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## NOTE

# Young children and the say/mean distinction: verbatim and paraphrase recognition in narrative and nursery rhyme contexts\*

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## ABSTRACT

Children's ability to distinguish between the text, WHAT WAS SAID, and the intentional structure, WHAT WAS MEANT, was interrogated by means of verbatim and paraphrase questions in two types of discourse, narratives and nursery rhymes. Three- to seven-year-olds participated (n = 119, mean age 5·1). There was an interaction between the type of discourse and the younger children's ability to separate wording from intentional structure. In the narrative form they had difficulty rejecting true paraphrases when asked to focus on wording, while in the nursery rhyme form the difficulty was accepting a true paraphrase when asked to focus on intention.

### INTRODUCTION

A topic of continuing interest in psychology has been the development of the child's ability to coordinate different forms and levels of representation (Piaget, 1952). Children's conceptual understanding of language has been one domain in which this process has been studied (Karmiloff-Smith, 1992). One feature of language that lends itself to this examination is the young child's developing ability to focus on the structure of a message or TEXT separately from its intended meaning in discourse. A number of early studies have indicated that young children have difficulty separating these two dimensions. The poor performance on these tasks by five- to seven-year-old children has been characterized as a failure to blame the speaker for message

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inadequacy (Robinson & Robinson, 1977), as a failure to reflect on messages as cognitive objects (Flavell, 1977), as a failure to decentre (Hakes, 1980), as a failure to understand task demands (Reid, 1996), and, as a failure to distinguish literal from intended meaning (Robinson, Goelman & Olson, 1983; Beal & Flavell, 1984; Bonitatibus, 1988 and Winner, 1988).

Concurrently, research in a variety of domains has provided a rich body of evidence that the acquisition of literacy has a direct and substantial impact on children's understanding and awareness of both the phonological structures of their speech (Ehri, 1985; Morais, Bertelson, Cary & Alegria, 1986; Read, Zhang, Nie & Ding, 1986) as well as children's understanding of what words are, their so-called word awareness (Reid, 1966; Francis, 1975; Ferreiro & Teberosky, 1982; Olson, 1996; Homer & Olson, 1999).

This study examines children's development of an awareness of the distinction between the more objective aspects of what a text 'says' and the more subjective interpretations a listener or reader brings to the text. We suggest that categories for expressing this new orientation to language are to be found in the metalanguage and involve concepts which distinguish the text (what was said) from the intentional structure (what was meant).

This distinction is most clearly expressed in written texts and learning to read and write may be instrumental in its acquisition. For a child learning to read, a necessary conceptual insight about text is its fixed nature, the notion that the words of a text are invariant although paraphrased in somewhat different ways. This study looks at this conceptual development by examining when children begin to accept paraphrases as correct responses to questions about the intent of the speaker while rejecting them as correct responses to questions about what exactly was said. A paraphrase captures an intended meaning while 'exactly the same words' captures 'what was said.'

Earlier studies of paraphrase by Gleitman & Gleitman (1970) seemed to indicate that young children lack the concept of paraphrase. In a study of four-, seven- and ten-year-olds' understanding of direct quotation in a narrative retelling of stories which contained direct speech, Hickmann (1993) found that the four-year-olds used description (no quotation) or unframed quotes. What the four-year-olds failed to use were 'framed' quotes, quotes which are metalinguistic in that they mark the boundary between the situation of expression and the propositional content of the message. In a study of comprehension monitoring Reid (1996) found that children under six years of age failed to benefit from instruction to focus on the literal meaning of the message rather than on the intended one. Hedelin & Helmquist (1988) examined the conditions under which preschool children were unable to reject paraphrases when asked what a character has said. They found that younger children (under the age of five) tended to accept paraphrases as being what was said more often than older children. They offered three possible explanations for the younger children's performance.

First they noted a strong tendency for younger children simply to accept as correct anything said by an adult. Second, the question itself may have been seen as ambiguous in that requests for 'what was said' can in some contexts be correctly answered by a paraphrase. However, this explanation would not explain why performance shifts at about five years of age. Third, children may lack the sensitivity to the specific wording of utterances that is promoted by literacy, remembering primarily the gist of what was said. Consequently, they treat any utterances with roughly the same gist as 'what was said.' We will return to this point in the discussion.

To date, studies have not examined the possibility that the distinction between wording and meaning may also be tied to the genre of discourse. Jakobson (1990) pointed out that whereas narrative prose discourse highlights meaning over wording, poetic discourse highlights the form including the sound patterns and wording. Hence one might expect that younger children will more easily attend to the exact wording in the nursery rhyme genre than in prosaic narratives. Even if that turns out to be true, it remains to be seen if the conceptual distinction between wording and meaning is available in such a way that children will be able to systematically distinguish what was said from its paraphrase, what was meant or wanted across various genre of discourse.

This study examines the development of the concept of 'wording' by examining children's understanding of the distinction between 'the exact words' and a paraphrase in two forms of language, narrative and nursery rhyme.

#### METHOD

#### Participants and materials

Participants were 119 children, fluent in English, from middle-class preschool and private schools in a large urban area. See Table 1.

To avoid the possibility identified by Hedelin & Helmquist of younger children agreeing with adult utterances the children were introduced to a large teddy bear and his sticker book (collecting stickers in a sticker book was a popular and widespread activity among children in the community). The task was presented to the children as one in which Teddy was learning to listen. Teddy was seated beside the child in order to observe the scenarios that were acted out or to see the illustrations for the nursery rhymes. The experimenter spoke for Teddy using a high pitched voice, different from that used for the rest of the script. In the context of the situation the children appeared to engage in treating Teddy as a participant, addressing their remarks to him and to enjoy rewarding or withholding stickers for his book.

Children were asked to distinguish between verbatim repetitions of utterances (Verbatim condition), and utterances which were good paraphrases (Paraphrase condition) of the target utterances. Participants were asked to judge whether Teddy was correct or incorrect in saying what a story

Age	n	Mean	8.D.	Range
3	18	3;6	2.46	3;0-3;11
4	25	4;6	3.04	4;0-4;11
5	26	5;2	2.24	5;0-5;11
6	25	6;5	3.87	6; <b>0</b> –6;11
7	25	7;4	4.0	7;9–7;11

TABLE 1. Mean age of participant groups

 TABLE 2. Conditions and items within condition for verbatim-paraphrase
 wording study

	Conditions		
Items	Verbatim	Paraphrase	
True	Wording preserved; meaning preserved.	Wording changed; meaning preserved.	
False	Wording changed; meaning preserved.	Wording changed; meaning changed.	

character had 'said' or had 'wanted' for the narrative form and whether Teddy was correct or incorrect in saying the rhyme or saying what happened for the nursery rhyme form.

*Narrative stories.* Eight short, four sentences stories involving Sesame Street characters were developed, each describing a common event and involving a target utterance from one of the characters. Each story was acted out with 3-inch Sesame Street figurines and props. Test utterances were developed for each story consisting of a correct or incorrect paraphrase of the target (wording changed, meaning preserved or altered) and a correct or incorrect verbatim repetition of the target (meaning preserved, wording identical or altered). See Table 2. Following is a sample story with variable endings:

Big Bird and Snuffy go to Maria's for lunch. Big Bird says <u>I want some food</u>. 'What did Big Bird say?' \_\_\_\_\_ Snuffy sits down at the table. Big Bird goes into the kitchen. Big Bird helps Maria. Verbatim-true – I want some food. Paraphrase – true/Verbatim – false – I want something to eat. Paraphrase – false – I want some toys.

Note that the target utterance *I* want something to eat is correct when the instruction to Teddy is to 'say what Big Bird wanted' but incorrect when the instruction is to 'say exactly what Big Bird said.'

*Nursery rhymes.* Eight short, two to four line nursery rhymes were developed, along with an illustration for each. The rhymes varied in familiarity. As with the narrative items, test utterances were developed for each rhyme consisting of a correct or incorrect paraphrase of the target and a correct or incorrect verbatim repetition of the target. Most frequently a word was changed in the middle of the rhyme, e.g. *in twinkle twinkle little star, little* star became *tiny* star (true paraphrase/false verbatim), *giant* star (false paraphrase). The end rhyme was preserved in each nursery rhyme. Following is a sample nursery rhyme item with endings:

Hickory dickory dock The mouse **ran** up the clock True verbatim – The mouse **ran** up the clock True paraphrase/False verbatim – The mouse **raced** up the clock False paraphrase – The mouse **gave a talk** 

#### Procedure

Verbatim and Paraphrase conditions were administered on two different days. For half the participants the Verbatim items were presented on the first day; for the other half the Paraphrase items were first. Within each condition (Verbatim and Paraphrase), four test items were administered, two narrative stories and two nursery rhymes. Two training items for each condition and form, one true and one false, were administered immediately before the experimental items for that condition. If necessary, corrective feedback was provided to the child about the correctness of Teddy's response on the training stories.

The task was presented to the children as one in which Teddy was learning to listen. They were asked if they would help him by rewarding Teddy with a sticker when he was correct and to withholding a sticker when he was incorrect, saying to him 'no sticker Teddy.' Children were asked to repeat the target utterance in each story as soon as it was read or repeat the rhyme to minimize memory and attention problems. Experimental items were counterbalanced across conditions. The order of conditions and tasks were counterbalanced, as was the order of true and false items within conditions and tasks.

In the Narrative form; Verbatim condition, the instructions to Teddy were to repeat exactly what the story character said, to 'use the same words'; in the Paraphrase condition, Teddy was to say what the story character wanted, 'you DON'T have to use the same words.' In the Nursery Rhyme form, Verbatim condition the instructions to Teddy were to listen so he could say it right 'use the same words'; in the Paraphrase condition Teddy was to say back what happened 'you DON'T have to use the same words.'

The script for the procedure established a rich situational context, as follows.

#### Verbatim condition

*Narrative*. Introduction – addressing the child, 'Teddy is learning to listen. When Teddy listens he has to listen for exactly what the person said.' Addressing Teddy, 'Teddy when you listen I want to you to listen carefully and say exactly what the person in the story said. The words have to be the same. You have to say the same thing.' Addressing the child, 'When he says it right, give him a sticker. When he says it wrong say 'No sticker Teddy'. Does he have to use the same words?' \_\_\_\_(yes/no).

This explanation was followed by two training stories (one true and one false). Corrective feedback was provided if necessary.

Test items – each test item was proceeded by addressing Teddy, 'Teddy I want you to listen for exactly the same words.' The test story was acted out; the child being asked to repeat the target utterance immediately after the story character 'What did x say?' The story was finished. Addressing the child, 'O.K., now we're going to see how well Teddy listens.' Addressing Teddy, 'Teddy, say exactly what x said. The same words.' Teddy responded according to the condition and the child either gave Teddy a sticker or said 'No sticker, Teddy.'

Nursery rhyme. Introduction – 'Teddy listen carefully so you can say it right, you have to say exactly the same words.' Addressing the child, 'When he says it right, give him a sticker. When he says it wrong say 'No sticker Teddy'. He has to say exactly the same thing. Does he have to use the same words?' \_\_\_\_(yes/no). This explanation was followed by two training stories (one true and one false). Corrective feedback was provided if necessary.

Test items – each test item was proceeded by addressing Teddy, 'Teddy I want you to listen for exactly the same words.' The test rhyme was said while pointing to the illustration. Addressing Teddy, 'Are you listening carefully Teddy?' The rhyme was repeated again. Addressing the child 'Will you help Teddy? You say it to him.' The child repeated the rhyme along with experimenter. Addressing Teddy, 'O.K., Teddy it's your turn now.'

Teddy responded according to the condition and the child either gave Teddy a sticker or said 'No sticker, Teddy.'

## Paraphrase condition

*Narrative*. Introduction – A parallel procedure with the following wording was used to describe a paraphrase to the children (the term paraphrase was not used). 'Teddy has to listen carefully for what the person wanted. Teddy you don't have to use the same words. Just tell us what the person wanted.' Each story contained a statement by a character referring to a desire. This was followed by two training items. Each test item was proceeded by

			3		4	4		5		6		7	
	Condition	Task	М	S.D.	М	S.D.	М	S.D.	М	S.D.	М	S.D.	
·	Verbatim	Narrative True	o·88	0.32	o·88	0.33	o·88	0.32	0.80	0.40	0.96	0.30	
537		Narrative False	0.52	0.46	0.40	0.20	0.01	0.40	o·68	0.42	0.84	0.32	
		Nursery Rhyme True	0.22	0.42	0.26	0.43	o.88	0.35	o.96	0.30	0.95	0.22	
		Nursery Rhyme False	0.72	o·46	o·76	0.43	0.95	0.52	0.95	0.52	0·96	0.30	
	Paraphrase	Narrative True	0.01	0.20	0.26	0.43	o.88	0.32	o.88	0.33	1.00	0.00	
	-	Narrative False	0.72	0.46	0.92	0.27	1.00	0.00	1.00	0.00	1.00	0.00	
		Nursery Rhyme True	o.66	0.48	o·48	0.20	0.60	o <sup>.</sup> 47	o·84	0.32	0.95	0.22	
		Nursery Rhyme False	0.72	0.46	0.95	0.52	0.60	0.42	1.00	0.00	1.00	0.00	

TABLE 3. Mean scores for age groups on the narrative and nursery rhyme tasks by condition

addressing Teddy, 'Teddy, I want you to listen for what the person wanted.' The test story was acted out. Then addressing the child 'O.K., now we're going to see how well Teddy listens.' Addressing Teddy, 'Teddy, what did \_\_\_\_tell \_\_\_\_? Remember you don't have to use the same words.'

Nursery rhyme. A parallel procedure with the following wording was used to describe to the children a paraphrase in the context of a rhyme (the term paraphrase was not used). The expression 'say what happened' was selected as the clearest direction to attend to meaning verses wording. 'Teddy listen carefully, when you tell it back you need to say what happened, you don't have to use the same words.' Addressing the child 'Remember he doesn't have to use exactly the same words but he has to say what happened.' Each test item was proceeded by addressing Teddy, 'Remember Teddy say what happened, you don't have to use the same words.'

## RESULTS

Children were scored correct if they gave stickers to Teddy on true items and withheld stickers on false items. Children at all ages had no difficulty repeating the target utterance. Responses were tabulated for the four individual items within the language forms, Narrative and Nursery rhyme: Verbatim True, Verbatim False, Paraphrase True, and Paraphrase False. See Table 3 for mean scores on the tasks in the two conditions by age group.

Chi-square analyses revealed no significant differences for sex, schools or order of condition. The chi-square analyses for age are shown in Table 4.

Task	Condition Verbatim	$\chi^2$	df	Þ
Narrative	True	3.1	4	0.242
	False	18.3	4	0.00 I
Nursery rhyme	True	6.5	4	0.183
	False	8.6	4	0.064
	Paraphrase			
Narrative	True	13.2	4	0.01
	False	20.2	4	0.001
Nursery rhyme	True	14.3	4	0.01
	False	19.3	4	0.00 I

 

 TABLE 4. Chi-square values comparing the 5 age groups on the narrative and nursery rhyme tasks by condition

To summarize the results, within the Verbatim condition, there were significant age differences on the False item within the Narrative form (Chi-square)  $\chi^2 = 18.2$ , df = 4, p = < 0.001, with three- and four-year-olds failing to reject the false items more often than older subjects (28–40 % for younger participants versus 61-84 % for older participants). There were no significant

differences on True items within either the Narrative or Nursery Rhyme forms, or on False items within the Nursery Rhyme form.

Furthermore, a McNemar test comparing Narrative Verbatim False and Nursery Rhyme Verbatim False by age showed that performance on these items was significantly different for the three- to five-year-olds (three-year-olds, p = < 0.01; four-year-olds, p = < 0.05; five-year-olds, p = < 0.05) See Table 5.

TABLE 5. McNemar values for age Groups Comparing Performance by Language Forms (Narrative and Nursery Rhyme) in the Two Conditions

	Parap	bhrase	Verbatim			
Condition Age	Narrative False Nursery R. False	Narrative True Nursery R. True	Narrative False Nursery R. False	Narrative True Nursery R. True		
3	1.00	1.00	0.01	0.62		
4	1.00	0.00	0.02	0.20		
5	0.01	0.33	0.02	1.00		
6	*	1.00	0.51	0.51		
7	*	0.2	0.32	1.00		

\* Not computed as 100 % correct on both items.

That is, at all ages children found it easier to correctly reject a Verbatim False (a true paraphrase) with the Nursery Rhyme form than with the Narrative form. Which is to say, all children were more attentive to wording in the Nursery Rhymes than in the Narratives. See Fig. 1.



Fig. 1. Percent correct on Verbatim False by age on the Narrative and Nursery Rhyme forms.

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Within the Paraphrase condition, chi-square analyses revealed that there were significant age differences on False items in both the Narrative  $\chi^2 =$ 20.5, df = 4, p = < 0.001 and Nursery Rhyme  $\chi^2 = 10.2$ , df = 4, p = 0.001forms. On these items the six- and seven-year-olds were a 100 % correct. There were significant age differences on True items in the Narrative form (chi-square)  $\chi^2 = 13.7$ , df = 4, p = < 0.01, seven-year-olds were 100 % correct. There were significant age differences on True items within the Nursery Rhyme form (chi-square)  $\chi^2 = 14.4$ , df = 4, p = < 0.01, with threeand four-year-olds failing to accept true items more often than older subjects (66-48% for younger participants versus 84-92% for older participants). That is, older children were more able to accept true paraphrases when the wording changed in the nursery rhymes than were younger children. Further, there was a significant linear effect by age for both Narrative Paraphrase True (Mantel-Haenszel)  $\chi^2 = l_2 \cdot 409$ , df = l, p = < 0.01; and Nursery Rhyme Paraphrase True (Mantel-Haenszel)  $\chi^2 = 9.791$ , df = 1, p = < 0.005. (See Fig. 2.) Finally, there was a significant linear effect by age for



Fig. 2. Percent correct on Paraphrase True for the Narrative and Nursery Rhyme forms.

the Narrative Paraphrase False (Mantel–Haentzel)  $\chi^2 = 13.366$ , df = l, p = < 0.001 and for the Nursery Rhyme Paraphrase False (Mantel–Haenszel)  $\chi^2 = 7.739$ , df = 1, p = < 0.001, although even the three-year-olds scored more than 70 % correct in both Narrative and Nursery Rhyme form.

There were no significant differences between the items in the Nursery Rhyme form, even though some of the rhymes were likely to have been very familiar to the children while others were unfamiliar.

There was a significant age by item (stories) interaction in the Narrative form in the Verbatim condition. An analysis by item was performed for each variable, that is, Paraphrase True, Paraphrase False, Verbatim True, Verbatim False by age. For Paraphrase True, Paraphrase False, Verbatim True performance on the stories was similar. However for the Verbatim False item, one story was significantly more difficult than the others (chisquare)  $\chi^2 = 21.4$ , df = 3, p = < 0.001). The three-, four- and five-year-olds had particular difficulty in rejecting the particular target utterance in the verbatim false. The target phrase in the story is 'I want some food.' Teddy is asked to 'say exactly what Big Bird said. The same words.' when Teddy provides the verbatim false utterance 'I want something to eat' these children often fail to reject it.

## DISCUSSION

Children were found to be sensitive to changes in meaning and were quite competent in distinguishing correct from incorrect paraphrases. Furthermore, even three-year-olds were quite successful in recognizing identical wording, more so in nursery rhymes than in the narrative tasks. What posed the greatest difficulty for these children depended upon the type of text involved. For the Narrative condition, what is most difficult is to reject a good paraphrase when instructed to accept only exactly what was said, 'the same words only.' For the Rhyme condition, what is most difficult is to accept a good paraphrase when instructed to attend to the meaning 'you don't have to use the same words.' Five-year-olds seemed to be transitional and by the time they were six or seven years of age, most children were capable of managing these distinctions systematically. The most obvious differences between the younger and older children, apart from age, are those associated with schooling and literacy. Although unexamined in this study, the age at which children make these distinctions may differ by social class, as has been shown to be the case for the speaking and listening skills that may be involved (Lloyd, Mann & Peers, 1998).

It is interesting to note that in the Verbatim condition one false item was significantly more difficult to reject than others. The younger children, threeto five-year-olds, did not reject 'I want something to eat' as a verbatim utterance for 'I want some food.' For these children a focus on wording was lost to the meaning, this may have occurred because of the parallel wording in the utterances including the word some in 'something' and 'some.'

Children were sensitive to the functional purposes of the form of text and this was reflected in their ability to separate the wording from the intended meaning but this ability was tied to the particular genre involved. Narrative has as a major function conveying information about a character's intentions and actions towards goals. For Narrative tasks children had the most

difficulty rejecting a good paraphrase when asked to attend to the exact wording, as the paraphrase maintained the goal structure of the story. Nursery rhyme as a poetic form has as a major function the rhythmic patterns of the rhyme. This focus on rhythm may be accentuated in Nursery rhymes which possess only the most rudimentary aspects of the poetic functions found in other genres of poetry, e.g. lyric poetry involves the emotive function. As somewhat nonsensical verse the 'meaning' of a nursery rhyme resides to a degree in the specific set of words and hence the form fosters attention to exact wording. Children had the greatest difficulty with accepting alteration to a nursery rhyme (a paraphrase) when asked to attend to meaning even though meaning was preserved.

To conclude, while the younger pre-readers are very sensitive to the wording of a story, the concept of wording as distinct from meaning appears not to be fully developed until about age six or seven, at which point they can apply the distinction to either genre. At this point they can be credited with understanding the distinction between said and meant; between text and interpretation.

It seems unlikely that this is simply a developmental phenomenon. In this study the conceptual distinction was mastered at just the age at which reading instruction begins for these children. For a child learning to read, a necessary conceptual insight about text is its fixed nature, that the wording of a text is fixed and sustains multiple readings. The distinction is further enhanced by classroom discourse about what the text says, what the characters in the text say, what they meant and the like. Thus we suggest that this form of metalinguistic knowledge arises primarily through children's exposure to and acquisition of the written word. However, in a culture with universal instruction in literacy this hypothesis is difficult to test directly. Nonetheless, the finding that this distinction is acquired in the early school years supports this inference and is congruent with other findings. Once acquired, the notion of the fixity of a text relative to its paraphrase serves equally well for thinking about both the spoken and written word.

These findings may have broad implications for our understanding of the cognitive implications of literacy. It is well known that an acquaintance with print is instrumental in children's acquisition of such metalinguistic concepts as the sounds of speech and the constituents of sentences. We hope to add to the list of implications of print, a new understanding of the distinctions between what was said, the very words on the one hand, and meanings, intentions, and paraphrases expressed by these words, on the other.

Genre, narrative prose and simple verse, appear to recruit children's attention to the two sides of language, meaning and form. Hence, it is incorrect to claim that literacy is responsible for this attention. What literacy invites we suggest, is the generic categories of form and meaning which then may be applied to either genre.

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