# STAGING THE INTRODUCTION OF FIGURATIVE EXTENSIONS OF FAMILIAR VOCABULARY ITEMS IN EFL: SOME PRELIMINARY CONSIDERATIONS

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#### **Abstract**

In natural contexts, children are exposed to the many senses of highly polysemous words from early ages. Lacking this rich, natural exposure to target language forms, EFL learners' grasp of this aspect of language use will largely depend on the range of senses which they meet in the graded input of the classroom. Thus, which different semantic extensions should be introduced and at what stage of the learning process are important issues for syllabus design. This paper discusses these issues in relation to body part terms, many of which display considerable referential flexibility, extending their meanings through different figurative mappings. Research carried out with young EFL learners to explore their understanding of and reasoning about four senses of head, for example, reveals that children use different reasoning strategies between the ages of 5 and 11 as their conceptual knowledge develops and becomes more complex. These different strategies gave rise to correct and incorrect comprehension of figurative meanings by both younger and older learners, depending on the various motivations for the meaning extensions. We discuss these findings in relation to the staging of these different senses in ELT.

Keywords: core vocabulary, figurative extensions, EFL, young learners.

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An important characteristic of natural languages is that a limited number of linguistic signs may be used to refer to very different areas of human experience. English *hand*, for example, can denote not only a part of the body but also, alone or in combination with other elements, other entities (farm hand, handbag), processes (hand someone something, hand something out/round/in, give someone a hand), attributes (handy, handful) or circumstances (by hand, at hand), to mention only a few of the semantic and grammatical possibilities of this form. From the point of view of applied linguistics, it has long been recognised that the referential flexibility of a small number of linguistic items means, among other things, that in order to communicate on a wide range of topics in different discourse contexts, speakers do not need to use or master an enormous number of linguistic items. Rather, knowledge of the core vocabulary of a language such as English may suffice to cover a speaker's communicative needs in most circumstances, although the number of items calculated to actually comprise this core or basic vocabulary may vary considerably (cf Nation, 1990; Ogden, 1934; Peyawary, 1999 or West, 1953). This insight into what might be termed the 'semantic productiveness' of individual lexical items has, of course, a number of important implications for foreign language learning. On the one hand, it means that the task of learning particular language forms might be considerably reduced<sup>1</sup>, on the other, it implies that it will be desirable that learners become aware -at some level- of the processes involved not only in grammatical shift but also in the semantic extension of the meaning of core vocabulary items. That is, just as knowledge of regular morphological processes allows speakers to guess that the derivational suffix -ful may be added to a noun such as *hand*, so it may be that general principles of meaning extension may be applied by speakers when working out novel senses of familiar words that they encounter in discourse. In other words, while grammatical knowledge might enable a speaker to predict that the form handful is possible and might be used as a nominal quantifier (like *spoonful* or *mouthful*), a different type of knowledge would be involved in working out the meaning of the word in a phrase

such as *My teenage son is a bit of a handful*. In natural or ESL contexts, speakers abstract such principles from usage events; in EFL contexts, however, input tends to be organised and graded in order that, within the constraints imposed by time and length of exposure to the target language, such principles may become learnable.

The most obvious examples of general principles in meaning extension are metaphor and, more importantly, metonymy, as Taylor (2003, p. 643) points out. The systematicity of such figurative projections or mappings has been the subject of numerous studies (e.g. Cuyckens & Zawada, 2001; Dirven, 1985; Lakoff, 1987; Nerlich et al., 2003) in order to explain the motivation of multiple senses of the same linguistic form. Indeed, the application of these insights, particularly as it relates to the cognitive semantic notion of *motivation*, has proved in empirical research to benefit adolescent and adult learners' understanding and recall of semantically opaque expressions in the foreign language (e.g., Boers, 2000; Boers & Demecheleer, 1998; Boers & Lindstromberg, forthcoming; Kövecses & Szabó, 1996; Verspoor & Lowie, 2003). However, little attention has been paid to how learners may develop the ability to reason figuratively about TL forms, or how such reasoning processes might be constrained by age. Yet there is no sudden onset of the ability to reason figuratively in adolescence, as a host of studies on children's use and comprehension of metaphors have shown (cf Vosniadou, 1987): even small children use and understand metaphor, albeit in ways different from adults. Furthermore, foreign language learning begins in many educational systems in early childhood. This makes it pertinent to discuss how the insights of cognitive semantics might be usefully applied to young learners of EFL. Which different semantic extensions of particular lexical items should be introduced in the EFL classroom -and when- are important issues for syllabus design. While it may be supposed that children learning English in L1 or natural ESL contexts will be exposed to the multiple senses of highly polysemous words from early stages, making their problem one of sorting out the different senses (Hallan, 2001; Johnson, 1999; Rice, 2003), children learning English as a foreign language lack exposure to this

rich, natural input. Their grasp of this aspect of the language will thus largely depend on the guided input provided by teachers and teaching materials and activities.

The aim of this paper is to consider some of the issues involved in deciding which semantic extensions of core vocabulary items could appropriately be introduced to young learners of EFL and at what age. Our discussion is based on studies carried out with young learners of English in Extremadura, Spain (Piquer Píriz, 2005). These studies focused on body part terms (hand, mouth and head) and explored young school learners' ability to apprehend the meaning and motivation of figurative extensions of these words used conventionally to refer to areas of experience relevant to young children. So, for example, it was judged that expressions such as hand someone something or give someone a hand would be communicatively appropriate expressions for young children to learn because they describe actions that are an integral part of the social world of the classroom. In contrast, others (for example metonyms like farm hand) were not deemed relevant to the communicative needs of learners of this age. That is, selection of the items to be explored was based on communicative needs rather than any supposed difficulty or ease of processing.

In general terms, these studies revealed that children at ages 5, 7, 9 and 11 could grasp the figurative meanings of the body part terms they were exposed to. Furthermore, these children reasoned figuratively when explaining the motivation of L2 semantic extensions (using metaphor, metonymy and creative similes to justify their choice of different meanings of these body part terms) as might be predicted by cognitive linguists. However, the children's reasoning strategies varied at different ages, and the deployment of preferred reasoning strategies gave rise to correct and incorrect responses at all ages.

The study focusing on semantic extensions of *head* (as in *head* of the bed/a hammer/a line of cars and stairs) proves particularly illustrating in this regard, and provides interesting evidence of the relative success of young learners to reason about the motivation of these uses of *head* at different ages. All the learners who participated in the study were familiar with the word to refer to a part of the human body (one of the first semantic fields covered in the syllabus) but had not been exposed to these senses of the word. As can be seen, the motivation for the four semantic extensions may all involve some kind of transfer of meaning from the source (a body part) to another concrete entity, but the resemblance between a body part and part of another entity arises from matching different salient elements of the head. For example, being at the top on a vertical axis would appear to lie behind the use of *head of the stairs*, while a general resemblance in shape could be said to motivate head of a hammer. In fact, dictionaries may occasionally fail to capture the different motivations of such polysemous uses, by themselves resorting to figurative expressions to define particular senses. Thus, the New Oxford Dictionary of English defines one use of head in the following way: "the front, forward or upper part or end of something, in particular: the *upper* end of a table or bed" (italics ours). This definition implies that *head of the bed/table* denotes a raised portion of the bed (on a vertical axis) whereas this does not seem to motivate this use, as beds or tables are usually flat. Rather, physical contiguity seems to motivate head of the bed (the place where the head lies), while importance in seating arrangements underlies the use of *head of the table* (the place where the most important person sits). That is, although this Dictionary groups these two senses together, the motivation for head of the table would appear to have more in common with head of an organization or head of a school than it does with head of the bed.

In order to discover whether children could apprehend these different motivations of the semantic extensions of *head*, they were given different photographs of scenes depicting a hammer, a flight of stairs, a line of cars, and a bed and asked to circle the part that they identified as the *head* of each. They were then asked to give a verbal explanation for their choice. In general, the most transparent figurative use of head for all the learners was head of a hammer<sup>2</sup>, and the least transparent head of a line of cars<sup>3</sup>. However, age appeared to be an important variable in the (mis) understanding of some of these uses, particularly in head of the stairs and head of a line of cars. The five- and seven-year-olds (and to a lesser extent the nine-year-olds) favoured identification of the figurative use of *head* with the top or highest part of an entity, while the eleven-year-olds favoured the notion of importance. So a typical response for *head of the stairs* from a sevenyear-old, who had correctly circled the top part of the stairs, is:

> "Porque es lo más alto y tiene que ser la cabeza porque está en lo más alto –la cabeza es lo más alto del cuerpo"

> "Because it's the highest part and it's got be the head because it's at the top the – head is at the top of the body."

In contrast, an eleven-year-old who has circled the middle of the stairs justifies his choice thus:

> "El centro porque – no sé porque como la cabeza es como si fuese lo más importante pues – las escaleras – está el centro"

> "The central part because – I don't know – because the head is – because it was the most important thing, so – the staircase it's the central part".

The photo used to illustrate the *head of a line of cars* included a police car, with its distinctive lights on the roof, in second place in the line. 42% of the 5-year-olds correctly identified the first car as the "head" of the line, although the reasons offered for their choice were not always congruent with the motivation of this semantic extension. The most common explanation offered for choosing the first car included notions such as "first" or "begin", explanations that coincide with the definition offered by the Collins COBUILD Dictionary: "the front of it or the first *person or vehicle in a line"*. For example:

"Porque está el primero"

"Because it's the first"

However, 21% of the children offered explanations that incorporated notions of height (and were very similar to those given for head of the bed and head of a hammer) although the first car they circled was not higher than the others in the line. One child's explanation for circling the first car was:

"El primero porque la cabeza es arriba"

"The first one because the head is at the top"

This reasoning is almost indistinguishable from that given by the children who incorrectly circled the roof of the first or second cars:

"C4: Porque está encima del primer coche

R: Porque está encima del primer coche ¿y eso qué tiene que ver con 'head'?

C: Que la cabeza está encima del cuerpo humano"

"C: Because it's on top of the first car

R: "Because it's on top of the first car, and what's that got to do with head?

C: 'cos the head is on top of the human body"

That is, in marking the part of one of the cars that is actually above the rest of the line, the children appear to reason by appeal to a human body schema (in its canonical upright position with the head above the rest of the body [Clark 1973]). Some of the 9- and 11-year-olds, in contrast, appeal to a different head-body relation in their answers, likening the line of cars to a snake or a worm:

> "porque es como una serpiente y la serpiente tiene la cabeza al principio"

> "Because it's like a snake and snakes have their head at the beginning"

> "A mí se me parece a un gusano y la cabeza siempre -más o menos siempre está arriba – es la más pequeña"

> "It looks like a worm to me and the head is always – is more or less always at the top of it – it's the smallest bit"

Just as the 5-year-olds' generalisation about head and the highest part of something leads to correct and incorrect identification of the head of a line of cars, so the 9-year-olds' preference for metonymical reasoning (PART FOR FUNCTION - HEAD FOR GIVING ORDERS) is used to justify correct and incorrect answers. So a 9-year-old who had correctly circled the first car said:

> "Porque es el coche que va delante y en una fila el que va delante es el que manda – y la cabeza – y nuestra cabeza es la que manda"

> "Because it's the front car and in a line the front car is the one that gives orders – and the head – and our head is the boss"

This is the same type of reasoning that justifies another child's choice of the police car:

> "C: Creo que como la cabeza manda un poco más que – los demás – las demás partes del cuerpo

R: La cabeza manda un poco más que las demás partes del cuerpo y ¿el de policía?

*C: Es el que manda – el que tiene autoridad"* 

"C: I think that the head bosses more than – the others – the other parts of the body

R: The head bosses more than the other body parts, and the police car?

C: It's the one that bosses most –the one that has the authority"

A human body schema, with the head at the top when it is upright, is particularly salient for the 5- and 7-year-olds, and underlies their reasoning about all the semantic extensions of *head* examined. In contrast, the reasoning favoured by the 11-year-olds attributes *head* with notions of importance and leadership. The difference in these reasoning strategies is, in turn, responsible for the relative success of learners in understanding the sense of *head* in different contexts. The younger children were much more successful than the older ones in identifying the sense of *head of the stairs*, with a success rate of 82% among the 7-year-olds in comparison with 58% correct answers given by the 11-year-olds. In contrast, the older children's appeal to the metonymic relation PART FOR FUNCTION accounts for the 83% correct answers given by the 11-year-olds for head of a line of cars in comparison with 77% success rate for the nine-year-olds, 59% for the 7year-olds and 42% for the 5-year-olds.

As children develop and their knowledge of the world increases, their domain knowledge becomes more elaborated, allowing them to be more flexible in matching attributes of the concept HEAD with different entities, as can be seen in those answers which suggest an analogy based on the body schema of a reptile which visually "leads" the body in uses like *head of a line of cars*. However, this elaboration of domain knowledge is not necessarily an advantage in understanding the different semantic extensions of *head*; the younger learners have the edge over the older ones when considering "top part" the most important attribute of the head on meeting a use such as head of the stairs. While it is not surprising to find that this reasoning strategy should be more important at this age (studies of young children's drawings similarly show the salience of the head in relation to the rest of the body), what is more interesting is that, as far as the children that took part in these studies are concerned, it appears to be a strategy that is employed increasingly infrequently in the course of childhood. This suggests that if semantic extensions that match the younger child's understanding of the world are not introduced at the age in which they "make sense", the task of understanding them will be more difficult at older ages, rather than easier. If this is so, then matching the motivation of polysemous uses of a lexical item such as head with the child's cognitive development at different stages of childhood may facilitate learning of such uses.

In conclusion, the small-scale study of children's grasp of the general principles of meaning extension through metaphor or metonymy reported in Piquer Píriz (2005) shows that children do apply these principles when offered the opportunity to reason about the semantic extension of familiar body part terms. Recognition of this ability to reason figuratively about the motivation of polysemous senses of core vocabulary items even in early childhood may suggest ways in which young learners could be helped to expand the semantic possibilities of the words they know. Unsystematic approaches to introducing the different figurative extensions of core vocabulary items fail to take advantage of learners' ability to reason about the motivation for different semantic extensions from early ages. However, application of the general principles of semantic extension through metaphor and metonymy do not suffice by themselves to make the motivation of different semantic extensions transparent for young learners. Rather, because the mappings involved vary, some will be easier to grasp than others at different ages. Indeed, opportunities for introducing figurative extensions in a way that is meaningful for young learners may be lost if they are delayed in course contents and tackled at an age when they no longer seem commonsense.

#### **Notes**

- 1. At least as far as the written forms are concerned.
- 2. All the children at ages 9 and 11 accurately identified head of the hammer; 96% of the 5-year-olds and 95% of the 7-year-olds also circled the appropriate part of the photograph.
- 3. The percentage of correct identifications of *head of a line of cars* was as follows: 42% of the 5-year-olds, 59% of the 7-year-olds, 77% of the 9-year-olds, and 83% of the 11-year-olds.
- 4. 'C' stands for child and 'R' for researcher.

### References

- Boers, F. (2000). Metaphor awareness and vocabulary retention. Applied Linguistics, 21, 553-571.
- Boers, F. & M. Demecheleer. (1998). A cognitive semantic approach to teaching prepositions. ELT Journal, 53, 197-204.
- Boers, F. & Lindstromberg, S. (Eds.) (Forthcoming). Not So Arbitrary? Motivated Language in Language Teaching. Amsterdam: Mouton de Gruyter.
- Clark, H.H. (1973). Space, time, semantics and the child. In: T.E. Moore, (Ed.) Cognitive Development and the Acquisition of Language (pp. 28-64). New York: Academic Press.
- Cuyckens, H. & Zawada B. (Eds.). (2001). Polysemy in Cognitive Linguistics. Amsterdam: John Benjamins.
- Dirven, R. (1985). Metaphor as a means of extending the lexicon. In: W. Paprotté and R. Dirven (Eds.) The Ubiquity of Metaphor. Metaphor in Language and Thought (pp. 85-119). Amsterdam: John Benjamins.

- Hallan, N. (2001). Paths to prepositions. In: J. Bybee & P. Hopper (Eds.) Frequency and Emergence of Linguistic Structure (pp. 91-120). Amsterdam: John Benjamins.
- Johnson, C. (1999). Metaphor vs conflation in the acquisition of polysemy: The case of see. In: M. Hiraga, C. Sinha and S. Wilcox, (Eds.) Cultural, Psychological and Typological issues in Cognitive Linguistics (pp. 155-208). Amsterdam: John Benjamins.
- Kövecses, Z. and P. Szabó. (1996). Idioms: A view from cognitive semantics. Applied Linguistics, 17, 326-355.
- Lakoff, G. (1987). Women, Fire, and Dangerous Things: What Categories Reveal about the Mind. Chicago: University of Chicago Press.
- Nation, I.S. (1990). *Teaching and Learning Vocabulary*. New York: Newbury House.
- Nerlich, B., Todd, Z., Herman, V. & Clarke, D.V. (Eds.) (2003). Polysemy: Flexible Patterns of Meaning in Mind and Language. Berlin: Mouton de Gruyter.
- Ogden. C.K. (1934). *The System of Basic English*. New York: Harcourt, Brace and Co.
- Peyawary, A.S. (1999). The Core Vocabulary of Basic English: A Corpus Approach. Bergen: The Humanities Information Technologies Research programme. HITsenterets publikjonsserie 2/99.
- Piquer Píriz, A. M. (2005). La comprensión de algunas extensiones semánticas de los lexemas "hand", "mouth" y "head" en las primeras etapas del aprendizaje del Inglés. Doctoral thesis. Cáceres: Servicio de Publicaciones de la Universidad de Extremadura.
- Rice, S. (2003). Growth of a lexical network: Nine English prepositions in acquisition. In: H. Cuyckens, R. Dirven and J.R. Taylor (Eds.) Cognitive Approaches to Lexical Semantics (pp. 243-280). Berlin: Mouton de Gruyter.
- Taylor, J.R. (2003). Polyemy's paradoxes. Language Sciences, 25, 637-655.
- Verspoor, M. & Lowie, W. (2003). Making sense of polysemous words. Language Learning, 53, 547-587.
- Vosniadou, S. (1987). Children and metaphors. Child Development, 54, 870-885.
- West, M. (1953). A General Service List of English Words. London: Longman.