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The Cultural Dimension in Defining

ABSTRACT: This paper examines the types of information that monolingual ELT dictionaries present in definitions. It considers the implications for lexicography of work done by Eleanor Rosch and Hilary Putnam in the 1970s on prototypes and stereotypes respectively in order to see how a change in semantic approach may allow new approaches to defining to develop, allowing lexicographers to include cultural information and to meet the needs of the user faced with difficult tasks in text comprehension.

"A good part of the lexicographer's research is concerned with establishing criteriality, with the task to find what is criterial and what is not, with the necessity to discover the criterial features as precisely as possible". "The whole lexical meaning of words (lexical units), ... can be analyzed as consisting of elements, or partial components, which we shall call criterial semantic features or simply semantic features." Zgusta (1971).

This approach to writing dictionary definitions stems from a logical Aristotelian approach to meaning in which a given object is perceived to have defining characteristics which provide necessary and sufficient conditions for the individual object to be a member of the set of objects thus defined. The invariable example given in linguistic texts is that of **bachelor**, whose defining (or 'criterial') characteristics are those of being a man and unmarried. The traditional approach to lexicographic defining is to present the necessary and sufficient conditions for membership of the set or category 'bachelor' as being the ideal definition for the word, excluding, as it does, extraneous and irrelevant 'encyclopedic' information.

The traditional approach briefly outlined above has, however, been somewhat overturned both by the arguments of the philosopher Hilary Putnam and by the work of the psychologist Eleanor Rosch. Putnam argues that the traditional approach cannot apparently accommodate the notion that an individual member of a category can be abnormal. That is, if a cat is defined as a four-legged mammal with a tail and the characteristics [+mammal], + [four legs], and [+ tail] are necessary and (let us assume temporarily) sufficient, then Manx cats, which do not have tails, and cats who have lost a leg in an accident are not cats.

In deciding what are the criterial semantic features for a cat, the problem for lexicographers is intensified, since lexicographers must give due attention to which features are

'sufficient' as well as necessary, as they wish to distinguish cats from other four legged mammals with tails, such as dogs and tigers. The question thus arises as to what semantic features to give. Whiskers, the type of fur/hair, colouring, different types of hair; size is a difficult concept to use because it is relative ; a bald cat, however horrible to contemplate, would still be a cat.

Putnam's answer to this conundrum is to postulate the notion of a stereotype. A stereotype is a *normal* member of a category – the stereotypical idea of what a cat is that is shared by members of the speech community who use the word 'cat'. The traditional approach, by contrast, assumes that the meaning of a word is analogous to a mathematical set. As Putnam says: "A 'set', in the mathematical sense, is a 'yes-no' object; any given object either definitely belongs to S or definitely does not belong to S, if S is a set. But words in a natural language are not generally 'yes-no': there are things of which the description 'tree' is clearly true and things of which the description 'tree' is clearly false, to be sure, but there are a host of borderline cases. Worse, the line between the clear cases and the borderline cases is itself fuzzy." Putnam (1975).

Eleanor Rosch approaches the problem from a slightly different angle. Her work comes from a background of the problem of recognition of objects in the world and how human beings form categories (such as the category 'cat' or 'daffodil') from a continuous stream of perceptual stimuli. Like Putnam, she rejects the Aristotelian notion of using logically necessary and sufficient conditions for membership. Instead, she proposes that we "achieve separateness and clarity of category in terms of its clear cases rather than its boundaries" Rosch and Lloyd (1978) and proposing the notion of a 'prototype' as a way of looking at the most typical or core examples. Some trees, birds and vegetables, for example are clearer cases of the categories 'tree', 'bird' and 'vegetable' than others.

These two rather similar ideas of stereotype and prototype can be of great value to lexicographers, allowing them to move away from the notion of criterial semantic features and instead to view definitions as containing elements of information which explain, to a greater or lesser degree, the stereotype. (I do not propose to examine the relative similarity of the terms here and, for convenience, shall use the term 'stereotype' except when discussing Rosch's work.)

Given this approach however, questions then arise as to how the stereotype can be successfully conveyed. If it is accepted that there is general agreement on what constitutes the stereotype, how broadly does this general agreement range? If we take the lid off introducing encyclopedic (or non-criterial) information in definitions how shall we know where to stop? How narrow is a stereotype and how far does it accord with what we observe in the world?

The first of these questions assumes that there is, in fact general agreement on what a stereotype is. This certainly appears to be psychologically true. Rosch's well-known experimental work shows that, for example, given different types of vegetable or bird, there is very close agreement amongst experimental subjects on which are the most prototypical vegetables and birds and which are the least prototypical.

It is, however, very important to Rosch that it is understood that the process by which an individual acquires categories in the first place (which we might see as coming to understand how to use a word appropriately) takes place within a culture. Native speakers learn to use words within a particular culture and it follows that their perception of what is prototypical is determined by the culture in which they acquire language. Across

cultures, however, the prototype may vary. Indeed, "what is considered a vegetable in one country may be seen as a fruit in another" Lyons (1981) Where for the British the potato is a reasonably prototypical vegetable, according to Lemmens (1990) "the Dutch do not really see the potato as a vegetable at all".

Furthermore, it is also clear that certain aspects of meaning for an individual word are more important than others for determining the prototype. Children in Britain have to learn, as a curious fact, that whales are not technically fish and that tomatoes are fruit. Children in Britain eat tomatoes as part of the 'savoury' element of a meal where fruit is part of the 'sweet' element. It is hard for them to accept that a tomato is a fruit until they acquire some botanical knowledge because prototypical fruit such as apples and oranges are seen as separate and altogether different components of the meal. It may not be enough, then, to say, as most dictionaries do, that a vegetable is an edible plant, followed by some examples. That is we cannot fairly rely on the examples, say, potato and carrot, to define the prototype 'vegetable'. Potatoes and carrots *are* fairly prototypical vegetables in our culture but the problem of tomato demonstrates that for the British, at any rate, it is an important characteristic of a vegetable that it be eaten in certain parts of the meal and that it be considered savoury.

It is interesting to see the way the unease about whether a tomato is a fruit or a vegetable manifests itself in L2 dictionary definitions. "COBUILD" (1987) defines **apple** as 'a round fruit which grows on a tree and which has smooth red, yellow or green skin and firm white flesh inside it' and **potato** as 'a round, white vegetable with a brown or red skin. Potatoes are grown underground.' **Tomato**, however, is defined as 'a soft smallish red fruit that you can eat raw in salads, or cooked as a vegetable or in sauces', i.e. a fruit that you eat as if it were a vegetable. In effect, this is addressing the problem the wrong way round unless the definitions of vegetable and fruit are clearly explained. It would then be possible simply to say that a tomato is technically a fruit but is perceived in the culture to be a vegetable. "LDOCE" (1987), notably, has a second definition of **fruit**, marked *tech* with an example explaining the tomato situation: '*The tomato is technically a fruit, although it is eaten like a vegetable*' while OALD (1989) gives an example, again at **fruit**, '*Is a tomato a fruit or a vegetable?*'. The second question which I raised with regard to giving elements of the stereotype in definitions rather than looking for necessary and sufficient conditions, is that of how to determine which pieces of non-criterial information (often described as 'encyclopedic') are relevant. In fact dictionaries, particularly L2 dictionaries, do currently include encyclopedic information but there is no theoretical framework generally accepted for deciding which elements of information *should* be given. It is not difficult to see why this is so. As part of a training programme for new lexicographers, I frequently ask them to write definitions for **cat** and we then look at what pieces of information they think are important for understanding the meaning, and at what information is given in published dictionaries. They never, of course, volunteer definitions including items such as 'a four-legged animal with less than four legs if it has had one or more removed'. The usual sort of suggestions, apart from having fur (or hair) and four legs, are 'domestic/kept as a pet; eats fish; chases/kills mice; runs up trees; has whiskers; has claws. 'Runs up trees' has only rarely been suggested and is presumably stereotypically rather weak. But curiously, 'independent' has never been suggested, despite the fact that in discussions about the relative charms of dogs and cats as pets, dependence versus independence is invariably cited as the main issue. 'Said to have nine

lives' is also never mentioned, possibly because it is not perceived as factual, and relative size is never suggested initially.

Of the pieces of information mentioned, claws and possibly whiskers can perform the conventional function of particular dogs. 'Kept as a pet' and 'eats fish' are however part of some kind of cultural stereotype. Cats are not invariably kept as pets, nor do they always eat fish even in British culture and I am informed that in some Eastern cultures cats stereotypically eat rice.

When we look at the L2 dictionaries, we find that there are some points of agreement but also considerable areas of variance.

CAT

Characteristics	OALD	COBUILD	LDOCE
small	✓	✓	✓
fur	✓	✓	✓
four legs	x	x	✓
tail	x	✓	x
whiskers	x	✓	x
claws	x	✓	✓
domestic/pet	✓	x	x
catch mice	✓	x	✓
catch rats	x	x	✓
kill mice	x	✓	x
kill birds	x	✓	x
eat fish	x	x	x

All agree that a cat is a small furry animal kept as a pet and none mention its supposed culinary preferences. Apart from that there is disagreement on what information to give, oddly only "LDOCE" mentioning that it is four-legged.

If we accept, as L2 dictionaries have already done to some extent, that encyclopedic information can and should be given in definitions, then what is needed is a set of guidelines about how to select the relevant information. Using the theoretical basis of stereotypes could inform this process. (Notably Ayto (1988), in discussing metaphor in dictionaries from a similar theoretical basis considers a very extended range of non-criterial information, including docility, aloof independence and agility.) Since it is clear that native speakers carry with them as part of their linguistic knowledge cultural stereotypes and that, additionally, these profoundly affect the development of lexis, it seems reasonable to use them as an overt element in selecting definition elements.

The final question which I raised in determining how definitions may be based on stereotypes is that of how closely our stereotypes reflect what we observe in the world. This may be thought a somewhat curious question but it appears to be the case that a strong stereotype can be retained even when the actual potential denotation no longer accords with it. A simple example illustrating this is that of the combining form *-shaped*. Adding *-shaped* to a noun can often reveal the stereotype for the noun itself. Anyone who visits a shop selling kites will know that kites can be made of a wide variety of materials and in an extraordinary number of shapes. Yet we all know that something that is kite-

shaped is in the shape of an extended diamond and that the stereotype of a kite is a covered frame of this shape with a long streamer falling from one end of the diamond and lengthy string attached to the other, linking the kite, at some distance, to a small boy.

Another example is cited by Taylor (1989). He describes the stereotype 'mother' in British culture (and others). The stereotypical mother "is a woman who has sexual relations with the father, falls pregnant, gives birth, and then, for the following decade or so, devotes the greater part of her time to nurturing and raising the child, while remaining all the while married to the father". Similarly, one might say, parents stereotypically come in matched sets of two, one of each gender, for the duration of the child's upbringing.

Actually, stereotypical mothers are no longer as common in our culture as they once were. But the stereotype is retained. In order to reflect changing patterns in our society, we introduce new terms. A mother who breaks the pattern by working is not just a mother, she is a 'working mother'. A parent who brings up children alone is a single parent.

It is thus possible to take the idea of a stereotype further and consider the way in which it shapes culturally agreed patterns of what is 'normal' on a wider scale than merely that of what is most typical of an individual object. The terms 'working mother' and 'single parent' arise because they contradict the stereotypes of 'mother' and 'parent' which remain available, even crucial, after changes in society should have made them redundant. Stereotypes shift slowly.

There are cases in which it would be extremely useful to find a way of showing these 'idealized' stereotypes in dictionaries. The standard definition of **motherhood**: 'the state of being a mother', where **mother** itself is defined in biological terms, is not, for example, particularly helpful to a non-native speaker faced with the American collocation 'motherhood and apple pie'. Neither is the treatment of **apple pie**, ignored in most dictionaries as being a self-evident combination of 'apple' and 'pie', although defined in "LDOCE" as: 'apples cooked in pastry'. There are strong cultural associations of cosiness, comfort and tradition associated with motherhood and if these are not explained then there will be contexts in which it cannot be expected that a purely factual definition of motherhood will serve.

Indeed, a major advantage in accepting the notion that to explain meaning one should explain stereotypes or prototypes using 'encyclopedic' information is that it opens up the dictionary to allowing in information that is not usually covered and yet is clearly referred to or alluded to in texts, presenting text comprehension problems for learners. Bullon (1990) has argued that the understanding of many lexical items depends on a high degree of knowledge of the associations or connotations which accrue to the word in a particular culture. He cites the example of **champagne**. Champagne is generally defined as a sparkling wine made in France. Interestingly, both LDOCE and COBUILD mention that it is expensive. In order to understand a native-speaker who says, in an excited tone of voice, 'This calls for champagne', however, it is necessary to know that what the speaker means is 'this is something to be celebrated – a celebration which may or may not include an actual bottle of champagne, depending on the state of the speaker's purse. Champagne is strongly associated in our culture with special occasions of a celebratory or joyful nature. Bullon also points out the prevalence of literary and biblical allusions in text. Indeed, this should be widened to include a rich variety of allusion and connotation

based on our shared cultural acceptance of the significance of certain childhood stories and events in history. It is easy to find examples of this sort of reference in actual texts:

“I think I do that sort of thing in the Alice in Wonderland way – write first, research afterwards.”

Margaret Attwood interviewed on Radio 3 12.10.91

“To tell the truth, he looked like a goddamn knight in shining armor. But did I feel like a damsel in distress? Nope. We six-foot-one-inch women rarely do. Glass slippers don’t come in size eleven.”

Barnes, Linda *The Snake Tattoo* Hodder & Stoughton, London (1989)

The above citations depend upon the understanding of stereotypical features from the stories of ‘Alice in Wonderland’ and ‘Cinderella’ which are part of our shared cultural knowledge and can be assumed to be understood by native speakers even if, in the case of Alice, they have never actually read the book. To be understood by a non-native speaker dependent on a dictionary, they imply that the dictionary must go further than just explaining the stereotypes for common words but must introduce new headwords in order to explain some of the cultural stereotypes. The following text requires a considerable degree of knowledge of events as well as cultural allusions even to determine the subject:

“Most of the 67 concerts end by 10pm, which leaves time for elegant dining-out. But whether you take your Haydn with champagne and oysters or with a can of beer and a pork pie in front of the radio at home, the spirit of the Proms is the same...”

“It is as English as Wimbledon and Lord’s and the Boat Race. Here we amuse ourselves, seasonally, nightly. And here are all the best tunes.”

Daily Mail 20.7.91

A new dictionary due out from Longman in the autumn of 1992, the “Longman Dictionary of English Language and Culture” (LDEL), makes a serious attempt to introduce the kind of information which would enable a non-native speaker to understand more of texts like those cited above.

I have argued in this paper that lexicographers should change their notion of what constitutes ‘meaning’ in terms of dictionary definitions, that definitions should include encyclopedic material determined by the stereotype of a lexical item; that they should include explicit information on the stereotype in addition to the factual information that must also be given; that they should include information on cultural associations for lexical items; and that they should include words such as ‘glass slipper’ and ‘Wimbledon’ which are often excluded from dictionary headword lists but which are present in texts and need to be understood just as much as ‘cat’ and ‘vegetable’. This is not to say, however, that there are not practical difficulties associated with the task.

Firstly, in the case of allusions, these may depend upon a concatenation of stereotypes which are obliquely offered. A car sticker I saw recently read: ‘My mother-in-law’s other

car is a broomstick'. A dictionary like "LDELIC" might explain that broomsticks are associated with witches and even give some explanation of the concept of mother-in-law jokes, but could hardly explain the context for the joke which depends upon having seen other car stickers over the years which declare, for example, 'My other car's a Porsche', on the rear window of a small, relatively inexpensive car such as a Mini. A similar type of problem arises with the utterance heard on the radio during the 1992 British General Election campaign: 'I could hardly vote Green because I don't have a beard or wear sandals'. There is a stereotype in Britain which includes elements like concern for the environment, being vegetarian, being interested in complementary medicine, voting for the Green or Liberal Democrat Parties, being interested in 'spirituality' rather than materialism and having a generally rather 'hippy' flavour. This group of characteristics is caricatured by an image of a man with a beard wearing sandals and a woollen cardigan. The stereotype can be referred to by means of the image but does not reside in a specific lexical item or group of lexical items and cannot therefore be easily handled in a dictionary.

Secondly, and even more problematic, is the difficulty that faces members of a culture (including lexicographers) in making elements of that culture explicit. Like anyone else, lexicographers are likely to be so deeply imbued with their own culture that they have difficulty in knowing what information is in fact culture specific.

However, if we accept the reasoning of Rosch, Putnam and others in the field of cognitive linguistics, then we must accept that it is inaccurate to show meaning as if it were purely or as close as possible to denotational. It is therefore incumbent upon us as lexicographers to provide a framework for definition writing in which the stereotypical is realized. It is also, surely, part of our responsibility in compiling L2 dictionaries to give the kind of information in dictionaries that learners actually need in order to successfully decode texts.

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