CHAPTER 6

Contextual variability of word meaning

6.1 Preliminaries

Once we try to grapple with the notion 'the meaning of a word', we come up against a serious problem, namely, that the interpretation we give to a particular word form can vary so greatly from context to context. The observable variations range from very gross, with little or no perceptible connection between the readings, as in: *They moored the boat to the* ***bank*** and *He is the manager of a local* ***bank***, through clearly different but intuitively related readings, as in *My father's firm built this* ***school*** (*school* here refers to the building) and *John's* ***school*** *won the Football Charity Shield last year* (in this case *school* refers to (a subset of) the human population of the school), to relatively subtle variations, as in the case of *path* in *He was coming down the* ***path*** *to meet me even before I reached the garden gate* and *We followed a winding* ***path*** *through the woods* (a different mental image of a path is conjured up in the two cases), or *walk* in *Alice can* ***walk*** *already and she's only 11 months old* and *I usually* ***walk*** *to work*, where not only is the manner of walking different, but so also are the implicit contrasts (in the first case, talking and standing up unaided, and in the second case, driving or going by bus/train, etc.).

This type of variation, which is endemic in the vocabulary of any natural language, means that answers must be sought to questions like: Do words typically have multiple meanings? How do we decide what constitutes 'a meaning'? Is there a finite number of such meanings? How are the meanings related to one another? The present chapter attempts to address questions of this sort.

We shall begin by identifying two properties of variant readings of a word which are relevant to the problem of individuating and counting them. Suppose we find a perceptible difference in the readings of a word in two contexts. We can first of all ask whether (or to what extent) there is a sharp semantic boundary between the two readings (in our terms, how **discrete** are they?); a second question is whether they are mutually exclusive (in our terms, are they

antagonistic?). Both of these will be taken as aspects of the **distinctness** of two readings.

6.2 Aspects of distinctness

6.2.1 Discreteness

To begin with, only enough criteria will be given to establish the notion of discreteness; more subtle types of evidence, valid in particular contexts, will be brought into the discussion later. Four criteria will be considered here; three of them have often been regarded as **ambiguity tests** (and latterly dismissed as such). There are good reasons, however, for claiming that they are not tests for **ambiguity** (see later), but for **discreteness**.

6.2.1.1 The identity test

The first criterion goes under the name of the **identity test**. Consider the following sentence:

(1) Mary is wearing a light coat; so is Jane.

Intuitively, *light* means two different things: "light in colour", or "light in weight". Bearing in mind these two interpretations, there are four different situations with regard to the properties of Mary's and Jane's coats: (i) they are both lightweight, (ii) they are both light coloured, (iii) Mary's coat is lightweight and Jane's is light coloured, (iv) Jane's coat is lightweight and Mary's is light coloured. Notice, however, that sentence (1) is capable of designating only two of these situations, namely, (i) and (ii). In other words, once one has decided on a reading for *light* one must stick with it, at least through subsequent anaphoric back-references. This is known as the **identity constraint**. The constraint applies equally to speaker and hearer. A speaker can be held to account for the use of the above construction if they intended two different readings of *light*; in the case of the hearer, there is a processing constraint which makes it difficult to attach both readings simultaneously to one occurrence of the word. Notice that the pressure for identity of reading is much reduced (although perhaps not completely absent) if *light* is mentioned twice; (2) is not anomalous:

(2) Mary is wearing a light coat; Jane is wearing a light coat, too, as a matter of fact. However, whereas Mary's coat is light in colour but heavy, Jane's is dark in colour, but lightweight.

The identity constraint observed in (1) should be contrasted with its absence in (3):

(3) Mary has adopted a child; so has Jane.

The child must obviously be either a boy or a girl, but there are no constraints on the possible readings: the child adopted by Jane does not have to be of the same sex as Mary's, hence there is no support here for any suggestion that "boy" and "girl" correspond to distinct readings of *child*.

6.2.1.2 Independent truth conditions

The second criterion for the discreteness of two readings is that they have independent truth-conditional properties. A good test of this is whether a context can be imagined in which a Yes/No question containing the relevant word can be answered truthfully with both *Yes* and *No*. Consider the case where Mary is wearing a light-coloured, heavyweight coat. If someone asks *Were you wearing a light coat?*, Mary can truthfully answer either in the positive or the negative: *Yes, I was wearing my pale green winter coat*/*No, I was wearing my thick winter coat*. On the other hand, if one were to ask the Mary in (3) *Is it true that you have adopted a child?*, there are no conceivable circumstances in which she could truthfully answer either *Yes* or *No*.

6.2.1.3 Independent sense relations

The third indicator of discreteness is the possession by two readings of genuinely independent sets of sense relations (these are treated in detail in Chapters 8 and 9). Care must be taken here in the definition of *independent*; here, however, we shall confine ourselves to clear cases. For instance, the two readings of *light* have distinct opposites, namely, *dark* and *heavy*. The fact that these two are completely unrelated strengthens the case for discreteness. The two obvious readings of *bank* also have quite independent sense relations. The (river) *bank* is a meronym (i.e. designates a part) of *river*, and has *mouth*, *source*, and *bed* among its co-meronyms (i.e. sister part-names). The (money) *bank* is not a part of anything, but is a subtype of *financial institution*, and has, for instance, *building society* as one of its sisters.

6.2.1.4 Autonomy

The fourth indicator of discreteness is what we shall call **autonomy**. Basically this refers to the usability of the word form in one of the senses when the other is explicitly denied, or ruled out by reason of anomaly, or some such. Consider the two readings of the word *dog*, namely "canine species" and "male of canine species". In the sentence: *I prefer dogs to bitches*, the general sense is ruled out on the grounds of semantic anomaly (compare *?I prefer fruit to apples*), but the sentence is fully normal. This shows that the specific sense has autonomy. Compare this with the sex-specific interpretation of *child*, as in *This child seems to have lost his parents*. Although *I prefer boys to girls* is normal, *?I prefer children to girls* is not, showing that the sex-specific interpretation of *child* is not autonomous, and hence, in the absence of other indications, not discrete.

6.2.2 Antagonism

The readings of an indisputably ambiguous word such as *bank* display another property besides discreteness, which we shall regard as criterial for ambiguity. This is **antagonism**. Consider a sentence which admits both readings, such as *We finally reached the bank*. It is impossible to focus one's attention on both readings at once: they compete with one another, and the best one can do is to switch rapidly from one to the other. In any normal use of this sentence, the speaker will have one reading in mind, and the hearer will be expected to recover that reading on the basis of contextual clues: the choice cannot normally be left open. If the hearer finds it impossible to choose between the readings, the utterance will be judged unsatisfactory, and further clarification will be sought.

A sentence which calls for two discrete and antagonistic readings to be activated at the same time will give rise to the phenomenon of zeugma, or punning, as in *?John and his driving licence expired last Thursday* (*John* calls for the "die" reading of *expire*, while *his driving licence* calls for the "come to the end of a period of validity" reading); another example of punning is *When the Chair in the Philosophy Department became vacant, the Appointments Committee sat on it for six months* (this plays on multiple meanings of both *chair* and *sit on*).

It may be presumed that antagonistic readings are *ipso facto* also discrete, and therefore that antagonism represents the highest degree of distinctness.

6.3 Senses

We shall take antagonism between readings as a defining criterion for the **ambiguity** of a linguistic expression. Where the ambiguous expression is a word, like *bank* or *light*, we shall say that it has more than one **sense**. (Later on, degrees of distinctness that fall short of full sensehood will be introduced.)

6.3.1 Establishment

It is almost certainly the case that all words are potentially usable with meanings other than their default readings (i.e. the meanings which would come to mind in the absence of any contextual information). Examples such as the following can be multiplied indefinitely:

(4) (a) John ordered a pizza.
    (b) The pizza doesn't look too happy with what he's been given.
(5) (a) Some of the guests are wearing roses, some carnations.
    (b) The carnations are to sit on the left.
(6) (a) 'I'm off to lunch', said John.
    (b) 'This is my lunch', said John, waving a five-pound note.

However, although one has no trouble working out what is meant, no one would dream of registering the (b) readings above in a dictionary, nor is there any reason to suppose that they are permanently stored in the mental lexicon. In the following cases, however, it is fairly safe to assume that both readings are permanently laid down in some internal store:

(7) (a) John planted five roses.
    (b) John picked five roses.
(8) (a) That must be an uncomfortable position to sleep in.
    (b) What is your position on capital punishment?

These may be described as **established**, and the former set as **non-established**. For a word to be described as ambiguous, it must have at least two established senses.

6.3.2 Motivation: homonymy and polysemy

Given that a word is ambiguous, it may be the case that there is an intelligible connection of some sort between the readings, or it may be seemingly arbitrary. For instance, few people can intuit any relationship between *bank* (money) and *bank* (river), although a connection between *bank* (money) and, say, *blood bank* is not difficult to construe (both are used for the safe keeping of something valuable), or between *river bank* and *cloud bank*. In the case of *bank* (river) and *bank* (money), we say that *bank* displays **homonymy**, or is **homonymous**, and the two readings are **homonyms**. It is normal to say in such circumstances that there are two different words which happen to have the same formal properties (phonological and graphic). A lexicographer would normally give two main entries, *bank*[1] and *bank*[2]. Where there is a connection between the senses, as in *position* in (8a) and (8b), we say that the word is **polysemous**, or manifests **polysemy**. In this book the less common practice will be adopted of referring to the related readings of a polysemous word as **polysemes**.

Of course, the degree to which two readings can be related forms a continuous scale, and there is no sharp dividing line between relatedness and unrelatedness; furthermore, individual speakers differ in their judgements of relatedness. However, this does not render the distinction between polysemy and homonymy useless, because there are many clear cases. Notice that homonymy is possible only with established readings. It is probably wise to reserve the term *polysemy*, too, for established senses, like those of *position*, and to designate cases like *pizza* in (4a) and (4b) by the expression **coerced polysemy**.

6.3.3 Non-lexical sources of ambiguity

Ambiguity has been presented here as a lexical phenomenon; it is important to emphasize, however, that there are other sources of ambiguity. One of these,

of course, is syntax, as in *Mary saw the man with the telescope*. Many syntactic ambiguities arise from the possibility of alternative constituent structures, as here: *with the telescope* is either a manner adverbial modifying *saw*, or a prepositional phrase modifying *the man*. In neither case is there any other syntactic difference. An identity constraint operates here, too, in that co-ordinated items must have identical positions in the constituent structure. Hence, (9) has only one reading:

(9) Mary saw the man with the telescope and the bowler hat.

A syntactic ambiguity may involve functional alternation in one or more items, as in Hockett's classic telegram: *Ship sails today*, where *ship* and *sails* both change their syntactic categories in the two readings.

A word should be said about cases like *The man entered the room*. In any specific context of use, *the man* and *the room* will designate a particular man and a particular room, and in a different context, a different man and a different room. Is this ambiguity? It is not usually recognized as such, since there is no evidence that multiple entries will be necessary, either in the mental lexicon, or in any ideal language description. However, there seems no great harm in calling this phenomenon **pragmatic ambiguity** or **open ambiguity** (because the number of readings is potentially infinite).

6.4 Varieties of polysemy

There is, by definition, a motivated relationship between polysemous senses. There are various ways of classifying the sorts of relation that can hold between polysemous senses. We shall begin by distinguishing linear and non-linear relations.

6.4.1 Linear relations between polysemes

Senses have a **linear** relation if one is a specialization of (i.e. is a hyponym of—see Chapter 8, section 2.1) the other (which of course entails that the latter is a generalization of the former). We can distinguish specialization from generalization if we recognize one of the senses as more basic than the other: if A is more basic than B, and B is more specialized than A, then B is a specialization of A (*mutatis mutandis* for generalization).

6.4.1.1 Autohyponymy

Autohyponymy occurs when a word has a default general sense, and a contextually restricted sense which is more specific in that it denotes a subvariety of the general sense. An example of this is *dog*, which has two senses, a general sense, "member of canine race", as in *Dog and cat owners must register their pets*, and a more specific reading, as in *That's not a dog, it's a bitch*. Notice that

the specific reading demonstrates autonomy, since the second clause contradicts the general reading of *dog*: if the animal is a bitch, then it IS a dog. Another example is *drink*, whose general reading occurs in *You must not drink anything on the day of the operation*, and whose specific reading is exemplified in *John doesn't drink—he'll have an orange juice*, which also exhibits autonomy, because presumably John is going to drink (general reading) the orange juice.

6.4.1.2 Automeronymy

Automeronymy occurs in a parallel way to autohyponymy, except that the more specific reading denotes subpart rather than a subtype, although it is by no means always easy to determine whether we should be talking about automeronymy or autoholonymy, that is to say, it is not easy to see which is the more basic use. An example of this may be *door*, which can refer to either the whole set-up, with jambs, lintel, threshold, hinges, and the leaf panel itself, as in *Go through that door*, or just the leaf, as in *Take the door off its hinges*. Notice the zeugma in the following, which confirms the discreteness of the specific reading: *?We took the door off its hinges and walked through it*.

6.4.1.3 Autosuperordination

An example of autosuperordination is the use of *man* to refer to the human race (or indeed any use of masculine terms to embrace the feminine). There is no doubt that these are contextually restricted. (This fact may lend some force to the feminist argument that such uses should be suppressed; if the "male" reading is the default one, then the notion that the sentence applies mainly to males could arise by a kind of inertia.) Another example, but involving the generalization of a feminine term is the use of *cow* to refer to bovines of both sexes, especially when there is a mixed group (as in *a field full of cows*, which does not exclude the possibility of the odd bull); the normal reference of the term is the female animal.

6.4.1.4 Autoholonymy

As was mentioned above, discriminating automeronymy from autoholonymy is not easy, because there seem often to be different default readings in different contexts, that is to say, different contexts, which in themselves appear to exert no particular selective pressure, none the less induce different readings. Consider the case of *body*, as in *Jane loves to show off her body*. This surely denotes the whole body, not just the trunk (even though a lot of what Jane presumably enjoys displaying is actually part of the trunk!). But consider *She received some serious injuries/blows to the body*. Here, just the trunk is indicated. Another similar example is *arm*: *a scratch on the arm* is definitely on the non-hand part of the arm, but in *He lost an arm in the accident*, or *She was waving her arms about*, the whole arm is indicated. We shall tentatively consider these to be cases of autoholonymy, on the grounds that the inclusion of the hand in the latter cases is pragmatically entailed in those contexts, whereas

the exclusion of the hand in the former case is totally unmotivated (admittedly, the case of *body* is not quite so clear). There are clearer cases in other languages, for instance, the well-known *Have you eaten rice?* in, for instance, Malay, as a way of enquiring whether someone has had a meal (which would prototypically include rice as a part).

6.4.2 Non-linear polysemy

6.4.2.1 Metaphor

Many polysemous senses are clearly related metaphorically. A detailed consideration of metaphor will be postponed until Chapter 11: here we will simply characterize metaphor as figurative usage based on resemblance. A good example of a set of readings related metaphorically is provided by *position*:

That is an uncomfortable ***position*** to sleep in.
This is a good ***position*** to see the procession.
John has an excellent ***position*** in ICI.
What is your ***position*** on EU membership?
You've put me in an awkward ***position***.
You must ***position*** yourself so she can't miss you.

6.4.2.2 Metonymy

Another rich source of polysemous variation is metonymy, which is also dealt with in greater detail later, but may be characterized for the moment as figurative use based on association:

There are too many ***mouths*** to feed.
(Don't talk with your ***mouth*** full.)
That's a nice bit of ***skirt***.
(She wore a red ***skirt***.)
John has his own ***wheels***.
(One of the ***wheels*** fell off.)
Jane married a large ***bank account***.
(Jane has a ***bank account***.)
He is the ***voice*** of the people.
(He has a loud ***voice***.)

6.4.2.3 Miscellaneous

For some polysemous senses, although they are obviously related, it does not seem very illuminating to describe their relationship in terms of either metaphor or metonymy. An example is the calendric and non-calendric readings of words denoting periods of time, such as *week*, *month*, *year*. The clearest example is probably *month*, because the two readings do not even indicate the same length of time. A calendric month begins on the first day of the said month, and ends on the day before the first of the following month; a non-calendric month starts on any day, and ends four weeks later.

6.4.3 Systematic polysemy

Some cases of polysemy are systematic in the sense that the relationship between the readings recurs over a range of lexical items that is at least partly predictable on semantic grounds. Probably the least systematic is metaphor. There seems to be little pressure for systematicity in metaphor. For instance, in metaphors derived from the human body, one cannot assume that if *foot* is used for the lowest part of something, then *head* will be used for the upper part (or vice versa):

foot of mountain	*head/top of mountain
foot of tree	*head/crown of tree
head of a pin	*foot/point of a pin

We do speak of the *head* and the *foot* of a bed, but this is arguably a case of metonymy, that is to say, it indicates which part of the body is normally in that position.

The most systematic metaphors are probably the most basic ones, many of which are so naturalized that they hardly feel like metaphors any more. I am referring to cases like UP IS MORE/DOWN IS LESS. That is to say, if one can refer to something as *rising* (prices, popularity, hopes, etc.), the chances are pretty good that they are also capable of *falling*.

Metonymy can be highly systematic. Some examples are the following:

"tree species"/"type of wood"	beech, walnut, oak
"fruit"/"tree species"	apple, pear, cherry
"flower"/"plant"	rose, daffodil, azalea
"animal"/"meat"	rabbit, chicken, armadillo
"composer"/"music by same"	Beethoven was deaf.
	Do you like Beethoven?
"food"/"person ordering same"	The omelette is overcooked
	The omelette complained.

There is some systematicity, too, in linear polysemy. Take the case of *dog*. The story is that in a situation where a category has a binary subdivision, and only one of the subdivisions has a name, then the superordinate term will develop a more specific reading to fill the gap. So, for instance, in the case of *dog*, of the subcategories of male and female animals, only the female has a distinct name, namely *bitch*, so the superordinate term moves down to fill the gap. In the case of *duck*, it is the female subcategory which is unnamed, so *duck* functions as partner for *drake* as well as denoting the kind of bird. In other cases one can argue that the development has proceeded in the other direction, in that the name of one of the sub-categories (typically the most significant and familiar

one, if there is a difference), moves up to function as a superordinate. This is perhaps what has happened in the case of *cow*, and presumably, too, in the case of *rice* mentioned earlier.

6.5 Between polysemy and monosemy

In most accounts of contextual variation in the meaning of a word, a sharp distinction is drawn between "one meaning" and "many meanings", between **monosemy** and polysemy. But this is too crude: there are many degrees of distinctness which fall short of full sensehood, but which are none the less to be distinguished from contextual modulation (see below).

6.5.1 Facets

We have taken antagonism as a criterion for ambiguity, and hence for full sensehood; however, by no means all discrete readings of a word are mutually antagonistic. A clear example of this is provided by the word *book*. Sentences (10) and (11) below exemplify two such readings:

(10) Please put this book back on the shelf.
(11) I find this book unreadable.

In the first case it is the physical object which is referred to, in the second case, the text which the physical object embodies. However, this is not ordinary ambiguity: the two readings co-ordinate quite happily, without producing a sense of punning:

(12) Put this book back on the shelf: it's quite unreadable.

Such readings are called **facets**, and we may refer, for convenience, to the [TEXT] facet and the [TOME] facet (hopefully the labels are self-explanatory). There is considerable evidence of the discreteness of facets:

6.5.1.1 Identity constraint

Consider the following sentence: *John thinks this is the most remarkable book of the century; so does Mary*. If it is known that John is speaking of the text, there is a strong presumption that that is what Mary admires, too; likewise if John is impressed by the physical presentation.

6.5.1.2 Independent truth conditions

Consider the following exchange:

(13) A: Do you like the book?
B: (i) No, it's terribly badly written.
(ii) Yes, it's beautifully produced.

It is possible to conceive of a situation in which both of B's replies are true simultaneously. In reply (i), *book* is being interpreted as if only the [TEXT] facet was relevant, and in (ii), as if only the [TOME] facet was relevant. This independence of the facets is an indication of their distinctness.

6.5.1.3 Independent sense relations

The subvarieties of *book* [TEXT] are such things as *novel, biography, dictionary*, and so on. These do not correspond to subvarieties of *book* [TOME], the physical format of books, like *paperback, hardback*, and so on; that is to say, it is not the case that novels are typically hardbacks and biographies paperbacks, or whatever. Similarly, the parts of a text: *chapter, paragraph, sentence*, and so on, do not regularly correspond to the parts of a physical book, such as *cover, page*, or *spine*.

6.5.1.4 Ambiguity in containing constructions

The phrase *a new book* has two readings: "a new text" and "a new tome". This is genuine ambiguity: the two interpretations are fully antagonistic. But there is neither lexical nor syntactic ambiguity present. What happens is that the modifying adjective *new* is required to attach itself to one facet or another (this is the origin of the antagonism). However, two different adjectives, say *interesting* and *heavy*, may attach themselves to two different facets without tension, as in Fig. 6.1:

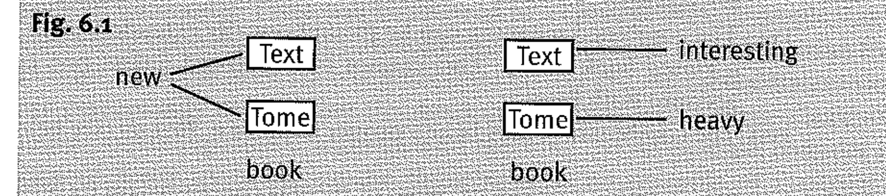

Fig. 6.1

6.5.1.5 Independent metaphorical extension

In the phrase *a book of matches*, the metaphor relates only to the [TOME] facet; the [TEXT] facet is completely irrelevant.

6.5.1.6 Independent proper noun

David Copperfield can be loosely described as the name of a book; but strictly speaking it is the name of a [TEXT], not of a [TOME].

Facets are not merely discrete, they are also autonomous. Consider the following:

(14) I'm not interested in the cover design, layout, printing, and so on, I'm interested in the book itself.
(15) I'm not interested in the plot, characters, or the quality of the writing, I'm interested in the book itself.

In (14) there are no problems about interpreting *book* as [TEXT], and in (15), as [TOME]. This use of *the X itself* is a particularly strict test for autonomy. A further indication of autonomy is that *book* can refer to ***only*** a text, or ***only*** a tome, that is, a text that has been composed, but is not yet embodied, or a book which has as yet no text in it (*I've bought a book to write the minutes of the meeting in*).

Facets can be described as fully discrete but non-antagonistic readings of a word. Another important characteristic is that they are characteristically of distinct ontological types. However, in spite of their discreteness and ontological distinctness it would not be correct to say that they represented distinct concepts: they are somehow fused into a single conceptual unit. Amongst the evidence for this claim the following may be cited:

(i) Ordinary speakers are not normally aware of the dual nature of *book*: it has to be pointed out to them (however, once pointed out, it becomes obvious). The facets form a single, unified 'gestalt'. The default reading of *book* is the combined one.
(ii) As we have seen, predicates selecting different facets can co-ordinate without zeugma, and there is no normal requirement for speakers to intend, or hearers to identify, only one of the facets, as is the case with true ambiguity.
(iii) The combined reading functions as a basic level item.
(iv) Some predicates require both facets to be present: *publish a book*, *John is reading a book*.
(v) The combined meaning can be metaphorically extended: *John's mind is a closed book to me.* This cannot be construed unless one takes into account both facets.
(vi) The combination may bear a proper name (e.g. *Britain* (see below)).

These points, although perhaps none of them is conclusive on its own, add up to an impressive case for the conceptual unity of the meaning of *book*.

It is not at present clear quite how widespread in the vocabulary the facet phenomenon is. It is certainly not unique to *book*; in fact anything that can be thought of as having both concrete form and semantic (in the widest sense) content seems to display facets. So, for instance, *John's speech was inaudible* and *John's speech was very interesting* manifest different facets of *speech*. Likewise, *a beautiful CD* and *a flexible CD* (and the ambiguity of *a new CD*), point to the dual nature of the meaning of *CD*.

An example of another large group of faceted words is *bank*:

(16) The bank in the High Street was blown up last night.
(17) That used to be the friendliest bank in town.
(18) This bank was founded in 1575.

These sentences involve facets which can be designated, respectively, as [PREMISES], [PERSONNEL], and [INSTITUTION]. These can co-ordinate together without zeugma:

(19) The friendly bank in the High Street that was founded in 1575 was blown up last night by terrorists.

A parallel set of facets will be found in *school*, and in *university*. A third group is represented by *Britain* in the following:

(20) Britain lies under one metre of snow.
(21) Britain mourns the death of the Queen Mother's corgi.
(22) Britain has declared war on San Marino.

In (20) *Britain* designates a concrete geographical entity, in (21), the population, a human entity, and in (22), an abstract political entity. According to my intuitions, although they are discrete, they all co-ordinate together fairly happily without zeugma, as in (23):

(23) Britain, despite the fact that it is lying under one metre of snow and is mourning the death of the Queen Mother's corgi, has declared war on San Marino.

6.5.2 Perspectives

There is another type of difference between readings which displays a certain level of discreteness without antagonism, but not as much as facets do, and without autonomy. These will be referred to as **perspectives**. A simple way of explaining these would be by analogy with looking at an everyday object from in front, from the sides, from behind, from on top, etc. All these different views are perceptually distinct, but the mind unifies them into a single conceptual unity. Something similar happens with meaning. As an example consider the case of *house*. A house can be thought of as an example of a particular architectural style, as a dwelling, as a piece of property, or as a piece of construction work. Each of these points of view causes a transformation in the accessibility profile of knowledge associated with the lexical item *house*. Some of these profiles may be sufficiently distinct to give rise to discontinuity phenomena, such as ambiguous phrases without ambiguous lexical items. An example might be '*a delightful house*', which could be delightful from the point of view of its architectural qualities, or because of its qualities as a place to live in. (It could, of course, be both, but my intuition is that one would mean either one thing or the other.) Think also of *John began the book*. This is ambiguous, and two of its possible readings are that John began reading the book, and that he began writing it. Notice that in both cases it is the [TEXT] facet which is involved, so the ambiguity here cannot be explained by appeal to facets.

How many different perspectives are there? One might suppose there to be an indefinitely large number; but if we apply the constraint that different ways

of seeing must give some evidence of discreteness, such as the possibility of ambiguous phrases, there seem not to be so very many. On one account, there are only four, which we shall illustrate in connection with the word *horse*. (What follows is a reinterpretation of Pustejovsky's **qualia roles**, as expounded in Pustejovsky (1995).)

6.5.2.1 Seeing something as a whole consisting of parts

Consider the viewpoint of a veterinarian, acting in a professional capacity. Such a person is primarily concerned with the proper functioning of the horse's body and its parts. Their approach has parallels with that of a garage mechanic to a car. (This corresponds to Pustejovsky's **constitutive role**.)

6.5.2.2 Seeing something as a kind, in contrast with other kinds

For this perspective, think of the way a taxonomic zoologist would view a horse. This would involve the way horses differ from other species, such as deer, and zebras and so on, and also how the various subspecies and varieties of horse differ from one another. Ordinary speakers, too, have a 'mindset' for classification; most 'folk taxonomies' depend heavily on perceptual features such as size, shape, colour, and so on, so these will figure largely in this perspective. (Some of the classificatory features will inevitably involve parts, but the point of view is different.) (This corresponds to Pustejovsky's **formal role**.)

6.5.2.3 Seeing something as having a certain function

A characteristic way of looking at things is in terms of their function: think of the way a jockey, or a Kazakh tribesman, will view his horse. Some things, of course, have many different uses, and each use will cause a different highlighting and backgrounding of conceptual material. But it is implicit in the fourfold division we are adopting here that within-perspective differences will be markedly less distinct (by various measures) than between-perspective differences. This is an empirical matter which has not been properly explored. As an example of between-perspective distinctness, think of a veterinarian's and a jockey's/racehorse trainer's differing interpretations of *This horse is in excellent condition*: health and race fitness are not the same thing. (This corresponds to Pustejovsky's **telic role**.)

6.5.2.4 Seeing something from the point of view of its origins

Adopting this perspective means thinking of something in terms of how it came into being. For a living thing, like a horse, this would involve the life cycle, conception and birth, and so on. It would also include the poet's view of their poem, a builder's view of a house, a farmer's view of farm products, and so on. Mention has already been made of the ambiguity of *John began the book*, which is ambiguous even when *book* is interpreted exclusively as [TEXT]: the ambiguity can be explained by saying that on the interpretation "John began reading the book", a functional perspective is being taken, since the purpose of a book is to be read, whereas on the interpretation "John began writing a book", a 'life cycle' perspective (in the broadest sense) is being taken. (There is a third possible interpretation, namely, that John began binding, or putting together a book physically. This, too, would be to take a 'life cycle' perspective. (This corresponds to Pustejovsky's **agentive role**.))

6.5.3 Subsenses

Antagonism should probably be regarded as a scalar property, which the truly ambiguous items (i.e. fully fledged independent senses) presented above display to a high degree. However, there are also readings with a lower level of both discreteness and antagonism than full senses, and we shall call these subsenses. A good example of this is afforded by the word *knife*. Although there is a superordinate sense of *knife*, according to which a *penknife*, a *table knife*, and a *pruning knife* are all *knives*, in certain contexts, the default reading of *knife* is a specific one appropriate to the context. Consider a mealtime context. Johnny is tearing pieces of meat with his fingers. He has a penknife in his pocket, but not a knife of the appropriate kind:

Mother: Johnny, use your knife.
Johnny: I haven't got one.

Johnny's response is perfectly appropriate: he does not need to be more specific. In this context, *knife* means "knife of the sort used at table". The independence of this reading is further confirmed by the fact that it forms part of a lexical hierarchy, with *cutlery* as an inclusive term, and *fork* and *spoon* as sister cutlery items. The inclusive reading is backgrounded in the above example, and probably only ever appears under contextual pressure; it is also relatively vague, whereas the specific readings are relatively rich and clearly defined. Other readings of *knife* have different sense relations. For instance, a pruning knife is a *tool*, a commando's knife is a *weapon*, and a surgeon's knife is a *surgical instrument*. There is reason to believe that the mental representation of a word like *knife* is a collection of specific readings loosely held together under a sketchy superordinate umbrella, rather than as a schematic specification which is enriched in various ways in particular contexts. That is to say, the specific readings of *knife* are selected from an established set, and are not the result of contextual enrichment of the inclusive reading (i.e. they are not the result of contextual modulation (see below)).

6.5.4 Sense spectra

Subsenses function like senses within their home domain, but they are less accessible from other domains. Another similar phenomenon is that of the **local sense**. These, too, are domain specific; they differ from subsenses, however, in that (i) they are points on a semantic continuum (called in Cruse 1986 a **sense spectrum**); (ii) the degree of antagonism between readings depends on

how far apart they are on the spectrum (in other words, superordination is also local); (iii) literal and figurative readings can be intuited; and (iv) there is no inclusive reading. The example of a sense spectrum given in Cruse (1986) was that of *mouth*. We may presume that the core (literal) meaning of *mouth* is the mouth of an animal or human, and that the other readings are metaphorical extensions of this. One of the most 'distant' extensions (in the sense of being farthest away from the literal meaning) is *mouth of river*. If we try to co-ordinate this with the literal reading, zeugma results: *?The poisoned chocolate slipped into the Contessa's mouth just as her yacht entered that of the river*. However, co-ordination of readings closer together on the spectrum produces no zeugma: *The mouth of the cave resembles that of a bottle*.

Points on the spectrum that are close together in the sense that they co-ordinate without zeugma, are none the less fairly insulated from one another in actual use, as they typically belong to different domains. Within their home domains they are quite like normal senses, with their own sense relations and so on. Thus *mouth* in the river domain is a meronym (designates a part) of *river*, with *source*, *bank*, and *bed* as sister parts; *mouth* in the bottle domain also designates a part, and has *neck* and *base* among its sister parts. Notice that there is no overall category of mouths which covers all the metaphorical extensions. Semantic spectra seem to be characteristic of situations where a core sense has a variety of relatively minor metaphorical extensions, and seem particularly prevalent when the basis of the metaphor is physical shape (as with *tongue*, *foot*, *head*, *arm*, *pin*, etc.).

6.6 Sense modulation

The effects of context on the meaning of a word can be summarized under the three headings **selection**, **coercion**, and **modulation**. All the examples of contextual variation in word meaning that we have examined so far have involved, as it were, ready-made bundles of meaning, selectively activated by contexts. This selection operates largely through the suppression of readings which give rise to some sort of semantic clash with the context (see Chapter 12 for more detailed discussion of this). If all the readings are suppressed except one, then this one will be 'selected', and generally in such a situation the alternatives do not even enter the consciousnes of either speaker or hearer. It sometimes happens that none of the established readings of a word is compatible with the context. Because of a tacit assumption that speakers are usually trying to convey an intelligible message, this typically triggers off a search through possible meaning extensions, such as metaphor or metonymy, for a reading which is compatible with the context. If one is found, this will be taken to be the intended reading, and we can say that context has **coerced** a new reading. However, selection and coercion do not exhaust the possibilities of contextual

variation: a lot of variation arises as a result of contextual effects which do not go beyond the bounds of a single sense. This is called here *contextual modulation*. There are two main varieties, **enrichment** and **impoverishment**, according to whether the effect is to add or remove meaning.

6.6.1 Enrichment

The most obvious effect of context is to add semantic content, that is, to enrich a meaning or make it more specific. The enrichments arise as a result of processes of inference which are in principle no different from those operating more generally in language understanding (for instance, those which generate conversational implicatures (see chapter 17)). There are two main ways of being more specific: by narrowing down to a subclass (i.e. hyponymic specialization), and by narrowing down to a subpart (i.e. meronymic specialization). Both may, of course, operate at the same time.

6.6.1.1 Hyponymic enrichment

The context may simply add features of meaning to a word which are not made explicit by the lexical item itself. For instance, gender may be determined:

(24) Our maths ***teacher*** is on maternity leave.

or height:

(25) My ***brother*** always bumps his head when he goes through the door.

or temperature:

(26) The ***coffee*** burnt my tongue.

or legality:

(27) Our house was burgled while we were away. They only ***took*** the video, though.

Contextual determination may be to a specific kind of the class normally denoted by the lexical item employed, rather than adding a feature:

(28) I wish that ***animal*** would stop barking/miaowing.
(29) John is ***going*** well in the 1500-metres freestyle.

In some cases, the specialization is to a prototypical example:

(30) I wish I could fly like a bird.

Notice that prototypical and non-prototypical interpretations co-ordinate without zeugma:

(31) An ostrich is a bird, but it can't fly like one.

The first occurrence of *bird* designates the whole class, but the second (via anaphora) must receive a prototypical interpretation. The normality of (31) shows that we are not dealing with separate senses.

6.6.1.2 Meronymic enrichment

Specification may also be to part of what the lexical item used normally refers to. This may be a definite identifiable part:

(32) The car has a puncture.

The only part of a car that this can refer to is one of the tyres. The specification may, on the other hand, be less definite:

(33) The car was damaged when John drove it into a tree.

Here the damage can be located at the front end of the car rather than the rear end, but there is still a range of possibilities, and the damaged area may not constitute a definite part. This kind of narrowing down to a part is widespread in language use and not usually noticed. For instance, *a red book* has red covers, not red letters, whereas *a red warning sign* most likely has red letters; *a red apple* is red on the outside, but the colour terms in *a yellow peach* and *a pink grapefruit* refer to the flesh; *Mary's eyes are red* and *Mary's eyes are blue* are not necessarily contradictory, because *red* and *blue* select different parts of the eye. Such cases can be multiplied *ad infinitum*.

6.6.2 Impoverishment

The effect of context is not always to enrich: it may also impoverish, if it makes clear that a lexical item is being used in a vague sense. Compare the following:

(34) The draughtsman carefully drew a circle.
(35) The children formed a circle round the teacher.

It is clear that the use of *circle* in (34) is in some sense the core one: the occurrence in (35) represents a kind of relaxation of the central, prototypical meaning, in that no one would expect the children to form a geometrically exact circle, and the description is vague in the sense (a) that it covers a range of possible dispositions of the children, and (b) that it is not clear what arrangements are excluded. The vague use of words is widespread and normal.

It may be useful to distinguish cases like (35), where context demands a vague use, but there is no explicit signal of vagueness, from cases like (36), where it is arguable that the word *turban* is not being used vaguely:

(36) He was wearing a sort of turban.

Here, of course, the phrase *a sort of turban* is vague. It is also worth pointing

out that although all words in principle are to some extent susceptible to vague use, some words are more susceptible than others. Just to give one example, although strictly speaking *twelve* and *a dozen* are synonymous, the latter lends itself more readily to approximate use.

Discussion questions and exercises

1. How would you characterize the differences between the (a), (b), and (c) readings of the underlined items in the following?

(i) (a) A *volume* of verse.
(b) A *volume* of 20 litres.

(ii) (a) Mary ordered an *omelette*.
(b) The *omelette* wants his coffee now.

(iii) (a) John is a complete *soldier*.
(b) Have you got a complete *soldier*? (No, the right leg is missing.)

(iv) (a) The *school* in George Street is going to be closed down.
(b) The whole *school* joined the protest march.
(c) That *school* is always being vandalized.

(v) (a) The drawer contained a collection of *knives* of various sorts.
(b) When you set the table, make sure that the *knives* are clean.

(vi) (a) They *led* the prisoner away.
(b) They *led* him to believe that he would be freed.

(vii) (a) She was told not to eat or *drink* after 8 a.m.
(b) It was after her husband left her that she began to *drink*.

(viii) (a) My *cousin* married an actress.
(b) My *cousin* married a policeman.

(ix) (a) Put that *encyclopaedia* down!
(b) I can't understand this *encyclopaedia*.

(x) (a) He has a *light* workload this semester.
(b) There will be some *light* rain in the evening.

2. Consider how many distinct meanings of **collect** are represented in the following. How would you organize them in a dictionary entry? Compare your results with the treatment given in one or more standard dictionaries.

(a) The books **collected** dust.
(b) He **collects** stamps.
(c) The postman **collects** the mail every day.

(d) She **collected** her things and left.
(e) She sat down to **collect** her thoughts.
(f) She **collects** the children from school at 4 o'clock.
(g) Dust **collects** on the books.
(h) The students **collected** in front of the notice board.
(i) They are **collecting** for Oxfam.
(j) He **collects** his pension on Thursdays.
(k) The dustmen **collect** the garbage on Wednesdays.
(l) She **collected** two gold medals in Tokyo.
(m) They **collected** rainwater in a bucket.
(n) They **collect** the rent once a fortnight.
(o) He will **collect** quite a lot on his accident insurance.

Suggestions for further reading

For a useful discussion of a range of approaches to polysemy see Geeraerts (1993). Chapter 3 of Cruse (1986) deals with context variants, but the present account differs from this in certain important respects, and is closer to Cruse (1995).

Most linguists take a more monosemic view than the one presented here. For an extreme monosemic position, see Ruhl (1989) (Cruse (1992*b*) is a critical review of this). Among those accepting a high degree of polysemy is Langacker—see, for instance, Chapter 10 of Langacker (1991*b*); the elaboration of Langacker's account in Tuggy (1993) is of particular interest.