a loss of around 45 units from last year. In reality this loss was a little less. There are always some addresses which escape listing at the first attempt."

The writer makes explicit that his data collection was imperfect, and thus uses vague quantities so as not to make exact statements which he does not have evidence for. There is about this an element of self-protection - of wanting to avoid later being shown to have said

or written something which isn't true. We shall look at other examples of this in 5.4.5.

### Displacement

Speakers use vague expressions to express their degree of certainty. Two situations in which speakers are often uncertain is where they are talking about the past, or the future. In the case of the past, complete evidence may be lacking. An example which shows this is taken from The Guardian:

[article in The Guardian (29.8.81) about the death penalty in the 18th century]

The records, though far from complete, showed that about 61 people died on the block

This is curious. My reading would be that the records stated that 61 people died. But the writer knows (and says) that they are incomplete, so he uses an approximator to take account of the unrecorded deaths. He also, I think, wants to 'cover' himself against the possibility of being wrong.

Vagueness is often used when making predictions about the future. This can be seen in the pre-budget edition of the programme Money Box in which possible changes in the tax system were discussed:

[The Stock Exchange propose abolishing Contract Stamp Duty]

that would cost the Chancellor about two million pounds a year or as they put it - seventeen and a half minutes of government expenditure

[it also proposes altering the 2% Transfer Stamp Duty; Deputy Chairman of the Stock Exchange:]

rather than have a duty which will become more and more evaded or avoided in the future because of the ways round it it is better to make it a bearable amount and therefore we're suggesting one per cent for everybody

Interviewer: And Peter Wills reckons that change will cost around a hundred and fifty million pounds

Notice the necessity for the exact figure "one per cent" in contrast

to the approximation for the uncertain future consequences of the reduction.

A final example from the same programme:

[building societies propose abolishing stamp duty on house purchase]

Interviewer: Any idea how much that would cost

Spokesman: the cost in this year would be about two hundred and twenty million pounds

Again, test subjects provided independent evidence that lack of knowledge is a reason for using vagueness. On number approximations, one said:

Usually if you have a figure like that it's because you've heard it somewhere or seen it somewhere and it's a very precise figure to start off with but you're just repeating it without the exactitude cos you can't remember all of it.

Discussing the tag test, the university student subjects told me:

its when you're trying to express yourself (.) you're really thinking about what you're trying to say (.) you say or something like that

you know (.) I think its when you (.) sometimes you don't know really what you're talking about /you use them/ but if you know what you're talking about, you know exactly what you want to say and you won't use them

This is borne out by the low frequency of vague additives in the three financial programmes recorded. People taking part in such programmes do so because they do know what they are talking about, and therefore they don't use vague expressions.

#### 5.4.5 Self-Protection

I suggested in relation to the Vichy advertisement that vagueness may be used as a safeguard against being later shown to be wrong. This was seen also in the report on student accommodation quoted in 5.4.4.

Examples of this strike a very odd chord when it is fairly clear that the speaker knows the information exactly and it is appropriate for the purpose of the conversation to give it exactly. Here are some of these.

[House-hunting telephone call to Estate Agent]

B: How many houses are there in the street?

C: There are [reads from printed details] approximately four houses in the street

In this case the estate agent will have made a survey of the area and will know how many houses there are, ie four. This approximator carries a message something like "we've counted four houses, but if you go along and see an extra one, or think that number 24, technically in the next street, is really in this one, then we are not wrong, because we said 'approximately'".

[BBC Radio 4 news: Police spokesman making statement about hijackers at Stanstead]

I can tell you that approximately eleven people are helping us with our enquiries

The non-round number suggests strongly that this is not really an approximation (cf discussion in Chapter 3). The speaker knows that eleven people are involved. His official position inclines him, however, to extreme caution, hence the approximator.

The third example I am including here probably shows a number of factors at work.

[Chemist interviewed on You and Yours, BBC Radio 4, 19.2.81, about not charging the NHS prescription charge for an item if the retail price is lower]

During that day in fact we had three prescriptions for throat lozenges which I think the retail price was about 41 pence and a tube of cream for arthritis which was about 58 pence and on all three occasions I said to the patient concerned - there's no point in your paying a pound - I will charge you the correct retail price.

I believe this speaker remembered these retail prices exactly. But he wanted to guard against the possibility of a faulty memory. In addition, he was probably affected by the stress of being interviewed for the radio which made him, perhaps, more uncertain, and this may also have led to his using vague expressions.

My last example of self-protection is from the university tutorial group:

C: One of the secretaries was saying there was a film or something.

A: oh yeah

D: really

C: last thursday we were all down in Z017 and the lecture was actually in Vanbrugh so I went down to the secretary and said where is everyone and she got out this book and looked at it and said its in Vanbrugh but some weeks there's a film being shown and I said well I do psychology and linguistics is just an elective - but I was intrigued by the film - can you have films in linguistics

A: oh yes we have lots of films

C: "really [disbelief]

The speaker knows quite well that the secretary said there was a film. He makes it definite in the preface to his question. Why tag the first occurrence of film? He is seeking information, he is not sure, and he doesn't want to be wrong. Also, however, account must be taken of the unequal tutor/tutee relationship. There may be some deference here. I discuss this in the next section.

#### 5.4.6 Deference

In discussing Extract 1 in section 5.3.2, I suggested that one reason for use of vagueness was the speaker expressing deference to the tutor at the same time as disagreeing with her. Vague additives are used for these kinds of social reasons.



Weiser (1974) noticed that utterances may be constructed so as to be deliberately ambiguous between at least two speech acts, so as to leave a hearer the option of taking up one speech act or another. One of her examples is:

I'm curious to know what went on at the hearing which can legitimately be treated by its hearer, she says, as a request for information, or as a statement. As such it leaves the speaker a bolt-hole: "I wasn't demanding that you divulge confidential information, I was just expressing curiosity". I think vague additives are used for the same sort of politeness reasons, for example, in this offer, couched as a question:

[A has given up alcohol, speaker knows this]

B: Would you like a drink - an orange juice or something [15.9.80]

The speaker is understood as presupposing that A will want a non-alcoholic drink - he deliberately cancels the preferred reading of "would you like a drink?" with his exemplar + tag. This is understood as referring to the category of non-alcoholic social drinks (orange juice being a good example) and he politely offers the addressee options within that category.

Another example, this time of a request, is taken from one of the tutorial discussions:

Could we, when you give us our essays back - and give us titles - could we sort of meet or something - because (.) I mean - there might be things we want to ask

We have already seen a possible example of deference between tutee and tutor. We have also seen the tutees' tendency to use a lot of uncertainty markers. Here the tutee makes a direct request to the tutor, but is heard as mitigating its directness by leaving the tutor other options (cf the test informants' interpretations, Table 4.6,

Item 26).

An example I gave in Chapter 4 is another example of deference. It is a recapitulation of a direct request for action (unfortunately not recorded; it would have been useful to have the first formulation of the request; I suspect it was without vagueness).

[B has asked A to buy him some bread]

A: so you'd like some bread

B: or something - anything edible will do

B mitigates the force of the request by leaving A much wider options than his original request.

In the next example, the speaker says something which is open to interpretation as being rather critical, so he mitigates it by using a vague tag:

B: I'm a third year physicist

C: I don't know anything about physics at all

B: well neither do I

C: I never even did them at school

B: not at all -ever

C: well I

B: [ general science

C: I did them for a term - so I know something about them - I did chemistry - did biology

B: mmm do you feel that this is a vast hole in your education or anything

C: no

[Clark, 1981]

These few examples show how vague additives are used to make conversational turns convey politeness in appropriate ways.

5.4.7 Informality and atmosphere

I noted with reference to the Vichy advertisement that vague language is associated with informal conversational settings. Some of the test subjects told me the same thing. One said:

If you're just having a conversation - with one's friends you'd probably use them - but if you're in the classroom - you wouldn't

and another suggested:

you change according to who you're talking to

The following is an extract from a conversation between two close friends (both men):

[buying Christmas trees]

B: oh uh I was up at Blackheath in the morning to buy a Christmas tree

C: you/did you actually buy one

B: yes - got one

C: well has it got roots

B: no it hasn't - no

C: how much was it

B: erm quid fifty - about five foot tall

C: that's not bad - we went down to Henry's and had a look at them but er ummm not particularly impressive - none of them had roots

B: ~~~~~more at this place I went to at Blackheath was very good

C: whereabouts is that

B: er just opposite the station

C: oh

B: just across the road

C: a cross the road

B: across the road from the station - yeah

C: it's it's normally a plant shop is it

B: well call it green grocery and things yeah

C: oh yes yeah

B: there there's another shop in Blackheath village that was selling really scrawny ones five or six quid a time

yeah well Blackheath I can believe it [Camb 9B14/18-33]

Incomplete utterances, yeahs and ums signal this as informal. Three vague expressions occur in rapid succession. Clearly the presence of these vague expressions is dictated also by the Conversational Maxims: Quantity - it is not necessary to know exactly how tall the tree was, or what the shop sold, and quality - the speakers probably did not measure the height of the trees, perhaps do not remember the price of the trees and do not know for sure what kind of shop it was. Obviously informality and giving the right amount of information are closely related.

My second example shows calculated informality, similar to that noted for the Vichy advertisement:

[children's book title]

All about Cuckoos and Robins and Things

The contents of the book make clear that what is intended is not the whole category BIRDS, but a subset: those that live in gardens and parklands. We know from Rosch's experimental work on this category (Rosch, 1973) that the robin is considered to be prototypical of the category BIRD. Hence the title is not very informative in identifying the intended category. Given, however, that it is aimed at children, it looks like an attempt to communicate in their register which is informal in a special way.

#### 5.4.8 Women's language

The test subjects thought that women use more vague expressions than men do. I did not control for this variable in looking for examples, but I have no evidence to suggest that it is the case.

The subjective impression that women use more vagueness could arise from several factors. Firstly, as we have seen, vagueness is associated with deference. If, in turn, women are seen to be or are required to be, deferent more often than men, then women will be expected to use vagueness. That is to say, if it is true that women use more vagueness, they do so not because they are women, but because they are deferent or uncertain.

Secondly, there is a view that women have their own language varieties for speaking about matters of concern to women. Angela Carter (1980) suggests that these varieties incorporate a "high degree of unspecificity". She writes:

"Any daughter sent out by her mother for a 'piece of cheese' will return with roughly the same amount (about half a pound). In fact, we all know what we mean by virtue of praxis, pure and simple; any fool ought to be able to work out how much butter, how many eggs, given a knowledge of the number of mouths there are to feed. (Men always insist on shopping lists itemized down to the last microgram and milliliter.)"

Language users recognise that women engage in this sort of time-saving brevity, hence the test subjects' judgment. Of course it is quite erroneous to suggest that only women do it. Any social group sharing interests and knowledge, employs non-specificity in talking about their shared interest. For example, people who repair their own cars might say the following:

Could you get me some sparking plugs?

Non-specialists asks 'how many?'. Specialist knows Renault has four, some Citroens only 2, and you always change them together.

I'll get some spares for our holiday - belts and things (= small easily changeable engine parts which might need replacing on the road (eg points, plugs, condenser)). Non-specialist has no idea what they are and so cannot identify the category referred to.

### 5.5 Conclusions

In this Chapter, I have looked at a wide range of conversational uses of vague additives (however, I have certainly not looked at all possible uses). These are varied both in the types of discourses from which they come, and in the effects which could be observed. The widespread use of vagueness for varied purposes demonstrates what an important aspect it is of the language user's knowledge of his language.

I have said that the discourse settings, and the effects observed, are varied. At the same time, there is an important unifying feature, which is that in every case an element of uncertainty is introduced for at least some participant in the conversation. Where vague language is used to tailor the amount of information given, hearers are uncertain by virtue of being in receipt of less than the full facts. If the hearer of the Christmas tree height were asked how tall the tree was, which his friend had bought, he would have to say that he did not know exactly. Of course, hearers are often not aware of the lack of precise information, because, as I have argued, it is sufficient for the purposes of the particular conversation in which they are taking part. If a speaker is unsure of his subject, or cannot find the right words, his uncertainty is present, and is communicated to his hearers. Hearers in turn are presented not with something precise, but with a series of options. In the case that the speaker does not know, or does not use, the right word or expression to name a category, but replaces it with a vague Category Identifier, his hearer must be uncertain to some degree of the extension of the category the speaker intends. The same applies to the use of an approximation for a quantity. In self-protection uses, the speaker is perceived as uncertain of his authority, and this

is apparent to hearers, who pick up on such cues as presence of a non-Round Number (if it is an approximation). In the deference and politeness examples, the hearer is provided with the opportunity to act upon the speaker's utterance in different ways, and so has uncertainty passed on to him, at least until he has made a choice.

## Chapter 6

Lexical Aspects6.1 Introduction

In the discussion of vague additives thus far , I have treated the expressions under consideration holistically. However, it is the case that all the expressions are made up of two or more lexical items, each of which has uses other than those discussed here. So there are two tasks to be undertaken in this short chapter, firstly to consider the extent to which the meanings which can be established for other uses of these words contribute to the meaning of the vague expressions in which they appear. Secondly, on the basis of this, to discuss, somewhat speculatively, whether these vague additives should be described as idioms or partial idioms in an eventual lexicon of English.

6.2 Lexical Descriptions

## 6.2.1 Or

Or occurs in both the number approximations (n or m, n or so) and in the tag set or something (like that).

One difficulty for me is that there is by no means any agreement as to the analysis of what are understood to be "normal" uses of or (ie, leaving aside those above). There are three areas of doubt; (a) is there one English or, or two (exclusive and inclusive), or more; (b) to what extent can English or be equated with the logical connectives for inclusive or exclusive disjunction; and (c) what are the conditions on acceptable use of or, and how should they be stated? Some of the literature on (a) is in Hurford (1974) and for an opposite view, Gazdar (1979), who summarizes much other work. Fillenbaum



(1978) and Wexler (1978) tackle this question for both or and and from the point of view of psychological theory. (b) is of course closely connected with (a) because if there is only one or, then it is potentially more like the logical operator. Gazdar (1979) tackles this issue. Fillenbaum (1978) and Wason and Johnson-Laird (1972) report psycholinguistic work, designed to test whether people employ the natural language connectives similarly to their putative logical equivalents. (c) is discussed by, among others, Lakoff (1971), Quirk et al (1972) and Wason and Johnson-Laird (1972). It is not the place of this thesis to become involved in these debates. I shall, therefore, extract from the references cited, what appear to be the generally agreed observations pertaining to or, and then consider separately how much the special uses of or which I am looking at are like them.

Firstly, there is the 'common topic' condition, noted by Lakoff (1971:148) and Wason and Johnson-Laird (1972:92). This is to say that part utterances connected by or must be perceived as having something to do with each other. Thus:

(1) Could you get me some apples or some oranges at Sainsbury's<sup>1</sup>  
is fine but

(2) Could you get me some apples or a washing up brush  
is odd. Some informants who I questioned informally about (2) said that they felt impelled to try to find a common feature shared by apples and washing-up brushes, say price, to get an appropriate reading. Fillenbaum (1974,1978) demonstrated experimentally that speakers are sensitive to the 'common topic' condition. In his

<sup>1</sup> In this chapter I revert to the earlier convention of marking attested examples with '+'.  
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experiments subjects were asked, among other tasks, to make appropriateness judgments on sentences containing violations of the 'common topic' condition. Where these were simple questions, for example, "96 per cent of the judgments characterised them as strange or weird" (1974:916).

Secondly, it has been observed that certain constructions containing or, which are disjunctive, can be thought to have arisen from ellipsis (Quirk et al: 9.34 and 9.61ff), or what is known as conjunction reduction (eg Harries 1973). Thus, for example:

(3) We can take John's car or Bill's

can be described as being derived from

(3a) [we can take John's car] OR [we can take Bill's car]  
 S S

Thirdly, as Quirk et al (and others) note, English disjunctive or is almost always understood as exclusive, to the extent that, it is quite hard to construct examples which force an inclusive reading, unless one adds or both. Their example is:

(4) You can boil yourself an egg or you can make some cheese sandwiches, or you can do both

Hurford's example of

(5) Inmates may smoke or drink

which we understand as inclusive, tends to show that inferences from pragmatic knowledge are what decide whether instances are understood as inclusive or exclusive. Hurford's conclusion, however, is that "some instances of English or are inclusive, while others are exclusive" (:411). Gazdar deals with this by making all instances truth-conditionally inclusive, but with a generalised conversational implicature of exclusivity, which can be expressly cancelled. The precise account which should be given of disjunctive or is not

important here.

A fourth point about disjunctive or is that noted by Hurford, that

"the joining of two sentences by or is unacceptable if one sentence entails the other; otherwise the use of or is acceptable."

Thus:

(6) \*John is an American or a Californian

Gazdar argues that Hurford's analysis is incorrect, depending as it does on a sentence, (5), which contains a modal. He proposes that the correct constraint is that sentences entailing one another may be conjoined if the entailed sentence potentially implicates the negation of the entailing sentence, otherwise they may not. This will still account for (6).

#### 6.2.2 And

The treatment of the connective and is in many ways similar to that of or. Its equivalence or not to the logical connective has been discussed (among others by Cohen (1971), Schmerling (1978), Gazdar, 1979). The question of whether there are two ands, one symmetrical and one asymmetrical, is discussed by Lakoff (1971). Lakoff, and Fillenbaum (1978), again discuss its various uses and their constraints, and again sentences containing constituents joined by and have been analysed as having undergone reduction or ellipsis (Harries, 1973).

The 'common topic' condition applies to and in the same way as to or and as Lakoff demonstrated, the perceived similarity may be at the level of presupposition or inference.

What is described by Lakoff as asymmetric and is the one where the conjuncts are ordered with respect to time, eg:

(7) \*The Lone Ranger rode off into the sunset and mounted his horse

But Kempson (1975:56) shows that even if these were two separate sentences, the ordering conditions would still apply, so this has nothing to do with the meaning of and as such. Lakoff concludes that such uses are special cases of symmetrical and.

For the reduction/ellipsis account, there is the problem that some well-known instances of and cannot be derived by ellipsis, eg

(8) John and Mark collided in the corridor

(9) John and Mary don't like each other

I notice that a contrast between and in a construction arrived at by ellipsis, and in a construction not deriving from ellipsis, is the possibility of the reduced version, or not. In an ellipted construction, and can be full and stressed, or reduced:

(10) John (<sup>ˈ</sup>/ænd/ ) Mary came into the room

(/ænd/ )

(/ən/ )

(/n/ )

where the bottom three have a meaning contrast with the first. Ands not in a putative ellipted construction cannot be full, thus:

(11) \*John <sup>ˈ</sup>/ænd/ Mark collided in the corridor

### 6.2.3 So

So has a number of uses, some of which can be excluded from consideration on distributional grounds. Thus so as an emphasiser (Quirk et al:5.51) can be left out, as can so as a conjunct (eg "I didn't feel well so I didn't go"). These uses cannot occur clause-finally. The uses of so which are of interest are those which

Quirk et al call PROFORMS, very commonly in a construction with the pro-verb do, thus

(12) She hoped that he would search the room carefully before her arrival but he didn't do so (2.17)

(\_\_\_\_\_ = part so stands for)

They note that it can be a proform for a clause (10.62), for an object (14.16), or for a predication (9.80).

Another use which may be related to the number approximation one is that with and: and so on, and and so forth which the Longman Dictionary of Contemporary English glosses as "and other things of this kind, and continuing".

#### 6.2.4 Something

As seen in Chapter 4, something alternates with anything, in tags, as between assertive and non-assertive contexts. In this way it parallels the usual uses of something described by Quirk et al (4.127). Something acts as a proform NP for (the Longman Dictionary of Contemporary English) "some unstated or unknown thing", as opposed to person ("someone") or place ("somewhere").

Mittwoch (1981) notes that "for the purposes of concord, something functions as a singular NP" (:119). She notes that there are two somes: some1 being that found in "some bread", and the other, always stressed, in "some book or other". Mittwoch claims that the some in something is some2, in which case it has the features [+delimited quantity] [+specified quantity] [+count] [+singular]. At the same time, something can be used to report a plural, for example when "I ate something" is used to report that I ate three sandwiches.

#### 6.2.5 Like

Prepositional uses of like are said by the Oxford Advanced Learners'

Dictionary to be "often governing a pronoun, noun or gerund". Given its position, the tag use of like must be a preposition, and it is followed by that which, I suggest below, is here functioning as a pronoun. This like is glossed as "such as, resembling". Weinreich (1963:130) calls like "the most powerful extrapolator of all" in the class of operators which "function as instructions for the loose or strict interpretation of designata".

#### 6.2.6 Things

Thing is a useful portmanteau noun which may be used to refer to any material object, and to non-material concepts as well. It also occurs in some idiomatic expressions such as quite the thing and do one's own thing. The Oxford Advanced Learners' Dictionary notes a sense which occurs only in the plural and is glossed as "belongings, articles of which the nature is clear (or thought to be clear) from the context", one of their examples being, "Bring your swimming things".

#### 6.2.7 That

That occurs in or something like that, and things like that, and and that. As far as I have observed, it never occurs in reduced form, which, together with its position, suggests it is the pronoun use of that which is of interest here. That is the singular demonstrative pronoun "used to make a thing specific". Many uses are deictic (as defined in Lyons, 1977:637), in that they point the location of a thing being referred to as "non-proximal" to the speaker. Another function is in textual deixis (Lyons:667), where it is used to refer back to linguistic material previous in the discourse.

### 6.3 Idiomatcity

"There is no generally-accepted criterion which would enable us to draw a sharp distinction between phrasal lexemes, on the one hand, and cliches or fixed collocations on the other" (Lyons, 1977:146)

As the above extract suggests, there is little agreement about how to treat multi-word phrases which in use seem to have some integrity as units. Weinreich (1969) summarizes varying approaches in American work on idioms up to that date, which he describes as having "a distinct hit and run quality". Becker (1975) talks similarly of idiom-like structures being "swept under the rug". In addition, as noted by Cowie (1981), there is a lack of generally agreed terminology for the various categories of idiomatic expression.

For Weinreich, an idiom is an expression which has a literal counterpart, and thus involves ambiguity. He would have an idiom list, and process idioms by a comparison process with their literal counterparts. Expressions not having literal counterparts (because for Weinreich they are "ill-formed") are classed as "complex dictionary entries", for example by and large. Searle (1969) proposed the same kind of schema.

Fraser (1970) defines an idiom as

"a constituent or series of constituents for which the semantic interpretation is not a compositional function of the formatives of which it is composed" (:22)

He classified idioms into different levels of "frozenness".

Becker, like Lyons, suggests that the divisions are not so clear cut. He distinguishes seven classes of expressions from "Polywords", which are invariable, such as forever, to "Verbatim Texts", whole texts which we memorize, eg "How ya gonna keep 'em down on the farm". Becker's view of language production is that it is more or less a haphazard exercise:

"We start with the information we wish to convey and the attitudes toward that information that we wish to express or evoke, and we haul out of our phrasal lexicon some patterns that can provide the major elements of this expression. Then the problem is to stitch these phrases together into something roughly grammatical, to fill in the blanks with the

particulars of the case at hand, to modify the phrases if need be, and if all else fails to generate phrases from scratch to smooth over the transitions or fill in any remaining conceptual holes." (:72)

Bolinger (1976) takes a similar view, saying that although language is a system ou tout se tient, it is heterogeneous as well as homogeneous. Arguing from examples of collocations, lexemes like else and ago with an idiosyncratically limited distribution, and idiomatic uses such as those of the verb bear, Bolinger's metaphor for language is of "a jerry-built structure":

"our language does not expect us to build everything starting with lumber, nails, and blueprint, but provides us with an incredibly large number of prefabs, which have the magical property of persisting even when we knock some of them apart and put them together in unpredictable ways." (:1)

He argues therefore in favour of models of language which reflect this heterogeneity, rather than those which try to reduce everything to constituent parts.

Psycholinguistic evidence on how idiomatic structures are processed tends to argue for the Bolinger view, and against the sort of schema proposed by Weinreich and Searle, in which the "literal" meaning is checked against context, and if found to be inconsistent, a "figurative" meaning is sought. If comprehending idioms involved the number of steps of back checking etc suggested in the comparison approach, we would expect idioms to take longer to process. However, Ortony, Schallert, Reynolds and Antos (1978) found that subjects could comprehend idioms as fast as literal interpretations, and possibly even faster, in situations where context was provided. In Swinney and Cutler's (1979) experiments, subjects saw contextless idiomatic and non-idiomatic sentences and consistently comprehended the idioms faster. Swinney and Cutler argue that their results favour a lexical representation of the idioms they looked at.



Many idiomatic uses are distinguished from their "literal" counterparts by intonation. Informant testing conducted by Jeffries (1981) indicated that hearers accurately recognise recordings of idiomatic uses, even when they are completely decontextualised. This also suggests that the Weinreich/Searle type account is not the right one. It might also indicate that such idioms are listed directly in the lexicon, complete with their intonation, since they can be looked up as such.

Ladefoged (1972), speculating on the mental organisation of language, writes:

"The indications from neurophysiology and psychology are that, instead of storing a small number of primitives and organizing them in terms of a (relatively) large number of rules, we store a large number of complex items which we manipulate with comparatively simple operations. The central nervous system is like a special kind of computer which has rapid access to items in a very large memory, but comparatively little ability to process these items when they have been taken out of memory" (:282)

To summarise then, a string which is a candidate for listing in the lexicon as a string (rather than being looked up under its constituent parts), should have some of the following characteristics:

- 1 meaning not accessible from the sum of its parts
- 2 some degree of "frozenness" to syntactic manipulation
- 3 some degree of constraint on replaceability of items within it
- 4 some degree of prosodic "frozenness"

Of course this is not to say that some perfectly well-formed apparently compositional strings might not also be stored as wholes in memory. From the point of view of linguistic model making, however, they are not a problem.



The final point on or was the entailment relationship described by Hurford and modified by Gazdar. Here, approximative uses of or fit in with Gazdar's constraint. (a) the m number always entails the n number and at the same time, (b) the n number potentially implicates the negation of the m number, since it is a property of the use of numbers for quantities that they potentially implicate "at most". See, for example, discussion of "Mary has five children" in Wachtel (1981).

I have described in Chapter 3 how the prosodies observed in vague uses of n or m are quite dissimilar from disjunctive uses. This prosodic marking suggests that this use of or should not be considered as disjunction. Secondly, we have seen other dissimilarities. Thirdly as we have seen, the interval-of-numbers meanings, which hearers attribute to these structures, have no direct connection with orthodox disjunction which presents just two (exclusive or inclusive) possibilities.

Yet this use of or is indirectly related to the disjunctive use. Firstly, disjunction expresses uncertainty: or connects possibilities, one or both of which may be true. Similarly in n or m expressions, there is uncertainty, and a whole interval of numbers is given as possibilities. Secondly, the fact that the two exemplar numbers each side of or, are always considered to be members of the interval of possible numbers, cannot be ignored. An inclusive disjunction reading accounts for that, what it does not account for is all the other numbers in the acceptable interval.

Finally, the question of n or m as a construction type. As far as the characteristics of phrasal lexemes were concerned, it is true that the meaning attributed by hearers to n or m cannot be deduced from the

sum of the meanings of its parts. Neither can its systematic difference in meaning from the other number approximations, such that it is always understood as allowing more possibilities (being more vague) than about/(a)round. If the approximation meaning is to be read off without a special entry, this will have to be by means of an implicature. It will be no good however, having this implicature attaching whenever two numbers are conjoined by or, since it is not present when the numbers are genuine alternatives. If it is present only when the correct intonation for a vague use has been placed, the implicature will have to be determined by the intonation. But the intonation will have to be determined by the vague meaning (which is the implicature) so this will not work. In addition, the implicature would be non-cancellable, which implicatures classically should not be. This is not the way to deal with this. Given the relative (for a language system) rigidity of the constraints on selection and ordering of numbers, and on intonation, a separate <sup>construction-</sup> ~~type~~ entry seems far preferable.

#### 6.4.2 n or so

One of the most interesting points made by Wachtel (1981) in his reply which commented on a paper (Channell, 1980) in which appeared part of the material on number approximation presented in Chapter 3, is that n or so should be regarded as a variant of n or m with so being treated as a pro-numeral (:316). This is also the approach of Quirk et al (:13.70) who refer to the numeral following or being replaced by so. As Wachtel notes, this analysis is consistent with the results I obtained for the meanings of n or so since the intervals invariably were skewed upwards from n. If so is being understood as m, and since m is always larger than n, this is what we would expect. Furthermore the magnitude of m is, as I have described, determined by that of n,

so a hearer may compute a likely *m* for any instance of so, from the *n* that he hears.

That so is understood as a proform for an *m* number, is also consistent with its many other uses as a proform, which I outlined in 6.2.2. There is also some meaning relationship between this so and that found in and so on, which we recall was glossed as "and other things of this kind". Hence this so can be glossed as "another thing of the kind we just had" viz, a number.

As we would expect, the or in n or so is related and not related to disjunctive or in just the same ways as the one in n or m. In this case, there may be some arguments for not creating a separate lexical entry for n or so, but for seeing it as a variant of n or m, created by use of the proform so which must have its own (rather abstract) lexical entry. The constraints noted on n or m will apply in the same way.

#### 6.4.3 Or Something

Under this heading are encompassed the variants

or (something ) (like that)

(anything )

Here we have another occurrence of or, and we must consider whether this is a disjunctive use or not.

The 'common topic' condition applies, in the sense that, as we have seen, the major aspect of meaning which has been observed is that the tag is understood as directing the hearer to a category which shares features with the preceding exemplar (Chapter 4). There were no (compliant) responses in the tests, where informants interpreted the tag meaning as completely unrelated to the exemplar. In this

respect it is clear that what hearers know of the usual use of or contributes importantly to their understanding of or something.

Secondly, the question of ellipsis/reduction. This sometimes appears to work, such that:

[one of the secretaries was saying there was a film] OR  
 S [one of the secretaries was saying there was  
 S something like that]

can be read, I think, as having the meaning associated with the derived sentence. To make this plausible, it seems necessary to see like that as having been present, but deleted in all instances of these tags.

Where or something is conjoined to a VP, reduction/ellipsis is not so neat, thus:

[could we sort of meet] OR [could we sort of do something like that]  
 S S

since an invariably deletable dummy do is necessary in the second S. This would make these VP + tag constructions not accountable by the regular ellipsis rules which could be formulated to apply to disjunctive or.

Another possible argument against seeing or something as the product of ellipsis is prosodic. In the case where two alternatives are presented, with or, the second one is usually a separate tone unit, and the or may even be a separate tone unit and receive a heavy contrastive stress, thus:

(14) You can come with us or you can stay at home

As I reported in Chapter 4, all the instances of or something that I have observed, have a one tone group intonation, and I do not think contrastive stress on the or is possible:

(15) ?\*there was a film || or || something ||

It's rather difficult to assign a meaning to (15).

Then there is the question of exclusive vs. inclusive readings. The evidence is, I think, that or something tags behave just like other or-disjunctions in that pragmatic considerations dictate whether hearers interpret these as exclusive or inclusive; thus:

(16) +Could we sort of meet or something

is heard as exclusive (as are most tags, in the same way as most disjunctions), but maybe something like .

(17) Would you like some dessert - trifle or something?

could be heard as inclusive.

Of course, if this or is not like alternative or, the question of inclusive versus exclusive may be irrelevant. One reason for suspecting this, is that speakers do not appear to have options of forcing the exclusive and inclusive readings by using either and or both, respectively. I'm not sure one could say:

(18) \*One of the secretaries said there was either a film or something and still less

(19) \*One of the secretaries said there was a film or something or both

and I have no examples of anything like this. These uses of either and or both are quite normal with alternative or. This then, is a very clear difference from alternative or.

The entailment situation is somewhat blurred, but subjects' responses indicated that they used the Gazdar-formulated potential implicature constraint, such that for example, for oranges or something, if SOMETHING = any member of the category of orange-like things, then "something" implicates NOT "oranges".

Something is also a constituent of this tag. Its gloss of "some unstated or unknown thing" fits in with what we can observe of its meaning here, since its unknownness is qualified by the like that which attaches to it. The fact that it may appear with plural exemplars, is also quite in accord with Mittwoch's observation that other uses of something can be used to report plurals.

Like indicates "such as, resembling". As we have seen, tags are always taken to indicate items which "resemble" in some sense their exemplar. It seems obvious that the regular meaning of like contributes importantly to this meaning. In addition, we have the presence of that, which, given the informants' responses, must be taken I think as a deictic pointer back to the exemplar.

Thus the meanings hearers attribute to or something tags are very closely related to the constituent parts of the tags. The only problem for an account which rests on combining the constituents each time, is the behaviour of or, which differs from its "normal" counterpart, in particular as far as intonational characteristics are concerned. If there is a cline with at one end cliches and fixed collocations, and at the other, frozen idioms, then it looks as if this expression may be closer to the fixed collocations end.

#### 6.4.4 And things (like that)

I gave in Chapter 4 the reasons why I consider like that to have been ellipted from occurrences of and things.

The 'common topic' condition on and, is seen to apply to these tags for the same reasons as I gave in more detail for or something, in the previous section, and to avoid repetitious discussion, I will not go through them again.



And in this tag, is understood as a conjunction, in the sense that both the exemplar and the other members of the associational category are understood as being indicated. Thus it contrasts in the usual way with or.

On the question of ellipsis/reduction, again here, some sentences look quite convincing:

(20) +I had to give them sentences with it in and things like that

[I had to give them sentences with it in] AND  
S [I had to give them things like that]  
S

The strongest reason for not seeing this and as the result of ellipsis is prosodic. The and which occurs in tags, is never (at least in all the examples I have) full and stressed, whereas, as I noted in 6.2.2, the and of putative ellipted constructions may be full and stressed.

Now, things, as noted, is more or less a proform for anything, and as we saw, there is another instance of its use where contextual factors of some kind determine, as here, how it should be "filled" ("swimming things"). Another link with that use is that it is invariably plural, just as it is in this tag.

Clearly here, just as with or something, the (sometimes tacit) presence of like that contributes importantly to the meaning of the whole tag.

So the situation parallels almost exactly that for or something. Everything can be accounted for from the constituents, except the special aspects of and, and the particular and rigid intonation structure.

#### 6.4.5 And That

In Chapter 4, I considered and that independently of the other tags.

As we saw at that point, it appears to have the same meaning, in the sense that something like car and that is understood to designate an associational category of which car is a good example. And in and that is in the same relationship with its "normal" use as that in and things like that. That also appears to be the same.

The difficulty is that there is nothing lexical in this tag from which to read off the meaning "some other member of the same associational category", since and will only give conjunction and perceived similarity, and deictic that, as a deictic pronoun referring to the exemplar, gives only a repetition of it. One possibility then is to see this as much more idiomatic than the other tags, in the sense that the meanings observable for it are definitely not available from the sum of its parts.

The other possibility is that again here, there is ellipsis, from and things like that, to and that. Then the full version contains all that is necessary to provide the meaning. I do not however, beyond the plausibility of this analysis, have any evidence for or against it. I don't have, as I do for example for or something, evidence that the two variants are in variation for the same speaker, in similar contexts and with similar meanings understood by hearers.

It is therefore possible only to conclude that (a) the constituents of and that contribute to its meaning, but that (b) it may well need a special lexical entry.

### 6.5 The Single Word Number Approximators

about/around/round/approximately n

These are different from the expressions so far considered. They are rather less likely candidates for being seen as idioms, and rather

more likely to be seen as fixed collocations when conjoined with numbers. Each of the words has other uses than with numbers, as follows:

#### 6.5.1 About

About occurs otherwise than with numbers as a spatial preposition, eg (the Longman Dictionary of Contemporary English) "They walked about the streets" , and as an adverb, (the Longman Dictionary of Contemporary English), "Is there anybody about?", which Quirk et al (6.10), suggest is an ellipsis from a prepositional phrase such as "about the house/ building etc". It also occurs as a non-spatial preposition: (the Longman Dictionary of Contemporary English) "Have you a book about the stars". This non-spatial use has an identifiable relationship with the spatial uses. So about is considered as meaning "somewhere within the general area of" both literally and figuratively.

#### 6.5.2 around/round

These are similar to about, in spatial uses. Bennett (1975:86-88) analyses the locative use of (a)round as [+locative] [+surround]. He notes that around and round are very often interchangeable and concludes: "It is unclear to me whether any correlation can be made between the semantic structure in a given instance and the likelihood that one or other of the two forms will occur." (:88) My observation is that in approximation uses around is more common, which is the opposite of Bennett's observation concerning spatial uses, so there may be a tendency to move towards a rule. Around and round have figurative uses, too, eg "They talked round/around the subject for a while".

#### 6.5.3 Approximately

Approximately is different, in that the Longman dictionary claims that it is only used with numbers. It seems to me however that it can be

used like more or less, as in:

(21) ?The work is approximately complete

(22) The card is approximately circular

What is clear is that approximately does not have the spatial prepositional uses which can be observed for the other three approximators.

#### 6.5.4 Discussion

The first reason for not seeing these as idioms is the degree of substitutability possible, any of them can be substituted for each other, and for a number of other prepositions (see below).

Secondly, there are no particular intonational patterns found with the number uses. There is not in principle any technical difficulty about constructing these expressions afresh from the lexicon each time they are required.

The other general question on these is whether the number uses are different senses (ie is there polysemy [2] in the sense of Lyons, 1977:550ff), or will just one sense suffice to account for the different observable uses? This is not a thesis on lexical semantics, and again here, it must be acknowledged that there is really little agreement among those in the field about how to establish different senses, or how to deal with them when you have. Cruse (1982) surveys the various discussions and other references are Nunberg (1979), Kempson (1979) and Lyons (1981a:146ff). It seems best, therefore, not to get involved in this, but to offer the observations on the number approximation uses of these words as a contribution to

2 Homonymy is ruled out because some sharedness of meaning can be identified.

their future lexical analysis.

As far as the number use of about/(a)round is concerned, we could see this as an extension from the spatial use in the sense that the language user conceptualises the number system as a long, narrow space, to points in which he can refer with spatial prepositions, just as he can to points in a street. Since many of the spatial prepositions can be used with numbers (under, and over, beneath, near, etc) this will be an instance of what Lehrer (1978) has analysed as semantic transfer. Her observation is that when one member of a semantic field develops a new sense, others will also develop related senses. In the case of approximately, however, we may prefer to see the development going in the other direction.

#### 6.6 Conclusions

In this section, I have considered the constituent parts of vague expressions in relation to their total meaning. What is most interesting about them, I think, is that they are a good example of expressions which have a partly systematic and partly idiosyncratic relationship with their constituent parts. This tends to support the view of language as something with "more patching and gluing about it than it has architectonics" (Bolinger, 1976:1), and hence the goal of a model of language which reflects just these heterogeneous characteristics.

## Chapter 7

Semantics, Pragmatics and Vague Meanings7.1 Approach

As I explained in Chapter 1, one reason for undertaking an examination of vague language was that there were already suggestions that it would be a hard testing ground for currently accepted semantic theories, and in particular for the necessary exercise of boundary drawing between semantics and pragmatics. In Chapter 1, I also mentioned a paper by Allwood (1981, hereinafter, Allwood), in which he reviews various theoretical approaches to meaning, and finds them wanting, being led thence to the general conclusion that:

"...so far we have no theoretically interesting and consistent way of separating semantics from pragmatics and that perhaps the distinction is more of a hindrance than an aid to clarity in the study of meaning in natural languages."

In this theoretical chapter, I consider some possible ways to separate semantic and pragmatic aspects of vague language, and offer some programmatic sketches of how each approach could work, drawing on Allwood's discussion. I begin by summarising, in the next section, the vague meanings to be accounted for, and I argue that the two types of vague expressions examined should in fact be analysed as being the result of the same process.

7.2 Vague Meanings

I begin by reproducing from Chapters 3 and 4 the observations of meaning for the Number Approximations, and for the Vague Category Identifiers.

Observed meanings associated with Number Approximations

1 There is a set of expressions whose effect is to bring a vague reading (= an approximation) to an utterance containing a number

2 The resulting approximations are understood as designating continuous intervals of numbers

3 Different approximators change the interval designated. Given an Exemplar-number  $x$ , (and setting aside the effect of other factors such as situation, and the form and nature of the E-number), the effect of the different approximators (as observed from the test results) can be seen schematically as follows:

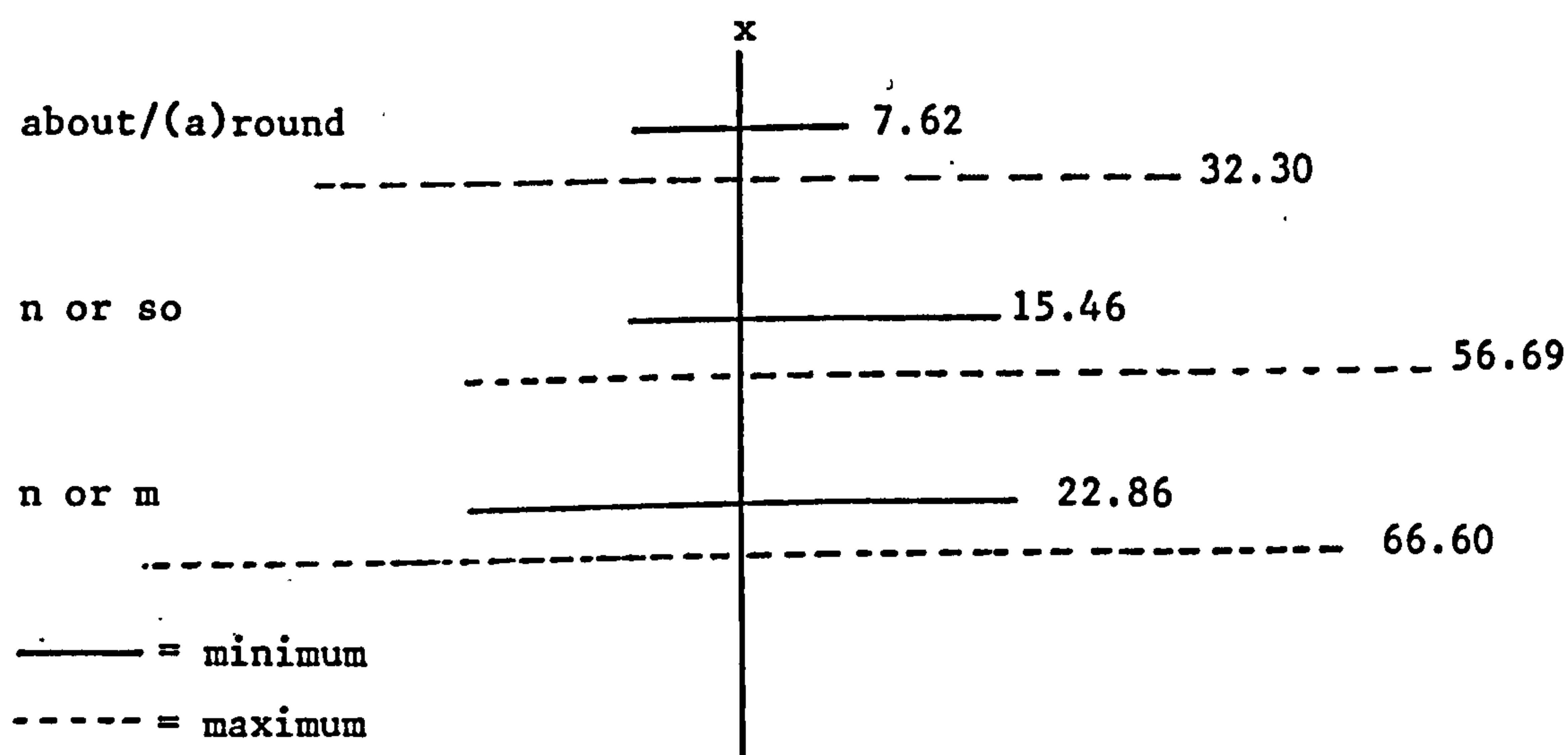


Figure 4

4 Although there is a high degree of agreement among speakers that numbers near the exemplar number are members of the interval, there appears to be variation about the extent of the interval in any given case

5 The size and form of the exemplar number both affect the length of the interval

6 Whether the E-number is a round number (= Reference Point Number) or not affects the length of the interval ("about 31" vs "about 30")

7 The nature of the item being approximated (discrete vs non-discrete, man vs cockroach) affects the interval

8 The conversational setting in which an approximation occurs affects how it is understood

9 Sentences containing approximators characteristically have the entailments and implicatures described in 3.7.

#### Observed meanings associated with Tags

1 Vague tags are understood to designate categories, either conjunctively or disjunctively, consisting of either concrete ("bread", "silver") or abstract ("meet", "elaborated code") entities.

2 These categories are associationally rather than semantically defined.

3 Several factors establish for the hearer the characteristics determining membership of the category. They are (a) the exemplar, which is understood to be a "good example" of the intended category; (b) the surrounding linguistic context; (c) the purpose of the conversation; and (d) the hearer's world knowledge which he brings to bear as relevant to the linguistic context and conversational setting.

4 There is some evidence to suggest that these expressions cause particular comprehension problems for hearers who lack specific world knowledge of the conversational topic. That is to say, more problems than non-vague expressions in the same situation.

#### 7.2.2 A Unified Approach

Now, what is common to the meanings of both types of expressions considered is that from an exemplar of some kind, a set consisting of a selection of possibilities is inferred. For the number approximations, this set is a subset of the set of Real Numbers, of which the exemplar number(s) is/are (a) member(s). For the tags, it is a set of abstract or concrete entities, of which the exemplar is a member.

An important observed characteristic of the sets associated with these vague expressions is that features of linguistic context, and situation, and world knowledge, all play a crucial role in



establishing, for any particular utterance of any vague expression, what the set consists of.

We saw in Chapter 3, in relation to number approximations, how factors such as the perceived purpose of the approximation, and the item being approximated, appeared to affect the interval of numbers which were thought of as possibilities. Similarly in Chapter 4, for the tags, I described how the different results observed for the same exemplar demonstrated the influence of world-knowledge and imagined context on the sets which the subjects produced as their answers.

Here then, we are able to observe in operation a clear instance of hearers "going beyond the information given" (in the sense of Bruner, 1973:218), by use of particular inferential procedures. Such a view of language understanding is not new, cf Fillmore (1977) who says that interpreting a text:

"...involves . . . much more than the processing of meanings directly provided by the text, but also memories, knowledge, and current perceptions of the interpreter, as well as the application of a set of procedures for determining the basis of the coherence of the text." (:86)

On the more recent view of Milroy (1983), it is the inference procedures which have primacy in decoding utterances on the lines of 'what kinds of things could this person possibly be meaning, given this situation, and what I know', and she suggests, it is only if this fails that recourse is made to the details of syntactic arrangement and lexical meaning, rather than, as more usually suggested, the other way round. She writes that "the relation between internal grammars and comprehension is indirect". Danell (1978:14) writing specifically about vagueness, makes the same point. Another instance of going beyond the information given is the inferential procedures described by Allan (1981) for the understanding of animal nouns, like lamb,

which are understood as denoting meat or skins, or other aspects of lamb, depending on context. He sketches the sort of inferential rules which would be involved. Clark (1978) also gives a programmatic account of inference steps. (cf also the various approaches to shared knowledge and inferences in Smith, 1982.)

In the present case, we may deduce that hearers go beyond the information given, in rather closely circumscribed ways, such that they agree strikingly as to the results they come up with. How do they do this? Bruner:

"...when one goes beyond the information given, one does so by virtue of being able to place the present given in a more generic coding system and one essentially reads off from the coding system additional information either on the basis of learned contingent probabilities or learned principles of relating material." (:224)

This brings me to considering a further point about these vague sets. The sets of possibilities which hearers understand are sets which are well-defined in the sense of forming a recognisable category (cf (Tag) T-test informants' gloss responses: Table 4.5 and 4.6) (clearly in a rather more circumscribed way for the number sub-sets). This is to say that in going beyond the information given, hearers must be using the principles of categorisation which have been observed as a fundamental aspect of human cognition (Palmer, 1975, for visual perception, Rosch and Lloyd, 1978, for psychological studies of the structure of categories, and the processes by which they are formed). Very generally, what this work shows is a cognitive predilection to organise items into categories, and to relate incoming stimuli to appropriate categories.

Most of the work conducted in psychology has up to now been done on categories of concrete objects. We have seen that where the vague tags contained concrete objects whose membership of particular

categories has already been demonstrated experimentally, the sets associated with them often bore a strong similarity to the experimentally determined categories (4.3.1). The situation for categories of non-concrete entities is quite otherwise since there is little work on them. Thus the analysis I am suggesting here is making an inferential leap in claiming that the non-concrete vague categories are equally the results of cognitive principles of categorization. It is, however, a leap which I think is warranted.

I have said the sets are discernibly circumscribable. But it appears that their membership "boundaries" are not fixed. Informants' comments, observations of use, and the results of the two tests, all suggest strongly that these sets are woolly-edged, - "fuzzy" just in the sense of Zadeh (1975):

"We have been slow in coming to the realisation that much perhaps most, of human cognition and interaction with the outside world involves constructs which are not sets in the classical sense, but rather "fuzzy sets" (or subsets), that is, classes with unsharp boundaries in which the transition from membership to nonmembership is gradual rather than abrupt. Indeed, it may be argued that the logic of human reasoning is not the classical two-valued or even multivalued logic but a logic with fuzzy truths, fuzzy connectives, and fuzzy rules of inference." (:ix)

In keeping with what has been observed in studies of categorisation, the sets appear to be internally structured in the way suggested by Lakoff (1972) and Rosch (1975a), such that, for example, all subjects agree that 15 is one of the possibilities allowed by "about 15" (N-Test item 5: Table 3.3), and all subjects (who gave item answers) agree that apples is a member of the set of possibilities allowed by "oranges or something" (T-Test item 1: Table 4.4). Whereas at what we may see as the "outer edges" of the sets, agreement becomes less and less.

This brings me to my final general observation about how vague expressions are understood. We saw in Chapter 4 that the exemplar in vague Category Identifiers had to be regarded in some sense as a good example of the set it was to identify, and I described how the exemplars which were "good examples" from Rosch's (1975a) categories, produced responses which bore in some cases a very close resemblance to the membership of the relevant Rosch category. From this data, it seems reasonable to infer that understanding vague additives involves using another well-documented aspect of human cognition, the Prototype. Rosch (1978:40-41) explains carefully that to speak of a Prototype is "a convenient grammatical fiction; what is really referred to are judgments of degree of prototypicality. Only in some artificial categories is there by definition a literal single prototype [. . .] For natural language categories, to speak of a single entity that is a prototype is either a gross misunderstanding of the empirical data, or a covert theory of mental representation". In this sense, what are understood to be used as exemplars are items which have a high degree of prototypicality for the understood set. Thus an exemplar with a low degree of prototypicality - necklace, for the category clothes; (T-Test item 4: Table 4.4) - does not direct its hearers to the set of clothes, but to another, different, set.

This principle applies equally to the number approximations. We saw in Chapter 3 that these are highly likely to contain Round Numbers, and we saw also that Rosch's work on the internal structure of the category of number names showed that Round Numbers were understood as reference points, or in some way prototypical exemplars, in the structure of the number system. At the same time, I must recognize specifically that the number system, as used in approximations, is rather different, in the sense of being much more

highly structured than the vague conceptual categories which are identified by the vague Category Identifiers.

Nevertheless I believe it is fair to say that the same general principles of manipulation are at work in both cases.

### 7.3 Semantics and Pragmatics

In this section, I look at different approaches to drawing the boundary between semantics and pragmatics. As noted by Allwood, this often takes the form of considering what is semantic to be in some way situation independent, whereas what is pragmatic will be closely related to actual contexts.

#### 7.3.1 Literal Meaning

"This meaning is either seen as present in all situations of use, due to linguistic conventions dependent on association between form and content only, or as a basic meaning from which the meaning of the linguistic expression in all situations of use can be derived." (Allwood: 183)

Literal meaning is thought to be closely connected with the meaning one can understand from decontextualised sentences. The first thing to be said on this is that it seems doubtful that what one gets from reading a decontextualised sentence is a decontextualised meaning. What we do when confronted with decontextualised sentences is to invent plausible contexts which enable us to understand them (Wachtel, 1981; Mikkel Blakar and Rommetveit, 1975; Lanin, 1977). The necessity of recontextualising in order to understand is demonstrated partly by what happens when we cannot do it. As I mentioned in Chapter 4, subjects in Bransford and Johnson's (1972) experiments who heard texts which had been artificially contrived to omit suitable contextual cues, performed much below normal on comprehension and recall tasks. The kinds of results I obtained in my test point to very much the same

strategy of recontextualisation on the part of my informants. This showed up in particular in the T-test, where the same exemplar was recontextualised in two items in two quite different ways (4.3.1 and Tables 4.4 and 4.5).

So perhaps there is no such thing, psycholinguistically, as a decontextualised sentence and decontextualised meaning. But this does not mean there cannot be a valid notion of decontextualised meaning for descriptive purposes, if we can find a valid procedure for isolating it.

Allwood considers three approaches to achieving it. Firstly the intersection or common denominator approach.

According to this approach, those aspects of meaning which are semantic are those which are common to every occurrence of a given linguistic expression. In order to simplify the discussion in what follows I shall use just a few examples which will be representative of the two kinds of vague expressions described.

In the case of the number approximations, we will want to attribute a literal meaning to five or six which reflects what is common to each of the three occurrences in examples (1) to (3), each of which was examined in Chapter 3 or Chapter 5:

(1) [academic publishing]

+You find that you get five or six articles and they're all very much the same [II,21.2]

(2) [buying Christmas trees]

+There's another shop in Blackheath that was selling really scrawny ones - five or six quid a time [Camb 9b14/32]

(3) [informant work]

+We've got about five or six of them but I'm only going to talk about three of them today [LAGB,9,81]

Now, drawing on the results of the informant test (in which, as it happened, none of these three examples was used, although (1) was discussed by the subjects), we know that for each case a vague interval reading of possibilities will result. We also know that the different items being approximated will give different intervals: articles (1) and informants (3) cannot be subdivided (at least not in the contexts in which they were used in these examples), whereas pounds (2) can - this will probably give a narrower interval for (2) than for (1) and (3). Next, there is the influence of the perceived purpose of the utterance. The test subjects who heard (1), commented that:

"He's using it for emphasis - because the whole sort of drift of the argument is that there are too many papers being produced (.) that's a signal that it can just possibly be a sort of vague number saying there are lots of papers being produced and there shouldn't be that number"

They felt that S did not have exact knowledge. In fact he could not have have done, since he wished to make his utterance fit a set of several situations in the world.

(2) is, I would judge, another case of S making his utterance general for several cases. He many or may not have remembered some exact prices he saw. In addition, on the basis of the fuller extract, I suggested that informality played a role here. In (3), as I described in Chapter 5, hearers probably understand that S does know exactly how many informants he has. In this case his approximation draws attention away from this part of what he says, and towards what is important, that three will be spoken about. In addition, Ss use of but tells hearers that '3' is not part of the interval intended by five or six, since it is contrastive.

What we may extract as general is that an interval (a subset of Real Numbers) is understood, of which 5 and 6 must be members. Also this interval is fuzzy, in not having its end points definite in any given case. All other aspects of the meaning must then be accounted for by pragmatic rules which reflect the inferential processes hearers use. For example, for five or six informants:

A

Inference 1: S knows how many he has (from premise, S is giving a paper about a subject he can be presumed to know well)

Inference 2: the formal setting (in comparison with, for example that of example (2)) rules out the choice of approximation for informality

Inference 3: S is focussing attention (by elimination of other possibilities)

B

Inference 1: persons are wholes (from situation)

Inference 2: interval is probably 4 - 7 (from the exemplars, 5 and 6, and the number 3 being excluded by but)

For the tag approximations, I shall look at two tags which had the same exemplar, in the informant test (results are in Tables 4.4 and 4.5):

(4) I stopped my bike by the verge, then a car or something came along and splashed me all over with water (T-test 16)

(5) They've got a car and that (T-test 24)

I leave aside the disjunctive/conjunctive contrast, which can be accounted for without difficulty either from the semantics of and vs or, or by stipulation in complex lexical entries, as we saw in Chapter 6. Again here, sets are involved in understanding both examples, and sets of which car, the exemplar, is both a member, and a central member or good example.



In the two cases, different supposed context supplied by the test informants led them to produce two different sets, which can be loosely characterised as "the set of wheeled road vehicles" (4), and "the set of desirable items associated with relative wealth" (5).

What is common to both occurrences is that a set of associated items is involved, of which the exemplar is a member. Only this then, can be analysed as semantic. All the mechanism of using the exemplar as a prototype, taking account of context and purpose, etc, in order to read off the relevant set, is to be dealt with by pragmatic rules which again would embody the likely inferential processes, on the lines, of, for example for (4):

Inference 1: linguistic context gives public highway as likely  
                   setting

Inference 2: linguistic context specifies things which can splash

Inference 3: vehicles are most likely candidates

Two things are noticeable about this sort of approach. Firstly, the proposed semantics is rather uninteresting, in the sense of making a quite small relative contribution to the observed meaning of the expressions in use. (cf Allwood making this same point: 184). Many linguists, notably Lyons in his recent writings (1977, 1981a, 1981b), have a pretheoretical predilection to keep more of meaning in semantics than would happen with this approach. Secondly, the semantic representations would have to be vague. Many people are not prepared to allow vagueness in semantics (eg, Wachtel and Sadock, discussed below). (But see Klein (1982) for proposals to allow vague expressions in the formal language needed for the semantics of comparatives.)

The second approach to literal meaning is the idea of an essence - abstracting 'basic' or 'ideal' aspects from instances of use. As noted by Allwood, what is difficult in this case is to recognise what the essence of a linguistic expression is. In the case of the vague expressions, the obvious candidate would be that they are vague - this appears to be the essence of all the actual instances of use. On this account, perhaps, the semantic representations for English would contain a subset of vague representations for these kinds of expressions. Pragmatics would then take care of all the rest of the meaning effects which were observed. Again this entails semantic representations which do very little of the work of explaining the meanings of vague language, and semantic representations which are vague. In addition it is difficult to see what empirical procedures could be used to determine basic meanings.

The third approach to literal meaning which Allwood considers is to say that it consists of the union of all uses of an expression. This has the effect of "connecting any information that has been conveyed by a linguistic expression with its literal meaning". Clearly for the expressions I am considering, this would be nothing short of disastrous, since, say for car or something, all the conceivable sets of which it could be thought to be a good example in all situations of use, would be involved in the literal meaning of the string. Included also would be all the conversational effects which we saw in Chapter 5 which can sometimes attach to uses of vague expressions.

The next solution Allwood considers is that which says that only some linguistic expressions have situation independent meaning - the syncategorematic expressions. Categorematic or contentful expressions

depend on context for specification. The difficulty here for the analysis of vague tags is that they contain a mixture of what are usually thought of as syncategorematic items (and, or, perhaps the numbers) and categorematic ones like that and things. If we choose, as I argued we should in the preceding chapter, to regard the expressions holistically, then they would be categorematic. But the idea of having syncategorematic items mixed up inside categorematic "lexical items" is not theoretically attractive.

On the matter of the relationship between literal/conventional meaning and referential meaning, Allwood cites Kempson (1977) as an example of someone who takes the two notions to be the same. His point is that they cannot be equated, because intuitively, conventional meaning is much wider than referential meaning. In the case of car or something, a description of its conventional meaning (vague, indicates a set, etc), will be very different from its referential meaning, which only comes into existence at the moment of its use on a given occasion.

### 7.3.2 Bivalent Truth-Conditional Semantics

A particular version of the common-denominator approach is truth-conditional semantics, in which a statement of the conditions which must pertain in any situation for a sentence to be true, are seen as all and only what is necessary to state its semantics. In a bivalent semantics, only two values are possible - a sentence is either true, or false, of a given situation. Pragmatics, in this model, concerns itself with all those aspects of meaning which are not amenable to treatment by truth-conditions (cf Gazdar 1979:2).

A considerable literature exists which argues that many aspects of meaning general to all occurrences of a sentence, are quite unamenable to treatment by truth-conditions, for example Kempson, 1975, Section 2. Lyons (1981b) brings to bear criticism of truth-conditional semantics on account of "its restriction to propositional content and its inability to handle the phenomenon of subjectivity" (:240), and in Lyons (1982), he describes how it cannot easily handle such things as modals, and the French 'conditionnel de citation' which he argues are manifestations of subjectivity. Allwood rehearses many of the standard examples.

The vague language under study here provides another example of utterances which are not easily amenable to treatment by truth conditions. I shall look at two attempts which have been made to account for number approximations. As far as I know, no-one has proposed a bivalent truth-conditional account of the vague Category Identifiers, but given their manifest similarities of meaning to the number expressions, I can show how they might be dealt with within the two approaches to be discussed.

The problem for a truth-conditional account is that for any use of a number approximation, it is apparently impossible to specify the point at which it ceases to be true, so for example, (2) is probably judged true of trees actually costing £7, but probably untrue of trees costing £14.

Similarly the tags exhibit the same cut-off point problem. (4) would probably be judged true of a situation where the thing in question was a bus, marginally true if it was a horse, and probably false if it was an elephant.

Sadock's (1977) account offered a semantics for sentences containing approximately. As we saw in Chapter 3, the meanings associated with approximately are very similar to those of other number approximations, so we may safely assume that his account could be applied to them as well. It could also be applied to the tags, as I shall show below.

Sadock's approach is to argue that because of the multiplicity of factors affecting appropriate approximation, the only possible truth-conditional account is "a fairly trivial one", in which a number approximation is always true, provided the thing being approximated can have the property of being measurable. All the relevant constraints on what makes approximations acceptable in given circumstances will be dealt with by pragmatic rules, in the same way, Sadock proposes, as Grice's (1975:70) proposals for tautologies, which as noted also by Allwood, are referentially all identical, but different in their sense.

Sadock's account would extend quite naturally, I think to the tag approximations, in the sense that we could analyse the category identifier in (4) as being true in all circumstances, but only appropriate in certain ones, determined by the sort of contextual factors I noted, which would be dealt with by pragmatics.

Sadock makes a number of useful observations on the use of approximations, which I described in Chapter 3. This is an example perhaps of the usefulness Lyons (1981b) attributes to attempts to deal with unamenable data:

"The failure of a precise, but inadequate, account often points the way to the construction of an equally precise, but more comprehensive, theory of the same phenomena. And even when it does not do this, it may throw some light, obliquely and by reflection, upon the data that it does not fully illuminate." (:143)

Sadock's account, however, is untenable, even on its own terms. A truth-conditional semantic account must be able to deal with the entailments of the sentences it purports to account for, as well as the effect on them of the putative logical operators such as NOT. Wachtel (1980:203) shows that Sadock's account fails, in making an incorrect prediction about the meaning of:

(6) Sam is not approximately six feet tall

which should entail the proposition that Sam has no height at all, which it arguably does not. However the defence to this is the one used by Wachtel to get out of a counter-example to his own proposal, that (6) is an example of what Sperber and Wilson (1981) call "mention" rather than "use", so is not a denial of the content of the approximation. Fillmore (1971:122) calls this semi-quotation, one of his examples being:

(7) I didn't "escape" from the prison; they released me

In addition, Sadock's account predicts that

(8) Sam is exactly six feet tall

entails

(9) Sam is approximately three feet tall

which Wachtel argues is "counterintuitive".

Wachtel's own proposal is also for a bivalent truth-conditional semantics. He assumes that for any particular occasion of utterance of a number approximation, an exact cut-off point for the interval of possibilities can be stated, drawing on relevant contextual factors (as he defines them, see below). There is thence a notion of "appropriate approximation" in a given context. Thus a particular occasion of use of a number approximation will be amenable to a bivalent treatment. His proposal consists of stipulating a set of

rounding functions  $F$ , which map from exact numbers to exemplar numbers (from Real Numbers to Real Numbers). In addition there is stipulated  $R$ , a one to one function from  $C$ , the set of contexts, into  $F$ . "We can thus define the notion of some number being an appropriate round number for some other number in some context." (:206). In this way the statement of the truth conditions for utterance of any particular number approximation will be determined by its particular context:

"I shall talk [. . .] in terms of a number being an appropriate round number in context  $c$ , where the notion of context is intended to cover all the factors that determine whether a given number is a suitable round number or not, including questions of culture, beliefs, and knowledge of the world, as well as the most important factor of the purpose of the estimate"

I am not certain that stipulating semantic functions really fulfils the claim of defining, except within a truth-conditional theory which is in turn defined by stipulation. Allwood rehearses in some detail how it is that a theoretical account where anything can be stipulated is empirically not enlightening.

Wachtel's account works well, in its own terms, and he showed in Wachtel (1981) that his account could be extended to deal with other types of number approximations, notably  $n$  or  $m$  and  $n$  or so.

I think also that an account similar to his could be devised for the vague tags, which show the same context-sensitive acceptability. In their case we may apply the notion of "appropriate exemplification" to the relationship between the stated exemplar and the set of possibilities it can be used, with its tag, to identify. Thus, discussing (4), car is an appropriate exemplar for bus in the particular context most likely to have been supplied by the test informants.

To formalise this we will need a set of exemplification functions  $E$ , which map from entity to entity within the universal set. So

$$E \{e:(x,y) [e(x) = y \rightarrow \{\exists s: x \in s \wedge y \in s\}]\}$$

where  $x$  and  $y$  are variables and  $S$  is any proper subset of the Universal set. Thus, in a particular context,  $e(\text{bus}) = \text{car}$

As I have said, vague tags share with number approximations the property of being sensitive to different contexts for their meanings. It is possible therefore, along the lines proposed by Wachtel, to let  $C$  again be the set of contexts, and stipulate a one to one function from  $C$  into  $E$  (the set of exemplification functions). I shall call this  $G$ . On these lines, somewhat crudely, car is an appropriate exemplar for an actual bus in a context  $c$  iff  $G(c)(\text{bus}) = \text{car}$ . Note that packed up into function  $G$  will be all we have observed about the structure of categories being relevant to what is considered a good exemplar, and all we have observed about contextual factors like intentions and relationships between speaker and hearer.

This account of vague tags predicts that:

(10) It wasn't a car or something that splashed you, it was a car  
and

(10a) They haven't got a car and that, they've got a car

will be contradictions, which indeed they are (cf Wachtel 1980:207).

The important thing to notice about this general approach, and what I shall argue is one of its serious weaknesses, is that it says that on a particular occasion of utterance of one of these vague expressions, exact cut-off points for possibilities are present. This is necessary in order to render the apparent vagueness amenable to two-valued truth conditions.



Returning to the data on vague language use which I have presented in Chapters 3, 4 and 5, I am persuaded that there is really no empirical basis for the contention that the vagueness of these expressions is resolved in particular contexts. On the contrary, the evidence rather points the other way. To take Sadock's formulation, these vague expressions are "purposely and unabashedly inaccurate statements" (:434). Informants say that using vague expressions arises from not knowing exactly, or not wanting to say exactly. Hearers react to vague expressions in particular ways, as we saw in Chapter 5.

To give an account of vagueness via bivalent truth-conditional semantics is to make the fundamental theoretical error eloquently described by Zadeh (1975):

"In our quest for precision, we have attempted to fit the real world to mathematical models that make no provision for fuzziness. We have tried to describe the laws governing the behaviour of humans, both singly and in groups, in mathematical terms similar to those employed in the analysis of inanimate systems. This, in my view, has been and will continue to be a misdirected effort, comparable to our long-forgotten searches for the perpetuum mobile and the philosopher's stone."

The second problem with this account is its extreme generality which leads to counter-intuitive predictions. For the number approximations, because it treats all numbers as equally available for use in approximations, equivalence is predicted:

(11) This is approximately one inch long

≡ This is approximately 2.067 cms long

(1 inch = 2.067 cms)

which is clearly wrong, given all we know about differences between round and non-round numbers. For the vague category identifiers, the formulation given allows that anything can be an exemplar for

anything, so, in theory,

e(Taj Mahal) = 53

(although this would be unlikely to find an appropriate context)[1].

There is another reason why I am unhappy with these accounts of vagueness. This concerns whether they are empirically testable. Notice that the relationship between the semantics proposed for approximations, and for vague tags, and actual observations of their use, is embodied in the functions R and G respectively. Thus in testing the semantics for number approximations, if we get a mismatch between the semantics and appropriateness judgments in a given case, this will be attributable to a failure to correctly specify the attributes of context c. If it is in an informant test, it will be because informants have supplied context in unpredictable ways. In Channell (1981), I drew on the N-test results to criticise some of the proposals in Wachtel (1980). Wachtel's general response to these (in Wachtel, 1981) was as follows:

"I think a general point that should be made is that elicitation tests can never provide conclusive evidence of the semantics of the sentences involved. They can provide, at most, indications. What the subject is asked to do is to invent a plausible specific context for a given sentence. That is, he or she must find an interpretation for the sentence, and then specify a context in which the sentence can have that interpretation. It is clear that preferred interpretations will, in general, be selected over the other interpretations. If semantics is considered to be the study of preferred interpretations, then there is no problem. If, however, semantics is considered to be the study of the meaning of the sentence, and if "meaning" includes at least preferred and non-preferred interpretations, then elicitation tests of this type do not provide evidence of the required type."

This is worrying, because taken to its logical conclusion, it says that semantic constructs do not necessarily have to be in accord with observations of language behaviour. This appears to make them quite

1 I am grateful to Thomas Baldwin for these observations.

unassailable, and therefore, on my view, unrevealing as hypotheses about language behaviour. Allwood makes a similar point, as follows:

"Since extension and intension for natural language expressions are mostly not stipulatively given, we face an empirical problem. We have to discover the intensions and extensions of natural language expressions in order to give an account of the truth conditions of sentences in natural language. This is clear, since we are not dealing with stipulation. The meanings of expressions must then be determined empirically. However, once we have empirically discovered what the meanings are, can we then not sit back in our chairs and continue as in formal semantics with situation independent meanings? . . . I do not think this will be possible" (:179)

### 7.3.3 Many-Valued Truth-Conditional Semantics

This version of truth-conditional semantics also separates what is semantic from what is pragmatic along the lines of a statement of the conditions which must pertain for a given sentence to be truly uttered. Lakoff (1972) offered an attempt to apply a many-valued ("fuzzy") logic to a range of natural language sentences which he felt to be unamenable to treatment by bivalent truth conditions. One group of sentences he looked at contained approximately (:222):

- (12) a Sam was surprised that he had approximately \$10,000 in his savings account
- b Sam had approximtely \$10,000 in his savings account
- c Sam had \$9,992 in his savings account
- d Sam had \$9,950 in his savings account
- e Sam had \$9,500 in his savings account
- f Sam had \$9,200 in his savings account

of which he says:

"a presupposes b. But b is fuzzy - it depends on what counts as an approximation to having \$10,000 in one's savings account. Suppose c were the case. Then I think b would be true no matter what, and a would make perfect sense. If d were the case, I think most people in most situations would still want to say that b was true and that a made sense. If e were true, the truth of b would become questionable. In many situations b would have a high degree of truth given the truth of e, and a would pretty much make sense. When we get

down to f, however, the degree of truth of b gets lower, and it makes less sense to say a. And so on."

Notice again that this account, although it allows for degrees of truth, will still, for any given occasion of utterance of a number approximation, compute an exact truth value, so that again, here, vagueness has been banished from the semantics.

It would in principle be possible with this approach too, to extend it to vague tags. It is rather clear that (4) would have rather a low truth value if the "vehicle" in question is a camel, but a high one if it is a bus, in the sorts of contexts deployed by the T-test subjects.

Sadock (1977) devotes a considerable amount of his paper to demonstrating that Lakoff's informally expressed proposals are actually impossible to put into practice. It is not necessary to reproduce the discussion here - effectively he shows that the large number and variety of contextual factors which must be taken into consideration renders the proposed semantics unattainable. He argues also that its sheer complexity is counterintuitive to the language user's impression of what an approximation is.

I think there are two grounds for criticising the fuzzy truth conditions approach.

The first is that it fails on its own terms in coming up with the wrong predictions about entailments and the effect of negation.

(13) Sam is not approximately six feet tall - he's exactly six feet tall

As far as I can judge, this is a problem, because only two values can be involved - negation is not fuzzy. The non-negated version of the first part will have a high truth value of 1, because Sam actually is

six feet tall. Negating it makes it false to say that Sam is approximately six feet tall, but since he is six feet tall, this must be wrong, and make (13) a contradiction, which it is not. The 'escape' from this is the same one described in the previous section, of seeing this as 'mention' rather than 'use'.

The other difficulty is the entailment relationship between

(14) Sam is exactly six feet tall

and

(15) Sam is approximately six feet tall

On a Lakoff account, the first sentence will get t-value 1 iff Sam is six feet tall. So will the second. This gives them the same truth conditions, or makes them semantically equivalent. Patently, they are not equivalent, so this is again "counterintuitive" and quite in disagreement with the N-test results.

Apart from these failures within its own theoretical framework, I want to argue that this is in general a mistaken approach. However, I must make clear that I see much of what Lakoff achieved in his work as highly valuable. The fuzzy approach has a lot of intuitive appeal, it seems to reflect the kinds of judgments language users can make, especially about the 'hedge' phenomena which Lakoff draws attention to. Where it goes wrong is in insisting on a clear division into what is semantic and what is pragmatic, which in turn leads firstly to an empirically unfalsifiable semantics, and secondly to a situation where most of what is interesting about approximation is bundled aside into a vaguely defined pragmatics where it can be, in Allwood's phrase, "safely left for another day".

#### 7.3.4 Cognitive/referential vs emotive/non-referential meaning

Another possibility mentioned by Allwood (:188) is to take the view that cognitive = referential = semantic, and emotive = non-referential = pragmatic. This would give a good account of, for example, verb pairs like put in/insert or enter/go in which are referentially identical but exhibit differences of contextual suitability (ie non-referential differences). Applying this approach to vague expressions is problematical in the same way that it is for some other examples discussed by Allwood. It is not clear which aspects are cognitive/referential and which are not. In addition, as we have seen, vague expressions refer differently on different occasions of use, so this might be like taking the 'union of all uses' approach, which has already been found wanting.

#### 7.3.5 Normative vs Descriptive

The last way of distinguishing semantics and pragmatics which Allwood considers, and also the last one I shall consider, is the idea of making the distinction in the way Carnap originally formulated it:

"Semantics would then be concerned with the normative analysis and explication of concepts that are used in many different and partly inconsistent ways in ordinary language. Pragmatics on the other hand would be concerned with the full richness of empirical data."

In many ways this appears to be close to the distinction argued for by Wachtel. He suggests (personal communication) that investigating meaning as I have done herein, is to do "psychopragmatics" rather than to do "semantics". Allwood explains that the problem with the above approach is that it is too close to the usual distinction between theory and data. Theory arises from normative idealisations of data - these would appear to be semantics. Thus pragmatics would be a non-theoretical enterprise, orienting towards the normative

idealisations called semantics.

#### 7.4 Meaning, Semantics and Pragmatics

The most natural conclusion which arises from the foregoing discussion of the data on vagueness is that no valid ways of seeking a distinction between semantics and pragmatics are forthcoming in the analysis of vague meaning. At the same time, the discussion provides further evidence that there are no valid empirically-based reasons for seeking to make the distinction. This leads to the same conclusion as that of Allwood, quoted at the beginning of this Chapter.

If, on the other hand, a semantics/pragmatics distinction is held to, then the consequence is that the semantic account will be forced to admit of vagueness, rather than shunting it off into pragmatics, since there appear to be no empirical reasons but only a theoretical preference, for making semantics exact. In this connection, Danell (1978:16-17) concludes that because vagueness is inherent in the way language is processed, the goal of precise semantic representations is "a forlorn one".

## Chapter 8

Implications for the Study of Meaning

It is by now apparent that this study of vague language has raised far more questions than it has been able to propose answers to. This is, however, exactly what we would expect of an investigation which takes on a relatively unworked area, and which does so with a methodological insistence that attested data, with all their idiosyncracies and untidinesses, should be used and given priority wherever possible. Yet certain answers have been arrived at. I shall first summarise the main ones, and then make some concluding remarks on their future implications.

8.1 Summary of Findings

1 Vague language forms a considerable part of conversations. Only a small sample of data - a few hours of conversations - produces many examples. This means we cannot, in any theory of language, treat it as the exception rather than the rule.

2 For the vague additives which I have described, the informant tests show that hearers assign meanings to them which are fuzzy sets, identified by the exemplar given. It is likely that this fuzzy set meaning is also assigned to very many other vague expressions. I give in Appendix 1 a list of attested expressions which I think have a similar fuzzy set meaning.

3 From the data and analysis in Chapter 5, we know that certain vague expressions are used for particular and diverse conversational reasons, all of which are, however, unified by the common feature of uncertainty for at least some participant in the discourse (taken in its broadest sense).



4 The relationship between constituent lexical items, and meanings attaching to complete vague expressions, reinforces a view of language in which lexical units of varying degrees of cohesion must be recognised.

5 For these expressions, it is apparently impossible to describe their meanings independently of consideration of context and inference.

## 8.2 Psycholinguistic/Psychological Implications

Some language is vague, and we understand it as vague and assign vague meanings to it. I cited Zadeh, in Chapter 7, arguing that behavioural phenomena are better dealt with by a model which incorporates vagueness. Here Guilbaud, a mathematician, argues the necessity of vagueness for communication, even for life:

" . . . take a newspaper. They are full of figures today: most of the figures are given implicitly or explicitly, with a qualification as to the degree of certainty. The population of a town, an industrial output, a distance, a temperature, a duration, a speed, a percentage, etc. How are we to find our way about? An approximate value, as common sense says, is that which is not exact. Is it a lie then? I would not deny that newspapers sometimes contain lies. But there is not always so much malice. No! Talking and thinking by means of 'about', 'nearly' is a necessity." (1977:126)

Vagueness in the relationship between language and the situations it relates to is endemic. As Guilbaud points out, it is not absent even from contexts where we might expect exactitude: science, economics, medicine.

Yet this should be just as we would expect, if we consider the nature of the relationship between language and the world it describes in its most general aspects. The "direction of fit" of language and the world is most often that language is required to fit the world. And the world makes demands on language in two different ways. First

it is, as we know, constantly changing and developing, making quite new demands on language which is to reflect it. For language to be fully useful therefore, in the sense of being able to describe all of man's experience, it must incorporate built-in flexibility. This flexibility resides in part in its capacity for vagueness. Secondly, as noted by commentators whom I mentioned in Chapter 2, many things in the world which language reflects are themselves vague, or perceived by us as vague, subject as our perception is to physiological and neurological constraints. Given, therefore, the direction of fit mentioned above, language cannot help but incorporate vagueness.

### 8.3 Consequences for Linguistic Theory

5 above calls into question the notion, fundamental to linguistic semantics, of decontextualised meaning, and supports the point put thus by Lyons:

"the notion of sentence meaning is arguably dependent, both logically and methodologically, upon the notion of utterance meaning, so that one cannot give a full account of sentence-meaning without relating sentences, in principle, to their possible contexts of utterance" (1981a:140)

x I would want to go further, and argue that if the above is true, then the goal of describing sentence meaning is no goal at all, since sentences and sentence-meaning cannot in principle be isolated as objects of description.

### 8.4 An Approach to Meaning

An appropriate way to end a piece of work which has tended to be negative, at least in its implications for existing linguistic approaches to meaning, is to offer some ways forward. I conclude therefore by giving a programmatic sketch of a possible fresh approach to the theory and methodology of the study of meaning.

The clearest point which emerges from this study is the inextricable relationship between contexts and understanding. I would therefore see the methodology of the study of meaning as one that works back from pairings of contexts with (hearer) assigned meanings.

The model I see would have a lexical list - but a lexical list containing rather more multiword units than are usually envisioned. Each entry would need a multiplicity of network relations (connections). These would be, on the one hand, to other lexical entries - paradigmatic relationships like apple/orange; class inclusion relationships, parent/mother, and syntagmatic relationships, university/student. On the other hand, many relationships would be to knowledge constructs known by a hearer to connect to lexical entries. Here would be incorporated all the information about use. Evens et al (1978) proposed a network lexicon for their computer model for understanding story texts. This would be an extension of their proposal.

It may be objected that this model would be a ridiculous goal since it necessitates taking account of all idiosyncratic connections a hearer might just happen to make. Clark (1978) shows why this is not so. Although he is writing about psychological models of comprehension, his point is equally valid for a linguistic model of language understanding. His argument runs like this. Although a hearer may, on hearing any utterance, (his example is he's crazy) make a bizarre association, such as having a mad Uncle Harry, the hearer would also set aside that association, as not relevant. The reason for doing this is that his strategy in comprehension is to make the connections he thinks the speaker intends him to make. Hearers' judgments of speakers' intentions are thus the base line of this

theory. The consequence for the linguistic description of the utterance of "he's crazy" is that it just takes account of the relevant relationships for crazy.

In this model then, there would be a relational network lexicon, linked directly with non-lexical knowledge where appropriate, and rules of comprehension. A representation of the meaning of "We've got five or six of them" (example 3 in the last chapter) would thence draw on the lexical listing of n or m which might have a network relation "approximation device" linking it to all the other approximation devices. These in turn would have links to the knowledge that approximation suggested not knowing or withholding. Note that these links would often embody information described as implicatures in other theories of meaning.

The network links associated with a linguistic expression have the advantage of being empirically discoverable. Yorick Wilkes (personal communication) has suggested to me one possible test, where overt context is supplied and hearers asked to react within it. For example:

1 A paint shop manager instructs his stock controller to reorder white paint when there are about 50 x 1 litre cans left on the shelf. At a Monday stocktake, there are 60 cans left. Should he reorder, or not?

2 A Guardian report on the South Sandwich Group, states that it consists of "about 13 islands". If you subsequently went there, how many islands would you expect to find?

Notice that a test like this would test my contention that such quantities are always understood as vague. If all test subjects gave the same precise answers, the cut-off point semantics proposed by Wachtel would be in a stronger position.

A model like this will give a good account of the observed phenomenon of hearer recontextualisation in tests; ie it makes explicit the machinery they draw on to do it.

Any account on these lines is then empirically testable (a) against hearers' reactions in experimentally restricted contexts, and (b) against observations of use, but importantly, not against invented examples.

The approach I have sketched here has one large advantage, as I see it, counterbalanced by one large disadvantage. The advantage is that it strengthens the linguistic investigation of meaning by bringing it much closer to empirically based scientific procedure, and taking it away from the weaker position of a stipulatively defined theoretical model.

Its great disadvantage is that it makes what is seen as the scope of the linguist's investigation of meaning very much wider than it is at present, when his principal goal is the description of decontextualised meaning. The data-base for any study would have to be large, and would be, in sheer practical terms, difficult to assemble (cf my points in Chapter 1). It would no longer be possible to do armchair semantics on invented sentences.

Despite the obvious difficulties, I very much hope to see the linguistic investigation of meaning moving in the direction I have outlined, and I offer the work in this thesis as evidence for the desirability of that approach.

Appendix: Other Vague Expressions (attested)

Number approximations:

The actual things were like two and six (Stop the Week, 14.2.81)

...ranged from two to four pence...

...the best thing to do I think is to start by getting a piece which is longer than the length you need and measuring that, and put a couple of bends, a couple of kinks in the wires at the two distances that you need, maybe a metre, ok, that way then you can position... (physics lesson, Camb 21A/60)

There are adjustments which have to be made for national tastes. Though roughly eighty per cent is shared by all countries, the differences born of experience are growing (article on Habitat catalogue, ST, 23.8.81)

Healy is the favourite round about evens, Peter Shore  $2\frac{1}{2}$  to one, there or thereabouts and Silkin  $3\frac{1}{2}$  to one and Michael Foot  $4\frac{1}{2}$  or 5 but he won't be that for very long because I expect to get a lot of money on him (labour MP interviewed about Labour leadership race, 15.10.80)

... some thirty students

Some six years ago about twenty women came together to form what looked like the beginnings of a Jewish women's liberation movement (ST, 23.8.81)

barely thirty

hardly thirty

are closer to fourteen percent

nearly n

almost eight million

Outside the plant contamination is virtually zero (BBC interview with nuclear physicist on radiation leak at Windscale, 30.3.79)

Pretax profits were less than a quarter of a million (The Financial World Tonight)

Just over a billion pounds last year ( " )

More than a million pounds better ( " )

Over more than ten years' production, its style has changed, grown up and diversified (Habitat catalogue, ST 23.8.81)

Or so. An extension of the n or so use is or so with month names:

It was in February or March or so (describing when he received a letter)

Last January or so, or December maybe (wife went for an interview)

All but. When used with an adjective, this is a vague additive, but when it is with a number, it is not an approximation, eg all but three of the crew, vs, all but ready

Vague category identifiers :

It's things like throat lozenges and pain killers, creams for arthritis, things like that (You and Yours, 19.2.81)

...affected by things like back pay and late returns...

x and the like

x and so on

He argues that the kid has worked out ways of referring to things and stuff like that and that it is a language... (tutorial on child language)

A doctor noting that his patient has a temperature and so forth is said to diagnose his disease as influenza (Ogden and Richards, 1923:21)

... your stuffed fish or whatever, you're making a fetish of originality (Stop the Week, 14.2.81)

("banded") Bound was what most men would have said but this one came from Oxfordshire or somewhere (Amis, K, 1978 Jakes Thing: 104)

hereabouts

whereabouts

Sort of and kind of:

A thing like that, like a back-up supervisor will hardly ever be used but it might help some of the problem cases, that's what I mean, its a kind of formalising something without restricting anything (II,21.2)

Also I've noticed sort of in some of my friends that the ones who had older brothers and sisters didn't learn to speak as quickly as their elder brothers and sisters (II,8.3)

You can do all sorts of things on this TV its pretty good actually how if they connect up sort of the local bookmaker and things you know its its quite good idea well its not a bad system really quite uh its a bit sort of jerry built uh (Dicks, 1974)

("What happens to the other people?") Well they're making general sort of sounds as though they're in agreement (N-test, experiment discussion, 11.6.79)

I did, I mean, I just sort of worried about it (see Extract 2, Chapter 5)

A: Sue is a geneticist

Sue: Of sorts, yes (I think this works like sort of)

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