A study is presented that considers the narrator's knowledge of conventional schemata for stories and the cognitive factors which seem to be affecting the selection and organization of material for narration. Children ranging in age from 3 years 10 months to 7 years 4 months were asked to watch a video tape cartoon and recount the story to a person who had not seen the cartoon. The same procedure was followed with 10 adult university students. It was found that both children and adults used a problem-resolution schema as the major source of content selection. The children differed from the adults in the following points: (1) they used very little introductory matter; (2) they did not resolve all the problems and in some cases neglected to present the problem initially; (3) younger children included irrelevant information; (4) they generally did not provide a setting for the events; (5) they used different types of transitions between episodes; (6) sometimes they reversed the order of events; and (7) children often needed an image as a memory prompt. Examination of the data reveals which aspects of story schemata are being learned during a particular period, and suggests how development of discourse skills is influenced by certain cognitive developments. (AMH)
THE DEVELOPMENT OF NARRATIVE DISCOURSE IN JAPANESE

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In societies where people spend a considerable amount of time at the movies or in front of televisions, these visual media become one source of the narratives which people tell one another. For children in these societies, television may be from an early age the most common source of stories; on a typical day in Tokyo, for example, hours of programs are directed toward young children in the late afternoon and early evening. An examination of the stories which children tell based upon these programs should provide insight into their developing notion of what it means to tell a story and their acquisition of the skills which are necessary for the production of successful narratives. As part of my dissertation research on the development of various discourse skills in Japanese, I collected stories based on the same television videotape from 46 children in Tokyo: 2 boys and 4 girls between the ages of 3.10 and 4.8, and 5 boys and 5 girls within each of the following age ranges: 5.0-5.4, 5.8-6.0, 6.4-6.8, and 7.0-7.4 years. Each child was interviewed individually at kindergarten or grade school by two young Japanese women. As part of one or two sessions involving other activities, each child viewed a 7 minute cartoon from the current TV "Sazae-san" series, a traditional cartoon about family life. After watching the videotape on color television with one interviewer, the child was asked to tell the story to the other interviewer, who had left the room during the showing. Standard prompts were provided when necessary by the interviewer who had seen the program with the child. In order to have a reliable model of adult performance on this task for comparison, the same procedure was followed with 5 male and 5 female university students.

Although a wide range of factors probably exerts some influence on the structure of the narratives produced in this task, in this paper I would like to consider the narrator's knowledge of conventional schemata for stories and the cognitive factors which seemed to be affecting the selection and organization of material for narration. In general, the structure of the narratives produced did not seem different from what might have been expected had they been in English, probably due to universals of memory and cognition as well as shared or westernized features of narrative organization.

The adult narratives, while differing greatly in length and other respects, all had certain structural features in common, suggesting a shared schema for narrative organization.
Nine of the ten adults began their story with an introduction of the characters or questioned the interviewer about her knowledge of the characters. All ten then had a brief introduction presenting certain background information, namely, that since a character named Taeko was sick, her toddler Ikura was being cared for at Sazaesan's house. The narratives then presented a series of episodes which were based on scenes in the videotape. These episodes included the information that throughout the day when Sazaesan was babysitting for Ikura, he practically tore her house apart with his mischief, especially opening drawers and emptying their contents. To the anger of Sazaesan's younger brother and sister. In the last episodes of their narratives, the adults recounted the final scenes of the videotape, in which Ikura's mother recovered so that he could stay at home, his father apologized for the mischief he had done, and it ultimately emerged that Ikura, having seen his mother take medicine from a drawer, had actually been searching in the drawers at Sazaesan's house for medicine for his mother. The episodes were usually introduced by settings containing fixed types of information: changes of time, place and cast of characters, background activities during which event sequences began, and background information such as the goals of the main actors. All speakers used a temporal schema for the transition between episodes, with the sequence of events in the narrative usually following that in the videotape. Each of the 10 adults ended the narration with what Labov (1972) calls a "code," bringing the narrator back to the world of the speech act. In nine of the ten cases, this included the formula "oshimai"/"owari"/"owatta" ("the end" or "it ended"), or the formula "soo yuu hanashi" ("that was the story"), or both.

From an adult point of view, the videotape presented a number of themes which can be analyzed as a series of problems and their resolutions; in selecting material for narration the adults were clearly making use of this problem-resolution schema. With the exception of a few descriptive details or background material used in episode settings, it was possible for each clause of the adult narratives to state which problem was being assumed, illustrated, left pending, or resolved by the information given. Although greatly differing amounts of information were verbalized by different speakers in support of any given problem and its resolution, no adult story contained any identifiable segments which were not directed toward a particular problem or its resolution. It is likely that the problem-resolution schema was an important factor in the adults' processing of the videotape in the first place, as well as in their recall of it for narration. Clearly, the ability to recognize and utilize this schema would be a tremendous help in comprehending and later retrieving and verbalizing the story.
The children's narratives differed from this general pattern in ways which suggested an incomplete knowledge of the narrative schemata used so consistently by the adults. None of the children under 5 years old gave an introduction to the story telling that Ikura's mother was sick and that he was being cared for at Kanaemon's house, as did all the adult narratives. Only two children in each of the age groups from 5.0 to 6.3 years and three children at 7.0-7.4 years had a story introduction with at least one of these two pieces of information. None of the children tried to introduce the characters to the interviewer. Use of a coda increased steadily from 28.6% of the youngest group to 50% of the 6 year olds; however, only 20% of the 7 year olds had a closing formula. The children's codas always included either "oshimai"/"owari" ("the end") or "owatta" ("it ended"), never the adult "soso yuu hanashi" ("that was the story").

In the children's stories the problem-resolution schema was the major source of content selection in most cases. In fact, some of the shortest and most primitive narratives were based exclusively on this principle, which seems to override all other considerations as the child leaps from the statement of one problem to its resolution, ignoring all the material which came in between in the videotape, as in the following narrative. Line 5 begins a much later scene in the same room.

(1) 4.5 ...ANO ne,...Ikurachan ga na,
yen okunuri o ne,...hikidashi kara damao to shita no.
...ANO soshite ne,
zembu ne kimonon ya ne,...ooyoofuku o dashichatta no.
...Katnokun wa ne,...ANO no, Wakamechan wa ne,
...soshite ne,...gangu teepu o haitte,
...Ikurachan ga itazura shihai yoo ni,
...ehiruhi o teuket oita no.

...UH you know,...Ikura you know,
tried to take medicine from the drawers.
...UH then you know,
(he) pulled out kimonos and clothes and everything.
...Katsuo you know,...UH you know, Wakame you know,
...then you know,...stuck on tape,
...so that Ikura wouldn't do mischief,
...(they) put on signs.

There was some tendency for the number of problem-resolution pairs per story to increase with age. The majority of the children at each age gave from 1 to 3 pairs. One or two of the children in each group under 6.0 years failed to produce any complete problem-resolution pairs, and the 4 children who produced 5 such pairs were all over 5.8 years. In comparison, 3 adults produced 3-4 problem-resolution pairs, and the rest had 5 or more. Presenting several different
problems and their resolutions clearly put a greater burden on memory, since the narrator must keep track of all the problems presented and be waiting to give their resolutions as he recalls the videotape. The stories of 30-40% of the children in each age group contained at least one problem which was never resolved; a child would say, for example, that Ikura's mother was sick but forget to mention that she got better.

A more prevalent and persistent deficiency than forgetting to give resolutions was neglecting to present the problems which are later resolved in the course of events, resulting in the use of unjustified presuppositions. For example, many children throughout the age range mentioned that Ikura's mother got better near the end of the story without having said that she was sick. This kind of presupposition error occurred in the narratives of 66.6-83.3% of the children in each age group, with no indication of any improvement in this age range. Thus in recalling material from the videotape for narration, it was obviously much more difficult to plan ahead and verbalize information that will be presupposed at some later point than to recall which already presented problems were awaiting resolution.

Although the problem-resolution schema was usually the major criterion for content selection, the children sometimes presented information which did not contribute to any problem-resolution pair as the main point of an episode. From 40-66.6% of the children in each group through 6.8 years produced a total of 8-12 irrelevant segments per group, ranging in size from single clauses within a larger episode to three episodes at a time, as in example (2) below. However, only 30% of the 7 year olds had irrelevant information in their narratives, and each of those children had only a single irrelevant segment. Thus there may be an indication of some progress at the upper end of this age range toward the adult standard of content selection, in which salience is totally identified with thematic relevance.

An examination of the irrelevant elements in the children's narratives reveals that they featured two types of information. Sometimes interesting or unusual information which had been visually focused by means of close-ups in the videotape was presented as the main or only point of an episode, such as a snail on a leaf in the garden in the final scene, or the image of Ikura's father who arrives loaded down with groceries, a very unusual state for a Japanese man. In other cases the children focused on familiar, everyday activities from their own lives: playing, eating, sleeping, doing household chores. In example (2), lines 1-5, 6-7, and 8-10 are based on three different scenes from the videotape, each of which included relevant thematic information, as well as
the details which this child chooses to focus on.

(2) 6.4...Sorede no,
yrs...nankbo ANO Sasaan ga ne,...okaasan ga ne,
ANO nanka osara toka ne,...oaidokoro de aratte ita no ne.
Sorede Wakamechan ga ne,...oaidokoro ni kita ne,
nanka otetsukai aruru mono nai tte itte ne,
...nankbo...UM no...sorede no...nakaj no...Lanten no...nankbo
Nanka...Wakamechan wa ne,...ofoton ni haitte nete ne,
...sorede...ANO no...Ikuran no ne otorokku ga yara ne,
nanka...obaaimone no sukuro o ne,...sagete no,
nanka meron toka nanka katta kita no ne.

...Then you know,
...then...UM U! Sasaan'in you know,...mother you know,
...UM was washing dishes and things in the kitchen.
...Then Wakamechan you know,...came into the kitchen y.k.
...and said, "Isn't there anything (I) can do to help" you know,
...then...UM then you know,...then you know,...then you know,
...then...UM Ikura you know,...got into bed and slept y.k.,
...then...UM you know,...Ikura's you know father at night y.k.,
...came carrying a shopping bag you know,
...(he had) bought melons and things you know.

This kind of focus on the "homey," familiar activities of the children's own lives, as well as any unusual or interesting departures from these activities, decreased the degree of thematic cohesion in the narratives of the children as compared to the adults, except for the two stories in which playing and eating were made the major themes, with problems and their resolutions being largely ignored.

In addition to these various difficulties with the problem-resolution schema of narratives, children in this age range also had trouble with the setting-events schema for episode structure used by the adults. From an adult point of view, an episode setting serves to orient the listener in time and space, providing him with a background mental image against which the event sequence is easier to visualize, as well as other kinds of background information which make it more readily comprehensible. Example (3) provides a typical case of an inadequate setting for an episode.

(3) 5.1...Sorede sa,...ETO sa,
yrs...okaasan ga naotte sa,
...Ikura...oniisan ga sa,
dendenmushi...dendenmushi sa, mitsukete sa,

...Then you know,...UM you know,
...(his) mother got better you know,
...Ikura,...the boy you know,
...found a snail...snail you know,
Both the first and third lines of example (2) begin what were new scenes in the videotape, yet no indication is given of the changes in time and location, nor of the arrival of new characters.

There is some evidence for a growing awareness of the setting-events schema for episode structures in this age range. Only 33.3% of the youngest group used a change in time or the arrival of a character as the setting for at least one episode, but 66.6-90% of the children over 5 did so. There was a steady increase from 50-80% over the age range in the use of at least one place change as an episode setting. None of the youngest group and only 2 children at 5.0-5.4 years had adequate settings for each unprompted episode; however at least 40% of the children in each group over 5.8 years did have adequate settings for all unprompted episodes. Yet the use of settings is not completely mastered in the age range sampled; 30% of the children in the two oldest groups still had 2 or more inadequate settings in their stories. In this context it is important to note that two of the adult narratives had one inadequate episode setting and one adult even had 2 inadequate settings in his story. The disregard for settings shown by children who do usually include this feature is probably due in part to their lack of attention to information other than actions and events; for both children and adults it suggests at least a temporary lack of concern for the listener's point of view.

Another difference between the story structures of the children and adults was the nature of the transitions between episodes. On one hand, the majority of all episode transitions in both the child and adult narratives, 80-87.9%, preserved the temporal sequence of scenes in the videotape. This suggests a general picture of recall in which the narrator seems to be able to "replay" the videotape before his mind's eye, skipping some scenes, but telling the others in the order of his "re-viewing." There was evidence that in this retrieval process, failures of memory tended to occur at points where there was a change of scene in the videotape. The interviewers used the prompt "sorede?" ("and then?") when the child paused for a long time, but prompts providing content clues were also necessary at certain points. From 77.7-85.7% of the content prompts were required at scene changes among the children through 6.8 years of age; this proportion increased to 100% among the 7 year olds. Thus memory failures were most common at points where there was a break in the background mental image recalled from the videotape; in general, a prompt such as "what about when they were eating cake?" was sufficient to recall the entire sequence of events which took place in that setting. Prompts giving only the subject, as in "what did Ikura do then?" were somewhat more likely to elicit further information from the same scene rather than a new scene. It
seems that to gain a new start in his retrieval of the input, the child usually needs to be given the image to which a particular sequence of events is tied. The significance of such imagery changes for recall can be seen in the adult narratives as well. Although no prompting was necessary, they often indicated verbally the points at which they were having memory problems by expressions such as "nan datta kke" ("what was it?"). Eight of the ten adults had such an expression at the beginning of the new episode, revealing their awareness of some difficulty in retrieving the next scene from the videotape.

However, the retrieval of scenes did not always follow the temporal sequence of the original story; there were reversals of the input sequence in both the adult and child narratives. In the adult narratives these reversals were usually just a re-ordering of the various mischief scenes. The adults seemed to be able to retrieve scenes having a certain theme in any order. In all cases the adult reversals were irrelevant to the plot, so that their temporal changes did not disrupt the basic structure of the narratives.

Although such unimportant and sometimes thematically based re-orderings occurred in the children's narratives as well, certain temporal reversals in their stories did, from an adult point of view, significantly change the plot. For example, one of the common types of reversal was apparently designed to conclude the narrative with events that fit the child's notion of an appropriate story ending. Some children seemed to feel that the story should end with Sazaesan's father arriving home from work at the end of the day, with the departure of Ikura and his father that night, or with the departure of Ikura's father after he drops in at Sazaesan's house the next day. The latter two scenes fit the "farewell" schema which some children had for the conclusions of narratives. They would reverse the order of events to place these scenes at the end, repeat them for a finale, or simply end the story prematurely with these scenes, as in example (4).

(4) 4.5 ...Sorede ne,...sorede ne,
...yre,...otoosan to kaete ne,
...mata kite ne,
...sayenara tte,
owari.
...Then you know,...then you know,
...(he) went home with (his) father you know,
...and (he) came again,
..."Goodbye," (he said),
(the) end.

None of the oldest group had such a schema-fitting ending, but 30% of the children at 5.0-5.4 years and 10% in each of the other age groups did.
Sometimes children's reversals of the videotape order of events were apparently triggered by a similarity between the mental images evoked by certain scenes. For example, in the second scene of the videotape, Ikura opens drawers in the children's desks, and later in the sixth scene while Sasaemon's mother is making dinner he over turns a drawer containing her best kimono. When telling the story, one child jumped from the dinner preparation back to scene 2 and the desk drawers despite the fact that he had already recounted that scene. Episode transitions based on such imagery associations led to leaps forward in the story line as well; this is probably a factor in example (1).

Temporal reversals were rare among the youngest group, although the child with the longest narrative had several, and another child tried to begin his narrative with the last scene from the videotape. 44.4-50% of the 5 year olds had temporal reversals which were not merely insignificant reorderings of mischief scenes. However, only 20% of the 6 and 7 year olds had such errors. Apparently toward the upper end of this age range the children were learning to avoid retrieving new scenes on the basis of misleading imagery associations and to be faithful to the temporal sequence of the original story even when it did not conform to familiar ending schemas.

In conclusion, an examination of young children's narratives not only reveals which aspects of story schemata are being learned during a particular period, but also suggests how the development of discourse skills is influenced by certain cognitive developments. Providing story introductions and episode settings, stating problems which will later be presupposed and resolving those which have been presented are acquisitions which depend on the child's attainment of a cognitive level which permits him to be concerned with the listener's ability to understand the story while he is performing the difficult task of narration. Acquisition of the temporal schema for episode transitions preserving the sequence of the original will depend on developments in memory, such as a decrease in dependency on visual or imagery-based connections in recall in favor of thematic links between episodes. Adults probably construct such thematic links during processing of the input, which helps them retrieve problems and resolutions and increases the number of new scenes which can be recalled without image-evoking prompts. Thus developments in narrative structure up to 7.4 years of age can be seen as an outgrowth of changing modes of processing and recall, cognitive de-centereding, and a growing knowledge of the cultural schemata for narratives.

Reference