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# Context sensitivity and insensitivity in object naming

**Abstract:** Objects can almost always be called by more than one name, and the name chosen depends on the context. However, studies of naming in some traditions elicit names by showing objects in isolation and asking merely *What is it?* If the names produced are not the same as those that would be given in more fully specified communicative contexts, the value of the tasks for understanding object naming is in doubt. The current study examined the effects of different communicative demands on naming of 60 household containers. A standard “free naming” task was contrasted with two other versions. In these two, participants had the goal of getting an addressee to find a target object among others. In one, each object needed to be distinguished from a small set of dissimilar objects, visible to the addressee. In the other, each needed to be distinguished from a large set of similar objects, not visible to the addressee. Responses were sensitive to context in the number of modifiers produced. However, they were insensitive in the head nouns produced. Simple naming tasks such as *What is it?* can produce results for head nouns equivalent to those from tasks providing more fully specified communicative contexts.

**Keywords:** object naming, referential communication, context effects, communicative goals, basic level names

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## 1 Introduction

Ordinary objects can almost always be called by more than one name. For instance, someone’s decorative bowl can be referred to as *my bowl*, *my cut glass bowl*, *my candy dish*, *my Waterford crystal*, *my favorite housewarming present*, and so on. The potential for name selection to vary depending on the

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circumstances of an utterance is well appreciated by researchers interested in referential communication. Factors impacting name selection include the way the object is currently being used (e.g. Labov 1973; Malt and Sloman 2007; Matan and Carey 2001); the past history of name choice by a pair or group of people (e.g. Clark and Brennan 1991; Metzinger and Brennan 2003), the amount of speaker or addressee knowledge in a domain (e.g. Mervis 1987; Dougherty 1978; Isaacs and Clark 1987); the need to compromise between providing sufficient information to pick out the intended referent and avoiding excessive information (e.g. Brown 1958; Clark and Murphy 1982; Cruse 1977; Rosch et al. 1976), and the desire to express an attitude toward an object or highlight some features over others (as in *hut* vs. *hovel* or *scrambled eggs* vs. *mess*; Malt and Sloman 2007).

Not all research on object naming has focused on referential communication, though. A growing literature on naming patterns across languages examines constraints and variations in how speakers of different languages divide up a domain by name (e.g. Bowerman 1996; Kay et al. 1997; Majid et al. 2008; Majid et al. 2006; Malt et al. 1999; Malt et al. 2008; Regier et al. 2007). This literature follows in a long tradition in anthropology and linguistics examining cross-cultural similarities and differences in naming and conceptualization of elements of the natural and constructed world (e.g. Atran 1985; Berlin 1992; Berlin and Kay, 1969; Boster et al. 1986; Brown 1984; Bulmer 1979; Conklin 1957; Hunn 1977; see Evans 2010, and Malt 1995, for reviews).

In this work, informants in the field or research participants in a laboratory are typically shown samples of the domain of interest and asked questions such as *What is it?* or *What would you call it?* Although there is a clear goal to the task, it is only to give a name to the experimenter. What kind of name should be chosen is not well-specified by that goal. In contrast, in the more elaborated context typical of discourse outside of the research setting, a speaker is typically referring to an object that plays some specific role with respect to the speaker or addressee and is being picked out against a context of other objects and entities within the discourse setting. Further, that object is only one element of a message that may entail communicative goals beyond transmitting information such as causing an action to take place or a state of affairs to change, etc. (e.g. Austin 1975). In such contexts, the various factors impacting name selection may have more room to operate in a meaningful way. These differences from most communicative contexts of everyday life raise questions about how participants interpret the standard free naming task, and whether the naming patterns obtained reflect what might be found in other contexts. If the names produced in such tasks are not the same as those that would be given in other, more common types of communicative contexts, the value of the tasks for understanding object naming patterns is in doubt.

In the current study, we examined the effects of different communicative demands on naming of the 60 objects used in Malt et al.'s (1999; 2003) research on naming patterns in English, Spanish, and Chinese. The objects were common household containers that were mostly called *bottle*, *jar*, or *container* in English. A standard free naming task (*What would you call it?*) was contrasted with two alternative versions of the naming task that elaborated the communicative context. In the two alternative versions, a goal was specified of getting the addressee (the experimenter) to pick out the named object from among others. In one version, participants named each object against a small array of dissimilar objects that did not include any other storage containers, and all of the objects were visible to the addressee as well as to the participant. In this situation it would be relatively easy for the addressee to identify the intended referent. In the other version, participants named each object against a large set of highly similar objects (all the other objects of the original container set), and none of the objects was visible to the addressee at the moment of naming. This situation creates a greater challenge for getting the addressee to identify the intended referent.

Two types of name change possibilities are most relevant to the current study. The first is when changes reflect a reconceptualization of the object to a greater or lesser extent. When a certain container is called *vase* when filled with flowers but *bowl* when filled with mashed potatoes (Labov 1973; see also Malt and Sloman 2007; Matan and Carey 2001), when a dwelling is called *hut* vs. *hovel*, or an abstract shape is called *the person carrying something* vs. *the person pointing to the left* (Clark and Wilkes-Gibbs 1986), the alternative names remain at the same level of abstraction but signal a shift in the features attributed to the object or considered most important. The second type of name change reflects a difference in the level of specificity. Calling an object *dishware* vs. *bowl* vs. *Waterford crystal bowl* conveys different amounts of information about the features of the object but does not introduce features that conflict from one name to the next. In the current study, both types of name changes are possible. An object made of glass with a short, wide neck might be called *jar* when it is being named against a context that includes many objects more typical of the name *bottle*, but it might be called *bottle* when named against a context of non-container objects. That is, the set of objects that seem appropriately designated by a given name may shrink or expand depending on what other exemplars the person is exposed to within the task, which is a form of reconceptualization. Alternatively, if people follow Grice's maxim of quantity (Grice 1989) and provide as much information as required but not more than required, the same object might be called *jar* when named against a set containing many things called *bottle* but it might be called by the more general label *container* when named against a set of non-container objects.

Two previous experiments have looked for context-based shifts in level of specificity. Rosch et al. (1976) presented objects to be named in sets that varied in their degree of heterogeneity. In one condition, objects could be uniquely identified by superordinate names (e.g. *clothing* vs. *furniture*); in another, superordinate names were not sufficient to identify individuals but basic level names were (e.g. *chair* vs. *desk*); and in the third only subordinates would (e.g. *kitchen chair* vs. *living room chair*). Regardless of contrast set, responses were overwhelmingly at the basic level. Lin et al. (1997) had participants engage in a non-verbal task before naming in which they had to rank the desirability of different objects sharing the same basic level name (e.g. four different breeds of dog). This task was intended to draw attention to distinctions among the objects. Participants then named objects, half of which had been shown in the ranking task and half of which had not. Here, too, the names produced were overwhelmingly at the basic level, regardless of whether the objects had been seen in the ranking task or not. Both of these experiments, though, used free naming instructions in which participants were merely asked to give a name for each object. No communicative goal was specified. Shifts in the level of abstraction may be much more likely to occur when the task requires attention to success in achieving a goal.

In the two possibilities for name changes posed above, the head noun of the response changes depending on the communicative context. Since the head noun is taken as the name for the object in studies using a free naming task, such a result would imply that there is actually no such thing as a name for entities that is stable across a range of communicative contexts, and that can be revealed by the free naming task. In contrast, if the head noun remains consistent across the different contexts, this result would imply that the free naming task yields information about naming patterns that would apply across a range of contexts.

## 2 Method

### 2.1 Participants

Eighty-four Lehigh University undergraduates participated for course credit, 28 in each naming context. The 28 who did the free naming context are those whose data are reported as the English naming results in Malt et al. (1999). Data from the other two participant groups were collected at the same time but have not been previously published.

## 2.2 Materials

Object photographs were those used in Malt et al. (1999), described in detail there. In brief, the objects pictured were 60 household containers, found in local homes and shops, that varied widely in their properties. Most were expected to receive the names *bottle* or *jar*, and some were selected as sharing salient properties with things often called *bottle* or *jar* but possibly to receive other names (e.g. *flask*, *can*). This range of objects was intended to provide a good assessment of the scope of each lexical category. From each picture, participants could see the size, shape, color, label, type of material, and the substance that each container was made to contain. Figure 1 presents six sample objects (see Malt et al. 1999, for more examples).

For one naming context (described below), seven additional photos were used, consisting of one picture each of a brush, a phone book, a screwdriver, a pen, a tape dispenser, an address book, and a cup.



Fig. 1: Sample stimuli.

## 2.3 Procedure

For purposes of the Malt et al. (1999) research, each participant first performed two non-linguistic sorting tasks in which they grouped the 60 target pictures according to the physical, functional, or overall similarity of the objects. (Each person did two out of the three possibilities). During this task participants became familiar with the full set of 60 objects and the range of variation among them. In the sorting task instructions, no mention was made of object names, and no objects were named at any time. Following the sorting, each participant completed one of the three naming task versions.

In the naming task, the pictures were presented in a random order (by shuffling after the second sort was completed). Each participant received one of the three naming contexts. In the *free naming* context, participants were simply told that they would be seeing the pictures again and that they should give a name for each one. They were asked to give whatever name seemed the best or most natural to them, and they were told that it could be one word or more than one word. The instructions emphasized that participants should name the object itself rather than what it contained. The experimenter held up each picture in turn and the participant recorded his or her name for it on a response sheet.

In the remaining two naming contexts, participants named the object as if a real addressee were being asked to interact with it. In the *heterogeneous/visible* context, the context would help constrain the interpretation of whatever name was used. This context retained the premise of the free naming task that both the speaker (the participant) and addressee (the experimenter) could see the pictures being named, but it changed the set of contrast objects against which the target pictures were named. The seven non-target photos consisting of the brush, phone book, screwdriver, etc. were placed on the table and participants were asked to imagine that they were objects on the table. For each trial, one target photo was placed among them. Participants were asked to imagine that they wanted the experimenter to hand them one of the eight objects, in particular, the one that was from the main stimulus set. They were to say, *Please hand me the . . .* and to finish the sentence with whatever name they would use to identify the object so that the experimenter would hand them the right one. Participants were told that the experimenter could see all the objects, and they should use whatever name would help him pick out the right one. As in the free naming context, they were told that the name could be one word or more than one word. Participants spoke the full sentence including their choice of name out loud, and then recorded the name as spoken on the response sheet.

In the *homogeneous/non-visible* context, the context provided little information to help constrain the interpretation of whatever name was used. As in the

free naming case, each container picture was named against the contrast set of all the other containers (familiar to participants due to the earlier sorting tasks), but this context eliminated the visibility of the target object to the addressee. Participants were asked to imagine, for each trial, that they wanted the experimenter to go to a storeroom full of the containers and get the one presented on that trial. The stack of pictures was placed face down, and each one to be named was held up facing the participant so that the participant could see it but the experimenter could not. It was emphasized that the experimenter would not know which object they had in mind, that he was going to have to pick it out from a lot of very similar ones, and that the participant should use whatever name would help him pick out the right one. Participants were asked to say *Please go get me the . . .* and to finish the sentence with whatever name they would use to identify the object so that the experimenter would pick out the right one in the storeroom. As in the free naming context, participants were told that the name could be one word or more than one word. They spoke the full sentence out loud and then recorded the name as spoken.

### 3 Results

Table 1 presents the dominant (most commonly produced) head noun for each object in each of the three contexts, along with the percentage of participants out of 28 who used that head noun.

This table shows that for 49 out of 60 objects, the dominant head noun was the same across all three naming contexts. For the majority of the objects, then, there was no evidence of a shift in conceptualization or in level of abstraction that required a change of name due to the context difference.

For the remaining 11 objects, two contexts shared a name and one yielded a different name. However, there is no clear pattern in which context produced the odd-name-out. Free naming had the odd-name-out once, the heterogeneous/visible context did four times, and the homogeneous/non-visible context did six times. One might wonder if the slightly higher frequency for the homogeneous/non-visible context indicates a tendency to shift toward a more specific name, but there is little evidence to support this possibility. In two cases (pictures 23 and 48) the object in the homogeneous/non-visible context received a name that might be considered more specific than the name shared by the other two contexts, but in four cases (pictures 33, 54, 58, and 60), the object in the homogeneous/non-visible context received a name that could be construed as more general (*container*) than the dominant name in one or both of the other contexts. Instead, it seems that the name variation in these 11 cases reflects mainly noise in the data.

Picture number	Naming context														
	Free naming					Heterogeneous/visible context					Homogeneous/non-visible context				
	Dominant name	Percent of responses	Mean # of modifying words	Dominant name	Percent of responses	Mean # of modifying words	Dominant name	Percent of responses	Mean # of modifying words	Dominant name	Percent of responses	Mean # of modifying words	Dominant name	Percent of responses	Mean # of modifying words
1	container	0.68	0.39	container	0.36	1.18	container	0.71	2.46						
2	container	0.86	0.39	container	0.54	0.86	container	0.61	1.71						
3	bottle	0.50	0.36	bottle	0.39	0.96	bottle	0.54	2.46						
4	bottle	0.54	0.36	bottle	0.57	1.04	bottle	0.57	2.5						
5	bottle	0.57	0.36	bottle	0.61	0.89	bottle	0.68	2.14						
6	container	0.57	0.32	container	0.50	1.04	container	0.68	2.39						
7	jar	0.93	0.36	jar	0.93	0.82	jar	0.96	2.25						
8	bottle	0.79	0.39	bottle	0.61	0.89	bottle	0.71	1.89						
9	container	0.46	0.36	container	0.43	1.14	container	0.39	2.71						
10	jar	0.57	0.36	jar	0.50	1.07	jar	0.39	2.5						
11	jar	0.93	0.32	jar	0.86	0.82	jar	0.79	2.14						
12	jar	0.96	0.5	jar	0.96	1.21	jar	0.79	3.36						
13	jar	0.96	0.39	jar	0.86	0.93	jar	0.79	2.14						
14	jar	0.89	0.32	jar	0.96	0.93	jar	0.93	2.04						
15	jar	0.89	0.5	jar	0.89	1.29	jar	0.89	2.86						
16	container	0.54	0.43	bottle	0.36	0.86	bottle	0.32	2.21						
17	jar	0.75	0.39	jar	0.57	0.96	jar	0.50	2.18						
18	jar	0.96	0.32	jar	0.75	1.07	jar	0.86	2.5						
19	jar	0.93	0.29	jar	0.93	0.89	jar	0.89	2.21						
20	tube	0.61	0.5	tube	0.54	1.21	tube	0.39	2.78						
21	bottle	0.68	0.39	bottle	0.43	1.07	bottle	0.71	2.92						
22	container	0.61	0.43	container	0.46	1.11	container	0.46	2.71						
23	can	0.46	0.57	can	0.29	1.18	spray	0.25	2.29						

24	can	0.93	0.64	can	0.46	1.14	can	0.61	2.14
25	container	0.39	0.5	pump	0.39	1.04	container	0.39	2.04
26	can	0.46	0.32	can	0.36	1.04	can	0.50	2.64
27	jar	0.96	0.36	jar	0.82	0.89	jar	0.89	2.78
28	bottle	0.68	0.61	bottle	0.46	1.00	bottle	0.79	2.57
29	jar	0.86	0.43	jar	0.82	1.14	jar	0.61	3.14
30	jar	0.86	0.32	jar	0.93	1.11	jar	0.79	2.68
31	jar	0.86	0.36	jar	0.89	0.78	jar	0.89	2.25
32	box	0.71	0.39	box	0.79	1.00	box	0.93	2.78
33	bottle	0.75	0.61	bottle	0.43	1.32	container	0.46	2.32
34	jar	0.93	0.39	jar	0.96	1.18	jar	0.89	1.75
35	container	0.54	0.43	container	0.46	0.96	container	0.46	2.00
36	jar	0.89	0.43	jar	0.82	1.29	jar	0.50	2.57
37	jar	0.96	0.43	jar	0.89	1.21	jar	0.89	3.07
38	jar	0.86	0.43	jar	0.96	1.14	jar	0.86	3.29
39	container	0.75	0.5	container	0.46	1.29	container	0.79	2.82
40	bottle	1.00	0.32	bottle	0.96	1.25	bottle	0.93	2.39
41	bottle	0.93	0.32	bottle	1.00	0.93	bottle	0.96	2.14
42	bottle	0.64	0.32	bottle	0.46	0.82	bottle	0.50	2.61
43	jug	0.54	0.5	jug	0.36	1.25	bottle	0.54	2.64
44	jar	0.79	0.39	jar	0.79	0.89	jar	0.68	1.86
45	container	0.79	0.36	container	0.79	1.04	container	0.64	2.43
46	can	0.57	0.25	can	0.57	1.00	can	0.61	2.57
47	can	0.71	0.61	can	0.71	1.07	can	0.57	2.61
48	container	0.54	0.43	container	0.54	1.11	bottle	0.46	2.71
49	bottle	0.71	0.5	bottle	0.89	0.93	bottle	0.93	2.36
50	bottle	1.00	0.46	bottle	0.82	0.89	bottle	0.89	2.54
51	bottle	0.79	0.43	container	0.43	0.93	bottle	0.68	2.39

Table 1: Dominant name, percent of participants who produced that name, and mean number of modifying words in three naming contexts.

Picture number	Naming context											
	Free naming				Heterogeneous/visible context				Homogeneous/non-visible context			
	Dominant name	Percent of responses	Mean # of modifying words	Dominant name	Percent of responses	Mean # of modifying words	Dominant name	Percent of responses	Mean # of modifying words	Dominant name	Percent of responses	Mean # of modifying words
52	container	0.50	0.43	container	0.50	1.32	container	0.46	2.89	container	0.46	2.89
53	container	0.61	0.39	container	0.54	0.86	container	0.61	1.93	container	0.61	1.93
54	jug	0.46	0.57	container	0.39	1.04	container	0.36	2.89	container	0.36	2.89
55	bottle	0.82	0.54	bottle	0.43	1.18	bottle	0.61	2.39	bottle	0.61	2.39
56	bottle	0.68	0.68	bottle	0.64	1.14	bottle	0.75	2.89	bottle	0.75	2.89
57	bottle	0.43	0.32	container	0.39	0.96	bottle	0.54	2.25	bottle	0.54	2.25
58	container	0.46	0.46	jug	0.43	1.14	container	0.50	2.75	container	0.50	2.75
59	container	0.46	0.36	container	0.54	1.14	container	0.71	2.86	container	0.71	2.86
60	jug	0.61	0.46	jug	0.39	0.82	container	0.50	2.11	container	0.50	2.11

Table 1: (Cont.)

Nine out of the 11 cases are ones where the dominant name in each context was produced by a maximum of 15 participants out of the 28, just slightly more than half. In other words, these are cases where there is low agreement among participants on the name for the object, and so when a discrete choice is made of which is the dominant one, some variation in which one has the largest value from sample to sample is to be expected (cf. McCloskey and Glucksberg 1978).

To help interpret results, typicality ratings for the objects with respect to the names *bottle*, *jar*, and *container* were consulted. These ratings were collected for analyses in Malt et al. (2003) and were obtained from native speakers of English who had not participated in the naming task. Five of the 11 objects (pictures 16, 23, 25, 48, and 51) had mean ratings below 4 on a 0 to 7 scale for all three names, indicating that they were not considered typical examples of any of them. Five more (pictures 43, 54, 57, 58, and 60) had ratings between about 4 and 6 for typicality as *container* but had low consistency in being named *container*. This finding may reflect the apparent dual basic-level/superordinate status of the word *container*. In the full set of naming data, *container* was the dominant name for 11 objects in all contexts. These objects included common packaging for substances such as yogurt, ice cream, and lip balm. It seems that participants had no name for these objects other than *container*, and this term may contrast as a basic-level term with words such as *bottle* and *jar* in addition to serving as a superordinate term that encompasses all objects that contain. The five objects with fairly high typicality for *container* but low name consistency may represent the general (superordinate) category of containers fairly well but not be typical as examples of things named *container* at the basic-level. The one remaining object (picture 33) was rated moderately high (4.70) for typicality as *bottle* but yielded *bottle* as the dominant name most consistently only for the free naming context. There is no evident reason why preference for *bottle* should be strongest in free naming, and this variation most likely is random. In short, the typicality data reinforce the suggestion that the shifts in the dominant name across contexts for 11 objects reflect only noise in the data due to low affiliation with any single name.

The only manifestation of a context influence on the dominant names appears in the degree of consensus in name choices. The free naming context produced the highest stability in name choice overall. A mean of 72% of participants in this condition produced the dominant name across objects, compared to 66% for the homogeneous/non-visible and 62% for the heterogeneous/visible context. An ANOVA across the 60 items showed a significant effect of naming condition,  $F(2, 118) = 13.61, p < .001$ . Pairwise comparisons showed that free naming differed from the heterogeneous/visible and homogeneous/non-visible contexts,  $p < .01$ , although those two did not differ from each other. One might have expected that the heterogeneous/visible context would allow the most leeway in naming and

hence lowest consensus, and the homogeneous/non-visible would elicit the greatest care in name choice and hence most consensus. Instead, it seems that larger individual differences surface under the two more fully specified communicative contexts, perhaps reflecting more diversity in strategies for trying to fulfill the communicative demands of the contexts.

Although the dominant names do not show evidence of a communicative-context-based shift in naming other than in consensus level, the full responses produced by participants do show a different type of systematic shift in referential strategy. Specifically, participants responded to the communicative demands by altering the amount of information they offered in addition to the head noun. Table 1 presents the mean number of words modifying the head noun for each object in each of the three contexts.

Participants used fewest modifying words in the free naming context, averaging 0.42 (SD = 0.09) across all objects. In the heterogeneous/visible context, where an object from the container set only needed to be distinguished from seven objects from different domains in full view of speaker and addressee, participants nevertheless provided more modifying words, averaging 1.04 (SD = 0.15) across objects. Participants used the largest number of modifying words in the homogeneous/non-visible context, averaging 2.47 (SD = .37) across objects. In this context, they elaborated substantially on the features of the target object via frequent use of modifiers indicating the color, shape, height, or material of the container, its contents, and so on (for instance, *small white bottle of baby powder*; *large empty glass jar of spaghetti sauce*; *small plastic bottle of seasoning*; *big blue bottle of Cheer*). An ANOVA across the 60 items showed a significant effect of naming condition,  $F(2, 118) = 1609$ ,  $p < .0001$ , with all pairwise comparisons significant,  $p < .001$ . These data confirm that participants did engage substantially with the communicative demands of the different tasks. They indicate that participants responded appropriately to the difficulty of the referential task in the homogeneous/non-visible context by providing more information for the addressee. The unexpected outcome of more modifying words in the heterogeneous/visible context compared to free naming suggests that when any form of referential success is the goal, as opposed to the simple goal of telling an experimenter a name, more detailed information is provided. Nevertheless, the additional information comes by way of modifiers rather than shifts in the head noun.

## 4 Discussion

The data show that participants are quite sensitive to the communicative context manipulation. Their sensitivity is reflected in substantially differing levels of

modifier use across the three contexts as well as modest differences in consensus levels for the head noun. This sensitivity confirms that the context manipulation in this experiment carried meaning for them as representing different referential communication challenges. From the broader perspective, it shows that naming context does matter, in some respects, for responses to inquiries about the names of common objects. What did not happen, though, was any substantial degree of change in the head nouns produced. Out of 60 objects, no cases were identified where a shift of head noun from context to context could clearly be attributed to the context rather than to noise in the data. Objects having only weak affiliation to any particular name showed the most shifting, but only as a result of low name consensus among respondents. The observed adjustments, instead, were made to the number of modifiers that accompanied the head nouns.

These results indicate that laboratory and field procedures asking participants simply *What is this?* or *What would you call this?* carry little risk of misrepresenting the naming patterns that would occur if participants were responding to some more fully specified communicative goal, and if they were communicating about each target object in a context that placed the target object within a field of other similar or dissimilar objects. Head nouns are remarkably stable across different naming contexts.

Of course, this conclusion is not to argue against any impact of referential context on naming patterns. As the research cited at the beginning of Section 1 illustrates, context can surely make a difference in the choice of a head noun. But many cases of name shifts that reflect reconceptualization of the objects result from factors such as changing the uses of the objects. The prototypical case of reconceptualization is when an object is used for one purpose in one context and a different purpose in another (e.g. as a bottle for drinking wine and as a vase for holding a rose); with such reconceptualization, the name the object elicits may well change (e.g. Labov 1973; Malt and Sloman 2007). The age or background of an addressee may also matter. For instance, adults may call a tiger *kitty cat* when speaking to a child (Mervis 1987; see also Isaacs and Clark 1987). Studies asking participants *What is it?* or *What would you call it?* do not create such substantial shifts in object use between samples of participants to be compared, nor do they vary the knowledge base of the addressee dramatically. Instead, the main concern related to conceptualization in the laboratory or field naming case is whether the contrast set against which any given object is named stands to cause some shift in conceptualization by making an object seem to be more or less suited to a particular name. The current data suggest that any such shifts are likely to be rare and have little impact on overall conclusions. Sloman et al. (2002) did find an effect on name choice of what objects were seen just before a target object's name was elicited, but this effect was detected by carefully manipulating

the prior exposure to favor one name or another (see also Jaeger et al. 2012, for effects of prior material on lexical selection). In free naming paradigms asking for names of many objects, the objects are typically presented in different random orders across participants, and each instance of naming occurs against prior exposure to many other objects in the set. In such paradigms the local impact of any individual prior exposures is likely to even out across participants. In order for a participant to more generally shrink the boundaries of some lexical categories when confronted with many closely contrasting objects to be discriminated, it would be necessary for that person to have alternative names available for the objects outside of those boundaries. A maker of containers may distinguish *bottles* and *jars* from *flasks*, *vials*, *cruets*, *beakers*, and so on, but the average respondent in naming tasks may have only a few terms available in his or her total productive vocabulary for the domain to call upon.

It is perhaps more surprising at first glance that our context manipulations did not change the level of specificity of the names produced, given that they did substantially alter the degree of challenge the addressee would face to identify the intended referent. But an absence of shift in the direction of using more general terms when the object needed only to be discriminated against a set of objects from other domains may reflect a basic level name bias (Brown 1958; Rosch et al. 1976) that is rarely violated except under certain specific circumstances not represented by these tasks. Murphy and Wisniewski (1989) argued that superordinate-level terms are generally used to refer to collections of objects rather than to individual objects. For example, *furniture* is used to refer to a set of furniture rather than a single piece. When talking about containers, people may be inclined to say *container* (in its superordinate sense) mainly when they are directing attention to a group of objects including various containers, or when they need to obtain an object that can serve the function of containing and any of several different types will do the job. These sorts of situations are not present when people are naming individual objects. As for shifting to subordinate-level terms having different head nouns when the task requires finer discrimination among objects, that, too, may tend to happen only under certain more restricted circumstances. A speaker can only shift in that direction if she has knowledge of more specific terms, which may entail greater than average expertise in a domain. If terms such as *flask*, *vial*, or *cruet* (and *amphora* or other specialized terms) are thought of as distinctions among types of *bottle*, rather than as contrasting terms, absence of these words from the productive vocabulary would make a downward shift impossible. Most familiar subordinate terms may be in the form of conventional phrases composed of the basic level noun plus a modifier, such as *Mason jar* or *wine bottle*, which would not entail a change in the head noun produced.

## 4.1 Conclusion

Name choice for common objects may be both sensitive to communicative context in some respects and resilient or insensitive in other respects. Context effects in naming are real phenomena reflecting important ways in which speakers adapt their referential terms to their communicative intentions and their audience. There are also surely some types of laboratory task manipulations that can change name preferences. However, there may be a large set of circumstances under which conceptualization of an object is unchanging, superordinate terms are not appropriate, and specialized subordinate terms are not available to the respondent. The current data indicate that communicative context may have an impact on modifier use but choice of head noun is consistent across a range of task variations. Simple naming tasks such as *What is it?* or *What is it called?* can produce results in terms of the head noun equivalent to those from tasks providing more fully elaborated communicative contexts.

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