The Order of Children's Vocabulary Acquisition of English as a First Language

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Vocabulary acquisition involves long-term developmental process. Note that psycholinguists have focused most frequently on the problems of phonology and syntax, but not semantics. The problem of the acquisition of meaning is very complex, since it involves cognitive develoment. Children acquire productive use of many words between the ages of two and six. This paper is concerned primarily with the review and discussion of previous studies of the order of vocabulary acquisition by English-speaking children.

I. The order of acquisition of relational terms

1. Dimensional adjectives

(a) Most general terms > least general terms

Considerable research into semantic development of pairs of dimensional relational adjectives has revealed that there is a consistent order in their acquisition. Many studies have found an almost identical order, from the easiest to the hardest: *big-little(small)*, *tall-short*, *long-short*, *high-low*, *wide-narrow*, *thick-thin*, *deep-shallow* (Donaldson and Wales 1970 ; E. Clark 1972 ; Brewer and Stone 1975 ; Bartlett 1976). Clark proposed the Semantic Feature Hypothesis (SFH) to account for the well-established ordering of spatial adjectives (E. Clark 1973 ; H. Clark 1973). Clark's SFH proposes that young children learn the meanings of words feature by feature, and that they acquire the meanings of the semantically simpler terms before the semantically more complex ones. According to the SFH, the relative semantic complexity affects the order of acquisition. The simplest pair *big-little(small)* is acquired first, followed by gradually more complex ones. This pair is the most used by children aged about $3\frac{1}{2}$ years (E. Clark 1973 : 105). The most general *big-little (small)* can refer to overall size, with the fewest constraints on its use. Thus, *big-little (small)* can be used to mean the more specialized dimensional pairs (E. Clark 1972 ; Brewer and Stone 1975). E. Clark accounts for this phenomenon (1973, p.93):

The data on dimensional terms can also be represented in terms of components of mean-

ing known by the child at different stages in the acquisition process. *Big* is substituted for other unmarked dimensional terms because it is specified (like them) as + Dimension(3) and +Polar, but the child at this stage has not yet worked out how many dimensions are necessarily presupposed by the other terms such as *long* and *tall*. He has yet to differentiate between the dimensional properties of linearity, surface, and volume. While *big* simply applies to three dimensions, *tall* is more complex since it supposes that all three dimensions are present, and then talks about one specific dimension : + Vertical. The child appears to learn first the feature of dimensionality, then, later on, he specifies further what kind of dimensionality he is talking about ; for instance, whether the dimension is + Vertical as in *tall* or *high*, or − Vertical as in *long*, *deep*, *far*, etc.

Clark (1972) found that *big* was treated as a synonym for the unmarked adjectives and *small* (or *little*) was used to cover the marked member of each adjective pair. She relies on the work of Bierwisch (1967). *Big − small* means [physical extent], while the other adjectives refer to the particular dimension. Since *thick−thin*, *wide−narrow*, and *deep−shallow* require the child to identify a simple dimension that is secondary, they are more complex than *tall− short*, *long −short*, and *high−low*.

(b) Positive terms > negative terms

Dimensional adjectives consist of unmarked (or positive) −marked (or negative) pairs. Previous studies (Donaldson and Balfour 1968 ; Donaldson and Wales 1970 ; E. Clark 1971 ; Klatzky, et al 1973 ; Palermo 1973, 1974) show that preschool children learn the word *big* before the word *little*, *tall* before *short*, *long* before *short*, *wide* before *narrow*, etc. The data provide support for the Clark's SFH that positive or unmarked terms are acquired before negative or marked terms. Superiority of positive terms to negative terms can be explained by some reasons. E. Clark (1973) offers an explanation, following H. Clark (1970). First, the positive direction along the dimension serves as the name of the dimension (e. g. , *long−length*, *high−height*, etc). The positive−pole term can be used both nominally (e. g. *How tall is she? She is six feet tall.*) and contrastively (e. g. *She is tall.*), while the negative (or marked) term has only a contrastive sense (e. g. *She is short*). H. Clark's hypothesis is that children first learn the nominal meaning of antonym pairs. Second, the positive term, which indicates the extended end of dimension, will serve as the best instance of that dimension. Also, the frequency of positive terms is greater in adult speech than that of positive terms. Therefore, positive (or unmarked) terms are acquired before negative (or marked) terms. However, some of the findings that have been reported so far challenge the generality

of Clark's principle on polarity difference. Bartlett (1976) argues against it, showing that children do not acquire [+pol] features prior to their [-pol] counterparts.

(c) Dimensionality vs. polarity

According to the SFH, semantic features are acquired in order from most general to least general, which suggests that children will learn dimensional features before polar features. The polar feature specifies which end of the dimension is being referred to. Thus, children might confuse polar opposites, not knowing their polarity, and *high* and *low* would not be differentiated. However, some findings show that children confuse the dimensions, not polarity, i. e. they seem to acquire polar features before dimensional features. (Kuczaj and Maratsos 1975 ; Brewer and Stone 1975 ; Bartlett 1976). In Brewer and Stone, the most common error by the children was to point to the object representing the same polarity as the word requested. For example, when they were told to touch the low object, they pointed to the thin one, not the high one. Their errors confused the dimensions, not polarity. Carey (1978) also sees [±pol] as an early acquisition. Carey also proposes that polarity is acquired before dimensionality, pointing out : " This explanation of why polarity might be more learnable than dimensionality depends upon the child's mastery of the syntax of comparative constructions and of the lexial entries for *big* and *little* prior to his acquisition of the specialized spatial adjectives" (p.282).

Furthermore, Carey questions the Clark's view of the nature of the child's lexical entries. Carey feels that "immature lexical entries for spatial adjectives might contain information about some particular objects to which each adjective applies" (p. 286).

2. Antonym pairs

Before going on to each of the pairs of polar antonyms *more* and *less*, *same* and *different*, *before* and *after* in detail, it should be noted that the findings of previous studies demonstrate that children acquire positive terms like *more*, *same*, *before* prior to negative terms like *less*, *different*, *after*. Also, they show a strong tendency to treat negative polar terms as if they meant positive polar ones.

(a) *More* and *less*

In several studies of *more* and *less* (Donaldson and Balfour 1968; Palermo 1973, 1974), children appeared to interpret *less* as if it meant *more*, though they appeared to understand *more* correctly. Donaldson and Balfour dealt with

three-and four-year-olds'comprenension of *more* and *less*. When they were asked either "Which tree has more apples?" or "Which tree has less apples?" they consistently chose the one with the greater amount, i. e. the one which had more apples. Also, when asked to "make it so there is less in here", they consistently added. This indicates that they understood *more* correctly and understood *less* as if it meant *more*. In dealing with these results, E. Clark (1973b) points out that a non-linguistic strategy would contribute to the child's actual performance with *more* and *less* at the stage both words are confused. She argued that the positive *more* should be cognitively simpler than the negative *less*, because the non-linguistic strategy of choosing the object with the greater amount probably forms the basis for "the child's linguistic hypothesis about the feature [+Polar]" (p.180) and "coincides with the real meaning of *more*" (p.180). Thus, because of *a priori* preference for the greater amount, he has [+Polar] as well as the initial feature [+Amount], and gets *more* right and *less* wrong. E. Clark points out that at the last stage, *more* and *less* will be distinguished. However, Carey (1982) provides the *more* and *less* findings with different interpretaions from those of the SFH. She argues :"This order of acquisition provides no support for component-by-component acquisition, because it is not predicted by relative complexity of the terms. The *less* in 'which has less?' is no more complex than the *more* in 'Which has more?' .... Presumably, the child hears *more* in its comparative use much more often than he hears *less*"(p.364). Also, Atkinson (1982, pp. 80-82) points out that certain aspects of Clark's interpretation of the results are questionable. E. Clark (1973, pp.90-1) says that at the first stage, *more* is taken to mean "amount" and that *more* and *less* are used only in the nominal non-comparative sense. Atkinson argues that there is a problem with the proposed non-comparative use of *more* at the first stage and with the notion of markedness which is the basis of the SFH explanation. He concludes that the SFH suffers from a defect when accounting for the acquisition of *more* and *less* (p. 82).

(b) *Same* **and** *different*

Donaldson and Wales (1970) reported similar results. In their experiment, the sorting task was carried out in which four sets of material, common objects such as toothbrushes, eggcups, etc. (sets I and III) and formal geometrical shapes(sets II and IV) were used. In sets I and III, form and color were coincident, and, not in sets II and IV. They provided evidence that, *same* was understood correctly, *different* was understood as though it meant *same*. Given the instructions "Give me one that is the same in some way" and "Give me one that is different in some way", preschool children nearly all picked objects which were the same, making no distinction between the two instructions.

Both *same* and *different* were taken to mean *same*. E. Clark proposes that the *same* and *different* findings will also be interpreted by her general principles, as in the *more* and *less* results, though she does not clarify the semantic features of both words.

(c) *Before* **and** *after*

Similar results were obtained in a study by Clark (1971) on the child's comprehension of the temporal conjunctions *before* and *after*. The results showed children understand *before* prior to *after*. Furthermore, children appear to go through a stage where they interpret *after* as if it meant *before*. *Before* and *after* are characterized as positive and negative (E. Clark 1973). In the comprehension task, she required forty children aged 3;0 to 5;0 to act out sentences involving *before* and *after*, using farm animals. Clark presented them with sentences such as:

(1) He jumped the gate before he patted the dog.
(2) Before he patted the dog, he jumped the gate.
(3) He patted the dog after he jumped the gate.
(4) After he jumped the gate, he patted the dog.

She noticed a preference for describing events in the order in which they actually occurred. It was found that children consistently responded correctly to (1) and (4), while responding incorrectly to (2) and (3), using an order of mention strategy, that is, whatever is mentioned first happens first. Also, performance was better on the *before*-sentences (1) and (2) than on the sentences with *after* (3) and (4). The following order of difficulty from easiest to hardest was found : (1), (4), (2), (3) (E. Clark 1971). Clark found four stages in the children's comprehension of *before* and *after*. At the first stage, children understood neither word, and simply responded on the basis of an order of mention starategy. They regarded the first clause as describing the first event, and the second clause as a description of the second event. Therefore, the children apparently comprehended (1) and (4). At stage IIa, without regard to the position of *before*, children understood *before*, but not *after*. The lexical entry for *before* is now complete. *After* was still interpreted according to the order-of-mention strategy. For stage IIb, children interpreted *before* correctly, and treated *after* as if it meant *before*. In other words, children consistently acted out all utterances containing *before* correctly, and *after*-utterances incorrectly. Finally at stage III, children distinguished *before* from *after* and consistently understood both correctly. In discussing her results, E. Clark (1971) proposed, first, that the correspond-

ence between order of mention and order of occurrence is important for the comprehension of the sentences with *before* and *after*. That is, sentences which preserve the actual order of occurrence of the two events described are easier than those which reverse the order of events (E. Clark 1971 ; Johnson 1975). Second, she proposed that *before* is mastered first because *before* is simpler in terms of semantic features, and is the positive member of the pair. Clark originally treated the order of acquisition of *before* and *after* in terms of the semantic features. Her analysis (1971) suggests that the meaning of these words can be represented in terms of the features [time], [simultaneous], and [prior]. First, the child learns that the two words pertain to time [+Time]. Second, if he learns that *before* is + Time and −Simultaneous, he will interpret *before* correctly. If he has realized *after* is also + Time and −Simultaneous, he will misinterpret it. Finally − Prior is acquired and the child treats the two words as having contradictory meanings. Clark (1971, p. 273) says the words *before* and *after* are composed of the following features :

a) before [+ Time, − Simultaneous, + Prior]

b) after [+ Time, − Simultaneous, − Prior]

She states that the components are hierarchically related to each other. The first component which dominates the others is time :+Time. The superordinate component+Time dominates ± Simultaneous, and − Simultaneous dominates ± Prior. According to the SFH, *before* is simpler than *after* because the meaning of *after* is specified with an additional negative feature. Clark's (1973 b) study introduced a further concept of non−linguistic strategy into the discussion. In a sentence *The boy jumped the fence after he patted the dog*, children make an assumption that the order of mention always reflects the actual order. *A priori* non−linguistic strategy of describing events in the order in which they occurred could account for the child's reliance on order of mention in interpreting *before*−sentences and *after*−sentences.

Some research raised questions about the Clark's interpretation of her results of the *before* and *after* studies. Amindon and Carey (1972) challenged her interpretation, and suggested that order of mention is not a dominant strategy for 5−year−olds in interpreting temporal order information. In their experiment, children aged 5 ; 4 to 6 ; 3 successfully performed on commands containing the temporal adverbs *first* and *last*. For example, they easily interpreted

commands such as *Move a blue plane first ; move a red plane last*, but they had difficulty with sentences like *Move a blue plane before yov move a red plane*. Amindon and Carey offered an explanation to this precedence of *first* and *last* over *before* and *after*. They claimed that the young child's difficulty with *before* and *after* was due to difficulty with the subordinating syntax. Furthermore, their command procedure in which sentences instructed children (a second-person agent) to perform two identical actions was in contrast to the Clark's task instructing them (a third-person agent) to perform two different actions. When they were given the command, "Move a blue plane before you move a red plane", children would only move a blue plane, simply ignoring the subordinate clause. The preponderance of omissions of subordinate clause led Amindon and Carey to propose that 5-year-olds rely on a main-clause-subordinate-clause strategy, namely ignoring the subordinate clause in interpreting the sentences with *before* and *after*. They state the results demonstrate that 5-year-olds focus on the main clause regardless of clause order, rather than on order of mention, as proposed by E. Clark.

Johnson's tasks repeated the Clark (1971) and the Amindon and Carey procedures in order to clarify the discrepancies between the findings of Clark and Amindon and Carey. She also administered a command procedure, in which each sentence instructed two different actions. The results indicated that differences in children's (aged 4 ; 2 to 5 ; 2) responses based on order of mention strategies and main-subordinate clause strategies might result from differences in the tasks. Johnson pointed out that "omissions reflected ambiguity in the linguistic structure of commands. Thus, the effect of main-subordinate relations was confounded with directness of command" (p. 88). In all three tasks, performance was superior on sentences in which order of mention and order of occurrence corresponded, but no difference in the frequency of errors in comprehension of *before* and *after* was found.

Before and *after* can also be used as prepositions. Are *before* and *after* used as prepositions before they are used as subordinating conjunctions ? Coker's (1978) findings offer an answer to this question. Using kindergartners and first graders, Coker found that *before* and *after* were first acquired as prepositions, and then as subordinating conjunctions. Two prepositional tasks and one subordinate clause task were designed. For the first prepositional task, the child was asked a question like "What did I show you *before/after* the X ?"

For the second prepositional task, the child was asked a question like "Did I show you the X before the Y or after the Y ?" The children were required to act out the events in the proper order, as in previous studies. It was suggested by Coker's experiment that a syntactic factor seemed to

interact with a semantic factor. The results show that there seem to be two strategies that children may adopt in comprehending *before* and *after* used as subordinating conjunctions, that is, (1) a syntactic strategy, main-clause-first strategy of always acting out the main clause first (Amindon and Carey 1972), and (2) a semantic strategy in which order of mention of the events is interpreted to reflect the actual order of occurrence of the events (E. Clark 1971 ; Johnson 1975).

Then, when is a particular strategy used ? Coker suggests that task requirement variables seem to affect it, saying : "When the child is made aware of both clauses, the order-of-mention strategy occurs more often than the syntactic strategy.... With no hint to pay attention to both clauses, the syntactic strategy is more prevalent" (p. 274). Contrary to previous research, Coker's findings provide no evidence that *before* is learned before *after*, contradicting Clark's principle that the positive aspect of a feature is acquired before the negative aspect. It was found that there does not seem to be a consistent acquisition order between *before* and *after*. Therefore, she concludes that some children seem to learn the positive term first, while others seem to learn the negative term first.

In general, in testing children's comprehension of *before* and *after*, we should be careful about requiring them to process sentences that involve many cognitive operations which overload their working memory. Tanz (1980) suggests that syntactic obstacles which require children to "commit to memory a novel sequence of events/pictures" (p. 48) should be removed. Tanz states :

> Even if they do understand the sentences, they need to be able to remember the order of the events described by rote memory.... To tap children's earliest knowledge of *before* and *after* such obstacles should be removed, perhaps by questioning them about the order of events in real-life circumstances where temporal order has significance. For example : (15) What do you do before you come to school ? (16) What do you do after you come to school ? (p. 48)

3. Deictic terms

The relative complexity of word meanings appears to be a major determining factor in the order of acquisition of deictic terms like *I / you*, *this / that*, *here / there*, *come / go*, *bring / take*.

(a) Pronouns *I/you*, and demonstratives and locatives *this/that* and *here/there*

De Villiers and de Villiers (1974) investigated both comprehension and production of the following pairs of words: *I / you*, *this / that*, *here / there*, *in*

front of/behind. According to the de Villiers analysis, *I/you*, *this/that*, and *here/there* are produced according to the speaker's perspective. Correct comprehension of these terms requires the listener to adopt the speaker's point of view. For the comprehension of *in front of/behind*, however, they state that no shifting of perspective is required. In the de Villiers study, the relatively simpler pair *I/you* was the easiest to acquire, and only later the meanings of *this/that* and *here/there* were worked out. *I/you* is the simplest since it does not involve any distance rule, though it requires a switch from the speaker's point of view to the listener's. But children have difficulty in learning *this/that*, *here/there* becuse they depend on an implicit standard of distance as well as individual viewpoints for their production and comprehension. They report that since children incorrectly interpret *in front of/behind* as if they were stated from the speaker's point of view, *in front of/behind* was the most difficult pair.

(b) Deictic verbs of motion: *come/go*, and *bring/take*

Motion verbs also involve deictic components in their meaning, i.e. components of person deixis, place deixis, and time deixis, too. Tanz (1980) states that the semantic and pragmatic differences between personal pronouns and the other deictic terms may explain some of the delay in learning the other deictic terms. Tanz's experiments report the order of acquisition of categories of deictic terms (p. 145):

(1) Personal pronouns: *I/you/he*
(2) *in back of / in front of*
(3) *this/that*, *here/there*
(4) *come/go*, *bring/take*

Come/go and *bring/take* are governed by particulary complex rules. Clark and Garnica's (1974) study showed that even the 9-year-olds were not consistently correct on these motion verbs. In their comprehension task, children (5;6-9;5) were asked to identify the speaker or the addressee of utterances with *come/go* and *bring/take*. The results indicated the youngest children appeared to understand *come* and *bring*, but not *go* and *take*. They suggested that children go through several stages: (a) "they identify both speaker and addressee with the goal of the motion"; (b) "they identify only the addressee with the goal"; (c) "they identify the addressee of *go* with the goal, but are otherwise correct"; (d) "they give adult-like responses" (p. 559). The production data of Richards (1976) showed that *bring* and *take* are acquired later than the pair *come/go*.

4. Spatial prepositions

By the age of 1 or $1\frac{1}{2}$ years, children already have a great deal of general knowledge about objects and their possible relation in space, e.g. containers versus supporting surfaces. Clark (1973 b) included non-linguistic strategies as well as feature acquisition in accounting for the children's performance on prepositions. Clark (1973 b, 1975) argues that the order of acquisition of spatial prepositions seems to be affected by children's *a priori* general knowledge of spatial relations and the non-linguistic strategies they derive from it. Brown (1973) reports that *in*, *on* are usually the first prepositions young children produce in English. Clark (1973 b : 159) postulates that the two hierarchically ordered rules about spatial relations play a role in their working out of the meanings of prepositions like *in*, *on* and *vnder*.

Rule 1 : If Y is a container, put X in the container.
Rule 2 : If Y has a supporting surface, put X on the surface.

She states rule 1 precedes rule 2 since children always seem to treat containers as containers, not as surfaces, even if a supporting surface is also presented. Clark asked children aged 1 ; 6 to 5 ; 0 to "put X in/on/under Y." The results suggested that they resorted to non-linguistic strategies based on rules 1 and 2 prior to, and during, the acquisition of the locative prepositions *in*, *on*, and *under*. Even $1\frac{1}{2}$-year-olds appeared to understand *in* correctly all the time (by applying rule 1) and appeared to understand *on* only with supporting surfaces (by rule 2) and never understand *under* (by rules 1 and 2). Thus, Clark offers experimental evidence that the order of acquisition of the prepositions was first *in*, then, *on*, and then *vnder*. This order of acquisition of the prepositions seems to be the reverse of what H. Clark's (1973) hypothesis would predict: *in*, *on* instead of *on*, *in*. Further, at certain points in development, *on* and *under* were taken to mean *in*, and later *under* to mean *on*. *On* was treated as *in* whenever Y was a container, while *under* was also interpreted as if it meant *in* whenever Y had a supporting surface and was not a container. However, more complex prepositions appear to be acquired later than prepositions like *in*, *on*, and *under*. In the case of instructions with more complex prepositions like *below*, *between*, or *in front of*, 3-and 4-year-olds relied on their earlier strategies based on rules 1 and 2. When they were requesed to put X in front of Y, they would put X on Y (E. Clark 1975). Thus, childlen continue to resort to these same non-linguistic strategies whenever they do not understand new words (p. 93).

Children seem to prefer contact between objects. In Clark's (1973 b) study children always put two objects in contact when they put one object in or on another. They moved one object toward, not away from another. Therefore,

H. & E. Clark(1977, p. 504) predict that, according to this preference for making two objects touch, *to*, *into*, *onto* will be learned before *from*, *out of*, *off* respectively.

However the results and interpretation Wilcox and Palermo (1975) present are in contrast to those of Clark (1973b). They report different evidence that all three age groups (children aged 1;6–3;0) performed better with *on* than *in*, and except for the youngest age group performance on *under* was equal to or superior to on *in*. Performance with *under* tended to improve with age. Wilcox and Palermo raised questions about the SFH about the acquisition of word meaning. They argued that the meaning of *in*, *on*, and *under* is probably not acquired feature by feature like dimensional adjectives, and found no evidence that the children applied the ordered rules proposed by Clark in the case of the incongruent context. The children's performance relied on most normal contextual relationship. Therefore, they concluded that young children's comprehension of the locative prepositions *in*, *on*, and *under* is, "at least in part, contextually determined"(p. 4).

II. Basic-level terms and verbs

1. Basic-level terms

Rosch et al (1976) categorised concrete nouns as "superordinate","basic" or "subordinate" in several experiments. They report the results that basic-level terms are learned before more general "superordinate" or more specific-level "subordinate" terms, demonstrating that, in taxonomies of concretete objects, basic categories are the most inclusive categories and the earliest named by children. Therefore, they suggest that since they carry the most information, they are the most necessary in language. Table 1 will provide us Japanese teachers with valuable information in constructing teaching material for learners of English as a second or foreign language.

Table 1 The Nine Taxonomies Used as Stimuli[a]

Superordinate	Basic level	Subordinates	
		Nonbiological taxonomies	
Musical	Guitar	Folk guitar	Classical guitar
instrument	Piano	Grand piano	Upright piano
	Drum	Kettle drum	Base drum
Fruit	Apple	Delicious apple	Mackintosh apple
	Peach	Freestone peach	Cling peach

	Grapes	Concord grapes	Green seedless grapes
Tool	Hammer	Ball-peen hammer	Claw hammer
	Saw	Hack hand saw	Cross-cutting hand saw
	Screwdriver	Phillips screwdriver	Regular screwdriver
Clothing	Pants	Levis	Double knit pants
	Socks	Knee socks	Ankle socks
	Shirt	Dress shirt	Knit shirt
Furniture	Table	Kitchen table	Dinining room table
	Lamp	Floor lamp	Desk lamp
	Chair	Kitchen chair	Living room chair
Vehicle	Car	Sports car	Four door sedan car
	Bus	City bus	Cross country bus
	Truck	Pick up truck	Tractor-trailer truck
		Biological taxonomies	
Tree	Maple	Silver maple	Sugar maple
	Birch	River birch	White birch
	Oak	White oak	Red oak
Fish	Bass	Sea bass	Striped bass
	Trout	Rainbow trout	Steelhead trout
	Salmon	Blueback salmon	Chinook salmon
Bird	Cardinal	Easter cardinal	Grey tailed cardinal
	Eagle	Bald eagle	Golden eagle
	Sparrow	Song sparrow	Field sparrow

[a] From Rosch et al. 1976:388

2. Verbs: *ask* and *tell*

Tell seems to be learned before *ask*. E. Clark(1973) argued that an over-extension phenomenon could be seen in the acquisition of the relational terms like *more* and *less*, *same* and *different*, *before* and *after* which were discussed above. She states that the meanings of the positive terms like *more*, *before*, etc. are overextended to cover the negative terms like *less*, *different*, etc., and that it is the meaning of the overextended term that the child acquires first. In addition, she regards the acquisition of the meaning of *ask* and *tell* as an example of overextension. She cites the research of Chomsky (1969) that studied children's (aged 5;0 to 10;0) comprehension of the English verbs *promise*, *ask*, *tell* with complement structures. Chomsky found that, in several sentence forms, e.g. Ask/Tell X what name it is, Ask/Tell what to feed the doll, the children interpreted *ask* as if it meant *tell*, while responding

correctly to the instructions involving *tell*. The Chomsky's findings suggested that the acquisition of knowledge about the complements with these verbs was affected by a lack of children's syntactic knowledge. However, Clark presented a different interpretation of Chomsky's data on *ask* and *tell* in terms of semantic features. Her semantic interpretation of the results is that *ask* has some additional properties which *tell* does not, i.e. the meaning of *ask* involves "the request feature and also the allocation of roles" (E. Clark 1973:98). She argues that *tell* is overextended to cover *ask* and that the meaning of *ask* is differentiated from that of *tell* when the semantic features of *ask* are acquired. Thus, the acquisition of the verbs *ask* and *tell* appears to be affected by semantic complexity principle: the greater the semantic complexity of the word is, the later it is acquired.

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