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Discussion

Are there principles that apply only to the acquisition of words? A reply to Waxman and Booth^{$\stackrel{\prec}{\bowtie}$}

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Young children are strikingly good at learning the meanings of words, even under conditions of limited exposure. In Markson and Bloom (1997), we suggest that this 'fast mapping' ability is not special to word learning. Children who heard a novel object described, in passing, as 'a koba' remembered which object the word referred to when tested a month later. However, children who heard a novel object described, in passing, as 'the one that my uncle gave me' were equally good at remembering which object the fact referred to. Waxman and Booth (2000) replicate this finding, but they also found a difference between the word and the fact. They found that children extended the word to novel objects from the same category, but did not show this pattern of extension for the new fact.

We find this result unsurprising. Numerous studies have shown that children view count nouns as referring to categories (e.g. Brown, 1957; Macnamara, 1972; Waxman, 1999). And so when asked 'Is this one a koba?' and 'Are there any other ones that are kobas?', children will choose other objects that fall into the same category as the object originally called 'a koba'. But there is no reason to expect them to do so when asked 'Is this one my uncle gave me?' and 'Can you show me one that my uncle gave me?' The fact that a given object is a gift from the experimenter's uncle is information about a specific individual, and it would be perverse for a child (or an adult, for that matter) to extend it to other objects from the same category. If one is going to compare words and facts, the appropriate match for such a fact would not be a common noun – it would be a proper name, which is an expression that also picks out a specific individual.

 $^{^{*}}$ Principles that are invoked in the acquisition of words, but not facts, *Cognition*, 77, B35–B50.

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In any case, we agree with Waxman and Booth that words and facts are different. As they point out, the extension patterns of novel words can be determined in part on the basis of grammatical form, while the extension patterns of facts often depend on the precise nature of the facts in question. Some facts refer to transient properties, others refer to properties that are enduring; some are about the insides of objects, others are about their size, and so on. Some facts, such as 'this is the sort of desk they used to sell at Pottery Barn', pick out categories that would never show up as the referents of single words. For all of these reasons, determining the extension of a word is different from determining the extension of a fact. But the interesting question, to us at least, is not whether word learning is exactly the same as fact learning. It is whether word learning is done solely through more general cognitive systems, such as those involved in concept formation and intentional inference. Elsewhere, we have argued that some central findings about how words are extended - such as the whole object bias, mutual exclusivity, and the shape bias – are best explained in terms of such systems, rather than principles special to word learning (e.g. Bloom, 2000; Bloom & Markson, 1998). But the findings from Markson and Bloom do not bear on this issue, and neither do those from Waxman and Booth.

On a final note, Waxman and Booth begin their paper by asking whether 'the human language capacity' involves principles specific to this domain. Our answer is that it depends on which aspect of language one is concerned with (see Bloom, 1999; Gleitman & Bloom, 1999). There is nothing inconsistent about the position that some aspects of language, such as the principles of syntax, involve special dedicated systems, and that others, such as the learning of the meanings of words, do not.

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