

Mededelingen van de Afdeling Letterkunde, Nieuwe Reeks, Deel 61 no. 11

Deze Mededeling werd in verkorte vorm uitgesproken in de vergadering van de Afdeling Letterkunde, gehouden op 9 februari 1998.

E. V. CLARK

Word Choice and Conceptual Perspective

KONINKLIJKE NEDERLANDSE AKADEMIE VAN WETENSCHAPPEN, 1998

ISBN 90-6984-229-7

Copyright van deze uitgave © 1998 Koninklijke Nederlandse Akademie van Wetenschappen,
Postbus 19121, 1000 GC Amsterdam

Niets uit deze uitgave mag worden verveelvoudigd en/of openbaar gemaakt door middel van
druk, fotokopie, microfilm of op welke wijze dan ook, zonder voorafgaande schriftelijke toestem-
ming van de rechthebbende, behoudens de uitzonderingen bij de wet gesteld.

Adult speakers choose among perspectives when they talk, with different words picking out different conceptual perspectives on what they are talking about (e.g., *the vehicle, the bicycle, my means of locomotion*). Studies of lexical acquisition in young children, though, have often proposed a single-perspective view that assumes children can at first use only one term for talking about an object or event: a cat can only be called *cat*, not *animal* or *Siamese* as well. But since children are exposed to multiple perspectives by the adults around them, it would seem reasonable that they too should be able to adopt alternative perspectives from an early age. And, indeed, the evidence that children take a many-perspectives view is very strong: they use more than one term to refer to the same object; they construct novel compound words to mark alternate perspectives; they can shift perspective when asked; and they readily learn multiple terms for unfamiliar kinds.

In this paper, I will explore some of the relations between choice of a conceptual perspective and one's choice of words, the relations between children's language and the way they think about the world, and some of the proposals that have been made about the latter with respect to first language acquisition. One proposal, for example, is that there is an innate constraint on children's initial mapping of meanings onto word-forms such that they can think about things in only one way and hence are only able to use one single word to refer to any particular kind of thing, whether it is an object or an action, or some property of an object. One of my goals is to expand on this and show how it offers a fundamentally mistaken view of children and what they do in word-learning during the earliest stages of first language acquisition.

I shall begin by focussing on adults, and in particular on how they make use of conceptual perspective in their language use; I then take up two proposals that have been made about children and their initial assignments of meanings to words, examine their predictions, and finish by showing how the evidence on language and thought in children heavily favours one of these proposals over the other.

CONCEPTUAL PERSPECTIVE

Whenever we talk about anything, we make choices about how to present an event or an object to our addressee. In effect, speakers always choose a conceptual perspective first and then find the appropriate word or expression that will convey just that perspective (rather than another) for that occasion. Conceptual perspective, then, can be defined as the speaker's presentation of an object, relation, or event, through choice of words, to the addressee, such that some properties of the referent are included and others excluded by each choice (see Clark 1997). In fact, we make lexical choices all the time, without necessarily being consciously aware that this is what we are doing. We may talk about a neighbour, and in different conversations designate her in different ways – as *the cellist, the parent of those three boys, the teacher, or the Labour Party*

member. Or we can talk about the daily traffic and again take a variety of different perspectives (as Vossen 1995 has pointed out) by designating the cars in the street as *the traffic*, *the cars*, *the traffic-jam*, or *the polluters*, depending upon the occasion and who we are addressing.

Being able to take different perspectives is something we all take for granted – but differences in perspective are sometimes underlined, as when we see a headline like the following from the *Wall Street Journal* (2 July 1996): “Recyclers seek ‘recovered fibre’ but toss ‘wastepaper’ in the trash”. Here, the journalist juxtaposes two distinct perspectives, making clear that one person’s *recovered fibre* is another’s *wastepaper*, fit only to be thrown away.

Highlighting

Notice, in fact, that what our word choices do is *highlight* one aspect or property shared by some set of objects (an ad hoc category, in Barsalou’s 1983 terms), as when someone uses a term like *the doormat* to talk about a brick, or a shoe, or a wedge, or a jar of coins – where each one happens to be being used to hold a door open. That is, the speaker on these occasions is taking the same perspective on four different objects that happen to have the same function. Or else (as in the newspaper headline), the speaker can present different perspectives on the same object, as when someone uses different terms or expressions to pick out different properties of a single object. For example, a brick on one occasion might be referred to as *the doormat*; on another as *the support* (for a shelf, say); on another, *the step* (for standing on to reach something else, say); and on yet another, as *the brick* (as when someone is building a wall in the garden). On each occasion, the conceptual perspective chosen by the speaker dictates the choice of words and hence of referring expressions, in order to present that perspective to the addressee.

This kind of highlighting has various consequences for how we process information. It affects our recognition of pictures we have seen before, and in particular how accurate we are in judging, given a certain level of detail, whether we have seen them before or not; it affects our interpretations of line-drawings and what they are intended to represent; and it affects our estimations of the speed, for example, of vehicles seen on videotape. Let me take up each of these effects in turn.

Amount of detail

In studies of recognition memory, the amount of detail people remember appears to depend on the conceptual perspective that is indicated through the lexical expressions used to talk about the target objects. Consider a display in which two groups of people see a picture of some kind of flat fish next to a bread knife. One group hears the fish labelled as *the fish* in a description like ‘The fish is lying beside the bread knife.’ The other group hears the identical fish labelled instead with a more specific term, *the flounder*, in ‘The flounder is lying beside the bread knife.’ A little later, both groups take part in a recogni-

tion task where they are shown a large number of pictures of different kinds of fish and asked to pick out all those that look like the one they saw earlier. The *fish*-people accept a much larger range of pictures as being like the fish they had seen than do the *flounder*-people. This is because the latter appear to take into account many more of the details from the original picture (e.g., the exact shape of the fish, the position of its eyes and fins, the spots on its back, and so on). As a result, the choices made by the *flounder*-people were in general much closer to the actual fish they had seen in the original picture than were the choices made by the *fish*-people.

Effectively, people seem to attend to more details when they hear more specific terms (e.g., *flounder*), and they attend to fewer details when they hear more general terms (e.g., *fish*) (Jörg & Hörmann 1978). The speaker's choice of perspective, then, as reflected in the words he uses, affects people's expectations about how much detail may be important and so how much detail they should attend to.

Interpretation of line drawings

When people are shown a simple outline drawing of a closed vessel, wider at the bottom and narrowing to a smaller 'neck' at the top, and then told either 'This is a bottle' or 'This is a stirrup', they interpret the same drawing in two very different ways. This becomes apparent if they are later asked to re-draw the original picture they had seen. That is, they are asked whether they can draw *the bottle* or *the stirrup*, respectively. When they do so, their reconstructions of the line drawing they had seen are systematically distorted by the perspective they had been given. The *bottle*-people made the outline taller, with a narrower base and a more extended neck (closer to a wine-bottle in shape), while the *stirrup*-people made the outline shorter and rather fatter, with a single short vertical line at the centre top (much closer to a stirrup in shape) (Carmichael, Hogan & Walter 1932). This finding held for a whole series of simple drawings, each presented to two groups, each of which heard different labels for the drawings they saw.

In short, people stored their memory of the line-drawing along with the conceptual perspective they were given, and when they had to reconstruct the drawing itself, their reconstructions were filtered, so to speak, through the conceptual perspective. This had a strong influence on how they re-drew the original pictures they had seen.

Estimating speed

When people watch a film of an accident between a car and a van, for example, and then are later asked how fast the car was going at the time, their estimates of its speed are directly influenced by the verb that the speaker uses, that is, by the conceptual perspective represented in the verb choice. As a result, people who hear the verb *to crash*, in a question like 'How fast was the car going when it crashed into the van?' give consistently higher estimates of the

car's speed than people who hear the verb *to hit*, in the same question, 'How fast was the car going when it hit the van?' (Loftus 1979). Yet everyone in the two groups saw the identical film of this event. Here again, we see that the conceptual perspective chosen and indicated in the verb affects people's subsequent estimations of the car's actual speed. *Crash*, implying a stronger impact, elicits higher estimates of speed than the less forceful verb *hit*.

In general, in conversation, the speaker proposes a perspective and the addressee follows on, taking up the same perspective (e.g. Clark & Wilkes-Gibbs 1986, Garrod & Doherty 1994). This is part of what counts as being co-operative in a conversation. But there are also occasions where we see people presenting opposing perspectives. This can happen frequently, for example, in quarrels. It may happen in various kinds of negotiations, especially where the participants come from different cultures, and start, therefore, with different expectations and attitudes. And it may occur in more formalised disputes, in the courtroom for instance, when the advocate for one side cross-examines witnesses from the other side. This can be illustrated from a well-known us trial, of a doctor, in the State of Massachusetts. This State had decided to try to make abortion illegal (although it was legal under federal United States law), and the doctor in question was therefore being tried for manslaughter for having performed an abortion. During parts of the cross-examination, there was a clear clash of conceptual perspectives where the State attorney insisted on using the expression *the baby* and the doctor equally consistently opted for *the fetus*, as in the following exchange (Danet 1980):

Attorney: You didn't tell us, Doctor, whether you determined that *the baby* was alive or dead, did you, Doctor?

Witness: *The fetus* had no signs of life.

(see also other legal examples in Drew & Heritage 1992). What I have emphasized so far is that people can take a range of alternative perspectives on the same objects or events, and that they use the words of the language to convey the specific perspective chosen on each occasion. But what happens when children start to learn their first language? How soon do they grasp the fact that different terms are used for talking about the same referent from different perspectives? And what are some of the consequences of this realisation for how they use their words and how they start to structure their growing vocabulary? This is what I turn to next.

In recent research on children's acquisition of vocabulary, researchers have made the strong claim that children start out by assuming that each object-type can be referred to by only one word – effectively, they are claiming that children start out being able to take only one perspective on each object or event. The primary reason for this proposal is that such an approach is assumed to make the task of word-learning easier for young children because it limits the number of hypotheses children might have to consider as they try to assign meanings to words (e.g., Markman 1989). But these researchers have

gone further still to suggest that the one-word-per-referent restriction could stem from an innate constraint designed to aid lexical acquisition. I am going to argue instead that, from the start, children give evidence of being able to:

- (1) appreciate different physical perspectives on the objects and events around them from a very young age, and
- (2) use their words accordingly, from the one-word stage onwards.

But before I turn to just how young children take a perspective with their early word-uses, we will first look at whether 1;0 and 2;0 year-olds are capable of understanding the notion of taking different perspectives in physical space. The evidence suggests that they are.

SPATIAL PERSPECTIVE IN YOUNG CHILDREN

Very young children demonstrate their ability to deal with different spatial perspectives in a variety of settings. First, take pointing. From about 9 months of age onwards, infants are able to follow adult pointing gestures. They can follow a point and consistently look in the direction pointed (Leung & Rheingold 1981). Younger infants, along with other animal species, typically look at the adult's finger instead. Within a few months, infants can clearly appreciate what is available to someone else's visual field. For example, if they are given a picture to look at, they either hold it out horizontally to show someone else, or rotate it through the horizontal plane to face someone else. (The only problem here is the picture is now upside down for the new observer, but this fact isn't accessible to the 1;0 year-old holding the picture.) If children aged 1;0 to 1;6 are given a cube with a picture pasted onto one side of it, they will turn the cube so the picture is on the uppermost surface in order to show it to someone else. And if they are given a cup with a picture pasted on the inside bottom surface to look at, they tilt the mug so its opening is towards the observer in order to show the picture. And by age 2;0, in showing a picture to someone else, children are now able to hold the picture up towards themselves, and rotate it through the vertical plane to face the new observer, and now the picture remains the right way up for the other person too (Lempers, Flavell & Flavell 1976).

At age 2;0, young children have grasped the notions of 'front' and of 'facing' even if they do not yet have words for them. For example, if they are given a set of toys to play with and asked to make them into a procession or a parade, they line them all up facing the same way. But if asked to make two toys talk to each other, they then place them face-to-face, in a canonical encounter (Levine & Carey 1982). By this age, children are also able to orient objects so they face towards or away from a reference point, in response to questions. And they are also beginning to use a variety of deictic terms like pronouns (usually *I* and *you* first), locative *here* or *there*, and demonstrative *this* or *that* (Charney 1980, Clark 1978, Loveland 1984). Other more complex

deictic terms like *come* (vs *go*) or the causative verbs *bring* and *take*, though, may not be fully mastered until as late as age 8;0 or 9;0 (Clark & Garnica 1974).

Finally, as children get older still, they become able to talk about displacements in space as if they were standing in someone else's shoes and so taking, or presenting, that other perspective. By age 4;0, for example, one finds children thinking about differences in perspective as in the following examples (Clark, diary data):

- (a) D (aged 3;11, in a wild animal park): ANTS think people are walking trees.
- (b) D (aged 4;6, thinking about giants): For a GIANT, a year is just an hour, and an hour is just a minute! <pause> And for an ANT, an hour is a year!

A third kind of evidence that very young children can take different spatial perspectives on the same entity or event comes from their pretend-play – when they *act as if* one object is another, while making clear evidence that they know what that object really is. For instance, a child aged 1;0 may hold up a spoon to his ear as if it is a telephone, but on another occasion show that he knows how to hold a spoon and use it for eating. Soon after the beginning of the second year, such pretend play with actions becomes accompanied by words as well – as when a child says *hat* while putting a bib on his head, or *spoon* while putting the end of a block into his mouth (Piaget 1951). At around age 2;0, children also start to do the voices for different toys in play, and, as they get older, produce more and more elaborate differentiations of roles in play through uses of language – voice-quality, vocabulary and topic choices, syntax, etc. (Andersen 1990). From age 3;0 to 4;0, children are also increasingly skilled at using their language to signal moves into or out of their pretend-play world, as in the following exchange between a mother and her 3;0 year-old, playing with a doll's house:

- Mother: What furniture does the Maja doll want to have in *her* room then?
- Child [squeaky voice]: *I* want to have the furniture in *my* room.

Here, the child signals the shift into the pretend world, speaking for a doll in the doll's house, by her choice of voice quality and by the choice of first-person pronouns (*I*, *my*) in place of her mother's third-person *her* (Strömquist 1984).

In short, children offer extensive evidence by age 2;0 for their ability to take different physical perspectives in space, and for understanding what another person needs to be able to see or to know under different conditions. But do they understand that word-choices themselves mark perspective?

CONCEPTUAL PERSPECTIVE AND LEXICAL ACQUISITION

As I mentioned earlier, researchers have taken rather different views on early lexical acquisition. One, the one I will argue for here, is the multiple-perspectives view, which we can characterise as follows:

Speakers, child or adult, can take many different perspectives on the same object or event.

The other is what I will call the one-perspective view, namely:

Young children can take only one perspective on an object or event.

The difference between these two views can readily be summarized by considering the expectations of each view about how a child might talk about an apple. Under the multiple-perspectives view, children can talk about this piece of fruit using any and all of the terms *apple*, *fruit*, *snack*, or *food*, and should do so quite readily from the first. But under the one-perspective view, a child who knows the word *apple* can only look on this piece of fruit as an apple, and cannot take any other conceptual perspective on it. This is because, under the one-perspective view, 'each object [can] have only one category label' (Markman & Wachtel 1988). This one-perspective view draws in part on findings from some experimental word-learning studies with 2;0 to 4;0 year-olds, where children appear reluctant to apply a second term to objects for which they already have a word. But before we evaluate the support for the one-perspective versus the multiple-perspectives views of word acquisition, I want to consider what children hear from adults.

CHILD-DIRECTED SPEECH

What do children hear from the adults who talk to them? Do adults limit the ways in which they talk about objects and events? Notice that languages offer multiple terms for talking about all sorts of things, precisely to allow people to take different conceptual perspectives and to present those perspectives to others when they talk to them. In fact, studies of child-directed speech show that adults readily use multiple terms for the same object even when talking to very young children who as yet can say very few words. In one study of child-directed speech, for example, Callanan and her colleagues (1995) found that when adults were asked to teach their young children the words for objects in an unfamiliar domain (e.g., kinds of whales), they frequently used multiple terms for the same referent (e.g., *whale*, *beluga*, and even *fish*). In talking to children who had between 10 and 50 words in production (mean age 1;4), they did this some 17% of the time; and to older children (1;11), who had between 100 and 400 words in production, they did this 31% of the time. In short, adults readily offer children multiple perspectives, in their word choices for the same referents, from the earliest stages of language acquisition on.

Adults are also remarkably consistent in how they introduce information

that links one word to another, for instance, when they offer terms for parts of things. They typically first talk about the object, e.g., ‘This is a rabbit’, and only then introduce the term for the target part, as in ‘There are his ears.’ (The part itself is generally introduced in a possessive or demonstrative construction.) In one study of mothers’ spontaneous interactions with their 2;0 year-olds, the adults used this form of presentation for terms for parts in 664 out of 667 exchanges (99.55%) (Masur 1997). Adults also offer children various kinds of metalanguage directions about the connections among word meanings (Clark 1997, 1998), including information about the following relations:

- *Inclusion* (X is a kind of/sort of Y)
‘Oaks are kinds of trees’
- *Set membership* (X is Y)
‘All of them together are vehicles’
- *Property/material* (X has/is made of Y)
‘A walrus has tusks’
- *Part* (X is part of Y)
‘Your thumb is part of your hand’
- *Comparison* (X looks like/is similar to Y)
‘A zebra looks a bit like a horse’
- *Alignment* (with X and Y known: this is X, this is Y, and this is Z)
‘This is a bear, this is a lion, and this is a leopard’

In short, adults not only provide children with the conventional words to use, but also tell them how some of the meanings of such words are connected. Notice that telling children what the words are for things, and indicating how their meanings are related to other words, both result in the use of multiple terms for the same referent. A dog may therefore be *the dog*, *the animal*, *your spaniel*, *the family pet*, *the nuisance*, and *the barker*. If children are used to hearing the same referent picked out with different expressions on different occasions, they should take for granted that one of the functions of words is in fact to allow the presentation of the same referent from a variety of perspectives.

If children realize that words mark different conceptual perspectives, two predictions follow: first, they should readily use two (or more) terms for the same referent. And second, they should readily accept new terms for familiar objects and actions, whether they already know a word for them or not. These predictions from the multiple-perspectives view of lexical acquisition contrast with the predictions of the one-perspective view. This view instead predicts, first, that children will use only one term for a referent object, and second, that they will reject any additional terms for things where they already know a word for them.

I will briefly review five kinds of evidence relevant to these predictions, and argue that all five favour the multiple-perspectives view. The five kinds of evidence consist of: (a) use and acceptance of multiple terms for the same

object in spontaneous production; (b) rejections of perspectives, and not of words per se; (c) creation of innovative words for talking about subcategories of familiar categories; (d) elicited shifts in conceptual perspective, and (e) learning of multiple terms for the same referents.

(a) Use and acceptance of multiple terms

In their spontaneous speech, children use multiple terms for the same referent from at least 1;6 onwards. For example, they refer to their breakfast cereal as both *food* and *cereal* (D 1;7); they label individual animal types (e.g., *lion*, *tiger*, *zebra*) but designate them collectively as *animal* (D 1;7); and they are aware that they themselves can be designated in a number of ways, as in the following exchange where the mother asks the child (D, aged 2;1) what he is usually called, in contrast to what his father is called (Clark, diary data):

Mother: Are you 'lovey'?

D: No, I 'Damon', I 'cookie', I 'sweetheart'! Herb 'lovey'.

And slightly older children, aged 3;0 and 4;0, readily supply multiple terms for the same referent when asked deliberately mis-worded questions, as in the following sequence where the child is looking at a picture of a rose (Waxman & Hatch 1992):

Adult: Is this a dandelion?

Child: No, it's a *rose*.

Adult: Is this a tree?

Child: It's a *flower*.

Adult: Is this an animal?

Child: No, it's a *plant*.

In effect, these children have no hesitation in applying the terms *rose*, *flower*, and *plant* all to the same referent object (a picture of a rose). The point is that children appear to have no hesitation in their spontaneous speech and in elicitation tasks like this in using multiple terms for the same referent. But the use of multiple terms applied to a single referent is consistent only with the predictions from the multiple-perspectives view, and not with those of the one-perspective view.

(b) Rejections

Researchers have occasionally reported that 2;0 year-olds at times will reject a word, often in the context of the adult saying something like 'Look at this animal', whereupon the child says something like: *It's not an animal, it's a dog*. This has been taken as evidence that children this age will not accept or use both *animal* and *dog* for referring to dogs. But closer inspection of these anecdotes suggests that the problem in fact lies elsewhere. These same children typically use the term *animal*, but in reference to collections of animals (i.e.,

where there is more than one present, and typically more than one kind). For them, the term *animal* therefore denotes a collection of different kinds of animals, rather than a superordinate category to which each animal sub-type belongs. That is, the child's meaning for *animal* ('collection') is inconsistent with the adult's uses of the same term. This, then, could account for why children on occasion reject the adult's use.

To look at the status of rejected terms more closely, I analysed all the rejections recorded in my diary data up to the age of 3;0, and looked at each word rejected to see whether it had been used before for that kind of object or not. I found that nearly all the rejections involved two known words, both already familiar to the child, and not pairs of words where one was known and one was an unfamiliar or new word. So an alternative interpretation of data like these is that children this age are not rejecting additional words for the same referents, but rather are rejecting the perspective that the adult has proposed (Clark 1993). Both terms, then, can apply to the referent, but one perspective may be preferred in context to the other. Again, this interpretation is consistent with the multiple-perspectives account, but not with the one-perspective account.

(c) *Creating new words*

From a very young age, children coin new words for talking about subkinds of things, for subcategories of familiar categories. For example, English-speaking children come up with words like *poodle-dog* and *Dalmatian-dog* for subkinds of *dog*, when they are told that these dogs are *poodles* or *Dalmatians*. That is, they rely on the construction of novel compound nouns to indicate greater specificity within familiar categories. (This appears to be very common in children acquiring Germanic languages, languages where this is a productive option.)

Among the novel compounds for subkinds created spontaneously by children acquiring English, one finds instances like the following (Clark 1993):

Age	Word	Referent
1;7	crow-bird	picture of crow
1;1	oil-spoon	spoon for cod-liver oil
2;0	coffee-churn	coffee-grinder
2;0	fire-dog	stray dog found near fire
2;1	spear-page	picture of people with spears

In fact, two-year-olds, as well as older children, readily coin new words for subkinds upon demand as well (Clark, Gelman, & Lane 1985). By age 2;0, English-speaking children appear to be fully aware that the head (second) noun in a compound serves to designate the kind of thing being talked about and that the initial, modifier, noun qualifies the head noun in some way. *Apple-knife* designates a kind of knife and not a kind of apple, just as *bicycle-truck* designates a kind of truck, and not a kind of bicycle. But if a knife can be

called both *knife* and *apple-knife*, this runs counter to the one-perspective predictions, but it is entirely consistent with those for the multiple-perspectives view.

(d) Shifting perspective

Since children shift perspective spontaneously when they talk about something in two different ways, we have looked to see whether they can shift perspective when asked to do so. If they are able to take two (or more) perspectives on the same referent, this should not cause them any great difficulty. And, indeed, we found that children as young as 2;0 could shift perspective upon demand (Clark & Svaib 1997). We used anthropomorphic pictures to ask questions that required shifts from words for one level to words for another (for instance from *cat* to *animal*) and also shifts from one domain to another (for instance, from words for animals – *cat* – to words for professions – *mail-man*). Even young 2;0 year-olds were practically at ceiling in their performance (with well over 90% correct) both in understanding two different terms for the same referent and in producing two terms for the same referent (see also Deák & Maratsos 1998).

When asked to shift from one perspective to another, even young two-year-olds appear to use and understand multiple terms for the same referent in ways that are consistent with the multiple-perspectives account of lexical acquisition. They readily accept more than one way of referring to the same referent, and they themselves also produce more than one term for the same referent. These findings are again inconsistent with predictions from the one-perspective account.

(e) Learning multiple terms for the same referent

When children are taught new words for things, and given the information that an X is a kind of Y (e.g., a shrew is a kind of animal), they are able to use both terms (*shrew* and *animal*) appropriately. That is, they understand that shrews are both shrews and animals, whereas other things might be animals but not shrews. When young 2;0 year-olds are taught unfamiliar words for unfamiliar kinds of objects, they readily take in both the new words offered and the information about inclusion, and make use of both in their word learning (see Clark & Grossman 1998). The result is that children as young as two readily assign two words to referents where the meaning of one word is included in the other. This, then, is yet another setting in which even very young children adopt multiple terms for the same referent (see also Taylor & Gelman 1989, Waxman & Senghas 1992).

Children also seem to add further terms for things quite readily when it is clear how a new, unfamiliar, term is related to a term that is already known. But where this is not made clear, then children may well be confused about the intended relation, and play safe by using only a term already familiar to them, or only one of the terms they have been taught (see further Clark

1997). This may make it look as if they are restricting themselves to one term only for a particular referent-type. Evidence from word-learning, therefore, may differ with the kinds of pragmatic information available. Where the relations among word-meanings are clear, children as young as 2;0, and probably younger as well, appear to have no difficulty in learning two distinct terms for the same referent. Again, these findings are consistent, overall, with the multiple-perspectives view of acquisition, but they are not consistent with the one-perspective view.

CONCLUSIONS

The relation between language and thought in young children is indeed a rich one, with children able to represent things from diverse points of view – conceptual perspectives – as soon as they have the words to do so. They take in from adults the fact that different words for the same referent are used to mark different perspectives on that entity. And, in their acquisition of words, children show that, from the start, they can and do use them to mark different perspectives on the same referent object.

In some work on first language acquisition, researchers have argued that children's initial assumptions about word meanings are constrained in such a way that children assume at first that any one referent can only be talked about with a single term. Effectively, this approach assumes that the relation of language to thought is quite limited, since it mandates that children can use only one word for an object and must therefore be able to take only one perspective on it. What I have shown here is that children can in fact take different perspectives on the same thing, and that they do this from an early age.

Children are exposed from the start to multiple perspectives in the language they hear, and they grasp this property of language, exhibited in the lexicon, from the earliest stages of acquisition onwards. Their grasp of this property may be aided by the fact that they also show considerable skill in physical (spatial) perspective-taking by the age of 1;0 to 1;6. Moreover, they start to make use of lexically-marked perspective-taking in their language use by at least age 2;0 and possibly even earlier. Examination of young children's uses of multiple terms for the same referents across a variety of tasks and settings for spontaneous as well as elicited speech also shows that they use their words to take different perspectives on the things they talk about.

In short, a one-year-old knows that his toy horse is a *horse* when he's pulling it along, but when he sits on it, it can be a *chair*. The object itself is the same, but the two perspectives, marked by the terms *horse* and *chair* respectively, are different. The principle that different words can refer to the same thing in order to present it from different perspectives is built-in to the design of language. What is most impressive, though, is that children grasp this principle so early, and are able to make use of it as soon as they have the words available.

BIBLIOGRAPHY

- Andersen, E. S. (1990). *Speaking with style: the sociolinguistic skills of children*. London: Routledge.
- Barsalou, L. W. (1983). Ad hoc categories. *Memory & Cognition* 11, 211-227.
- Callanan, M. A., M. Sabbagh, D. Perez, & C. Cervantes. (1995). Names for objects in conversations between young children and their parents. Symposium on constructing meanings in context: constraints and pragmatics in semantic development, Biennial meeting of the Society for Research in Child Development, Indianapolis, Indiana.
- Carmichael, L., H. P. Hogan & A. A. Walter. (1932). An experimental study of the effect of language on the reproduction of visually perceived forms. *Journal of Experimental Psychology* 15, 73-86.
- Charney, R. (1980). Speech roles and the development of personal pronouns. *Journal of Child Language* 7, 509-528.
- Clark, E. V. (1978). From gesture to word: on the natural history of deixis in language acquisition, in J. S. Bruner & A. Garton (eds.), *Human growth and development: Wolfson College lectures 1976*. Oxford: Oxford University Press, pp. 85-120.
- Clark, E. V. (1993). *The lexicon in acquisition*. Cambridge: Cambridge University Press.
- Clark, E. V. (1997). Conceptual perspective and lexical choice in acquisition. *Cognition* 64, 1-37.
- Clark, E. V. (1998). Lexical structure and pragmatic directions in acquisition. Paper presented at the 34th annual meeting of the Chicago Linguistics Society, University of Chicago, Chicago, Illinois.
- Clark, E. V., & O. K. Garnica. (1974). Is he coming or going? On the acquisition of deictic verbs. *Journal of Verbal Learning & Verbal Behavior* 13, 559-572.
- Clark, E. V., S. A. Gelman & N.M. Lane. (1985). Noun compounds and category structure in young children. *Child Development* 56, 84-94.
- Clark, E. V. & J. B. Grossman. (1998). Pragmatic directions and children's word learning. *Journal of Child Language* 25, 1-18.
- Clark, E. V. & T. A. Svaib. (1997). Speaker perspective and reference in young children. *First Language* 17, 57-74.
- Clark, H. H. & D. Wilkes-Gibbs. (1986). Referring as a collaborative process. *Cognition* 22, 1-39.
- Danet, B. (1980). 'Baby' or 'fetus'? Language and the construction of reality in a manslaughter trial. *Semiotica* 32, 187-219.
- Deák, G. O. & M. P. Maratsos. (1998). On having complex representations of things: preschoolers use multiple words for objects and people. *Developmental Psychology* 34, 224-240.
- Drew, P. & J. Heritage, eds. (1992). *Talk at work: interaction in institutional settings*. Cambridge: Cambridge University Press.
- Garrod, S. & G. Doherty. (1994). Conversation, co-ordination, and convention: an empirical investigation of how groups establish linguistic conventions. *Cognition* 53, 181-215.
- Jörg, S. & H. Hörmann. (1978). The influence of general and specific verbal labels on the recognition of labeled and unlabeled parts of pictures. *Journal of Verbal Learning & Verbal Behavior* 17, 445-454.
- Lempers, J. D., E. R. Flavell & J. H. Flavell. (1976). The development in very young children of tacit knowledge concerning visual perception. *Genetic Psychology Monographs* 95, 3-53.
- Leung, E. H. & H. L. Rheingold. (1981). Development of pointing as a social gesture. *Developmental Psychology* 17, 215-220.
- Levine, S. C. & S. Carey. (1982). Up front: the acquisition of a concept and a word. *Journal of Child Language* 9, 645-657.
- Loftus, E. F. (1979). *Eye-witness testimony*. Cambridge, Massachusetts: Harvard University Press.
- Loveland, K. A. (1984). Learning about point of view: spatial perspective and the acquisition of 'I/you'. *Journal of Child Language* 11, 535-556.
- Markman, E. M. (1989). *Categorization and naming in children: problems of induction*. Cambridge, Massachusetts: Bradford Books.
- Markman, E. M. & G. F. Wachtel. (1988). Children's use of mutual exclusivity to constrain the meanings of words. *Cognitive Psychology* 20, 121-157.

-
- Masur, E. F. (1997). Maternal labeling of novel and familiar objects: implications for children's development of lexical constraints. *Journal of Child Language* 24, 427-439.
- Piaget, J. (1951). *Play, dreams, and imitation in childhood*. New York: Basic Books.
- Strömqvist, S. (1984). *Make-believe through words: a linguistic study of children's play with a doll's house*. Gothenburg Monographs in Linguistics 4, University of Gothenburg, Department of Linguistics.
- Taylor, M., & S. A. Gelman. (1989). Incorporating new words into the lexicon: preliminary evidence for language hierarchies in two-year-old children. *Child Development* 60, 625-636.
- Vossen, P. (1995). *Grammatical and conceptual individuation in the lexicon*. IOTM Monograph 15, Instituut voor Functioneel Onderzoek van Taal en Taalgebruik, Amsterdam.
- Waxman, S. R., & T. Hatch. (1992). Beyond the basics: preschool children label objects flexibly at multiple hierarchical levels. *Journal of Child Language* 19, 153-166.
- Waxman, S. R., & A. Senghas. (1992). Relations among word meanings in early lexical development. *Developmental Psychology* 28, 862-873.