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The semantics and morphology of household container names in Icelandic and Dutch☆

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ABSTRACT

In this paper, we report an experiment on the naming of household containers in Dutch and Icelandic carried out as part of the Evolution of Semantic Systems project (EoSS; Majid et al., 2011). This naming experiment allows us to support and elaborate on a hypothesis by Malt et al. (2003) that productive morphology in the naming domain can have an influence on boundary placement within the extensional space. Specifically, we demonstrate that the Dutch diminutive *-(t)je* favours a cut between small items versus others, whereas Icelandic, which does not use the diminutive in this domain, favours a cut between large items and others. This is not a typological effect, as Dutch and Icelandic are both Germanic languages and both have diminutive morphology available in principle. We find no evidence that the diminutive produces a proliferation of terms and/or fine-grained nesting within the extensional domain. Rather, the Dutch diminutive favours a more even distribution of terms across the space whereas Icelandic favours broad inclusive terms with a number of narrower specialist terms. Further, the extensional space defined by the diminutive is not associated with its own clear prototypical exemplar. Using evidence from compounding and modification, we also consider which semantic features are prominent in differentiating categories within the domain. By far the most prominent in both languages is the inferred contents of the container. Other than contents, however, the languages differ in the range and prominence of features such as intended usage or material of composition. Our results demonstrate that in order to understand the processes that produce semantic divisions of basic object classes, we should consider fine-grained analyses of closely related languages alongside analyses of typologically different languages.

1. Introduction

"Many a slip twixt cup and lip" runs the proverb, and the act of drinking from a container suitable for the purpose seems so natural that we rarely question how we know what a cup is. The question seems especially strange when considering historically and culturally related languages: surely English *cup*, Dutch *kopje* and Icelandic *bolli* mean essentially the same thing?

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The question of how naming practices relate to concepts on the one hand and the natural organisation of the world on the other is an enduring topic of controversy and debate in a number of fields, including philosophy, psychology, linguistics and anthropology. It has been claimed that in some cases the world is structured in such a way as to cry out to our senses to be named (Berlin, 1992; Hunn, 1977; cited by Malt et al., 2003). Objects, particularly those with boundaries and functions readily discernible from other aspects of our surroundings, could be thought of as exemplifying such external structural categories. Others have claimed that this apparent structure is in fact made by our own senses, and that our minds are innately endowed with instinctive frames of reference that organise the input of our senses in characteristic ways (Fodor, 1975). As Chomsky puts it: "But no one can seriously doubt that for all organisms, what counts as experience is richly determined by internal factors, which construct an organism-specific *Umwelt*" (Chomsky, 2003, p. 301). Others have repudiated the idea that either the world or our minds provide any inherent structure at all. Rather it is the systematic pattern of our own language, its vocabulary and grammatical organisation, which imposes a structure upon our perceptions where no such structure exists (Sapir, 1929, 1912; Whorf, 1956). Or again, it may be that language only has the influence it does because it is culturally-transmitted, and it is really cultural practices in all their forms that are decisive in categorisation: as Malt and Majid (2013, p. 590) put it, "could perception and cognition be culture-dependent all the way down"?

In this paper, we follow up on a series of psycholinguistic experiments concerning the naming of household containers as a class within the domain of objects, and we report our own experiment on the naming of household containers in Dutch and Icelandic carried out as part of the Evolution of Semantic Systems project (EoSS; Majid et al., 2011). We argue in favour of a hypothesis by Malt and her colleagues (Malt et al., 2003, p. 35; Malt and Majid, 2013, p. 588) that the morphology of a language can have an influence on the placement of extensional boundaries within a lexical domain. Specifically, we argue that the diminutive suffix *–(t)je* in Dutch encourages a separation of small from other objects in the lexicalisation of the container domain. This is not observed in Icelandic, where the break is more typically between small and medium objects on the one hand and large ones on the other. This is a significant extension and refinement of Malt et al.'s observation, as our anlaysis is based on two typologically closely related languages and involves a detailed analysis of a morphological process that Malt and her colleagues do not consider: diminutive formation. We also consider evidence from compounding and modification in the two languages to identify other features of meaning that are used for object differentiation in container naming and consider in a preliminary fashion the degree to which these represent variable cultural constructions.

We address the following questions in this paper. Can differences in morphological strategy influence the way that an extensional domain is carved up? If so, do the differences relate to broad typologically-based differences or narrower differences in the productivity of particular morphemes? We then consider what *kinds* of differences are produced. For instance, are there differences in extensional boundary placement, and/or proliferation of terms within the domain? If our results suggest that a morpheme does influence boundary placement in the extensional domain, can we also see the morpheme attracting a strong prototypical exemplar within that extensional space, as revealed in high inter-speaker agreement in naming? Finally, what features of meaning are important for differentiation within the domain, and to what extent are they variable?

To provide context for these questions we review the background literature on container naming (Section 2.1) and our assumptions concerning diminutive formation and compounding (2.2). In Section 3, we describe the data collection and coding methodology used by the EoSS project data and results that we report here, as well as some of the methodological issues that emerged with respect to our data. In Section 4, we present our findings and in Section 5 our conclusions.

2. Background

2.1. Literature on containers

2.1.1. General background

Naming practices can vary considerably between languages, even in the naming of familiar physical objects such as household containers. Kronenfeld et al. (1985) investigated the naming of 11 drinking vessels (such as cups, mugs and glasses) by Japanese, American English, and Israeli Hebrew speakers. They found that the extensional range of names in the languages varied considerably, guided by different prototypical exemplars and salient attributes. Hebrew speakers distinguished between two broad categories, separating tea and coffee cups from other kinds of drinking vessels. English speakers also made a two-way distinction but separated glass drinking vessels off from the others (e.g. cups). Japanese speakers made a three-way distinction, using a special category for wine glasses. Malt et al. (2003) found similar cross-linguistic diversity and no "compelling structure … in the world" (p. 21) in their study of the naming of household containers such as bottles, jars and cans by speakers of (Argentinian) Spanish, (American) English and (Mandarin) Chinese. Ameel et al. (2005) replicate the findings of Malt and her colleagues for Belgian speakers of Dutch and French, showing not only that monolingual speakers have distinct naming practices, despite their largely shared cultural environment, but also that Dutch-French bilinguals develop their own partially merged classification system distinct from the systems of monolinguals.

Collectively, these findings might be seen as providing support for a strong version of the linguistic relativity hypothesis (cf. Boroditsky, 2006; Lucy, 1992), i.e. that arbitrary linguistic categories condition thought and conceptualisation. Malt et al. (1999) challenged this position in their study of Spanish, English and Chinese naming practices. Here they also collected non-