Letter of Thanks

Dear Families, Teachers, and Directors,

Thank you very much for participating in our research this past year! Our research is made possible by the generosity of families and communities like yours and we greatly appreciate your support.

Our research focuses on how children learn different aspects of language, what this might tell us about the nature of cognitive and social development, and how these different aspects of development interact. This newsletter highlights some of the studies that your child or student may have participated in over the past year and gives an overview about the findings we have made.

If you have any questions about our projects, please feel free to contact us at (510)-664-4494 or lcdlab@berkeley.edu.

Best wishes,

Mahesh Srinivasan
Current Studies

Understanding and Gesturing About Time

When we talk about abstract concepts, like time, we often produce spatial gestures to help us communicate. For example, English-speaking adults may point to the left when talking about the past, and to the right when talking about the future. When does this phenomenon emerge, and what can it tell us about the ways we use space to think about time? One possibility is that this is due to experience with reading and writing from left-to-right, or with cultural artifacts like calendars, which are organized from left-to-right. If this is the case, such gestures may only occur relatively late in childhood, after children have acquired these skills. To explore these questions, we are studying children’s gestures while they answer questions about time, like “What’s the difference between tomorrow and yesterday?”

Moral Versus Conventional Norms

Preschool aged children encounter a lot of different rules and also begin enforcing rules on their own. We are doing this study to learn more about (1) when young children begin to distinguish between moral rules, like rules that prohibit harming other people, and arbitrary social rules, like what one should wear in school and (2) whether children consider a person’s knowledge (or lack of knowledge) about a norm when deciding how bad the transgression is (e.g., if a person wasn’t explicitly told a rule, should they be expected to follow it?).

Determining New Word Meanings

This study explores the features of language that children might use to learn new words. Our interest is the tendency for some languages, including English, to place a word (e.g., “the” or “a”) before nouns. The use of these words invites certain inferences. For instance, if someone were to ask for “the pencil,” they are likely referring to a specific pencil; however, if they were to ask for “a pencil,” it is likely that any pencil will do. In the current study, we examine if children can use the presence of words like “the” vs. “a” as cues to learn new word meanings.
A feature of some languages, such as English, is the ability to use a single word in multiple related ways. For example, the word “glass” can refer to the material “glass” and can also refer to “a glass” that one can drink out of. Our study explores whether children use the connection between two meanings of a word when learning names for new objects and materials. Children are introduced to novel materials (some “dax”) and objects that either share the name (a “dax”) or have different names (a “wug”). We examine whether children extend the name for one object to another object made from the same material, or to an object of the same shape.

Lexical flexibility, which allows us to use one word to express several different meanings, is used in many ways in English. For example, the word “chicken” can refer to both a live chicken and to chicken meat. As adults, we understand that although there is a relationship between those two meanings, they are in fact distinct and have different characteristics; upon being told that “chicken meat freezes well,” none of us would try to put a live chicken in the freezer! This study investigates whether children also understand that the two different meanings of lexically flexible words are in fact distinct by asking them whether characteristics can apply to both meanings. So far, we have found that four-year-olds are more likely to view these words as distinct than are three-year-olds.
Disagreeing About Relative Meanings

Some words, like "pretty" or "tasty," are inherently subjective; because these words are based purely on personal preference, we can disagree about them without either of us being right. Other words, like "spotted" or "square," have fixed, objective meanings: when we disagree about whether something is "spotted," one of us is objectively right. What about relative words, like "tall" or "big"? This study looks at whether children are sensitive to how speakers' different personal experiences might cause them to apply words in different ways.

Conventional Word Learning

As adults, we assume that other speakers of our language know the same words we do (e.g., that we all call pencils “pencils”). This forms the basis for many inferences we make: if you ask a friend for a “dax” and there is a pencil and another novel object in front of them, your friend is likely to infer that you want the novel object. This is because, otherwise, you would have asked for the “pencil”. However, not all words are mutually known by speakers. If two people make up a name of an object together, they should not expect a stranger to also use the same name for the object. In this study we explore how children reason about what words other speakers may know.

Using Words as Nouns and Verbs

One way in which speakers use language creatively is by using words in new ways, to express new meanings. An example of this in English is the flexible use of words, like shovel or hammer, to label tools, as nouns, and functional uses of those tools, as verbs, (e.g., “She hammered the nail”). We do this routinely to create new meanings for words: for example, it is now common to hear people use “google” to label the act of searching for something on-line. We hope to explore what such uses of words reveal about the structure of word meanings, and correspondingly, the locus of creativity in language. The present study explores whether toddlers are capable of using words in creative ways.
Thank You!
A huge thanks to the museums, preschools and daycares that continue to support our research! Our work would not be possible without your help.

Bay Area Discovery Museum - Clark Kerr Campus Child Development Center - Dwight Way Child Development Center - Habitot - Haste Street Child Development Center - Harold E. Jones Child Study Center - Lawrence Hall of Science - Little Imaginarium - Montclaire Child Development Center - Peek-a-boo Factory - Seesaw - Studio Grow Berkeley

UC Berkeley
Department of Psychology
Language and Cognitive Development Lab
Tolman Hall, Berkeley, CA 94704
lcdlab.berkeley.edu