

Does the title help children to understand a text, to recall it and to produce inferences?

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1. THEORETICAL CONSIDERATIONS

The inferential activity is essential to understand a text. It contributes to the establishment of the coherence and to the construction of the representation of the text. Paris & Carter (1973) underscore that between 7 years and 7 months old and 10 years and 6 months old, children are quite able to integrate several distinguished sentences by using inferences. However, recent works showed that children are really able to produce inferences from 9 to 10 years old (Schmidt & al., 1984). The comprehension of a text can be influenced by the subject's knowledge, the text and the context and there are also cotextual variables: the title of a text is the most typical. It facilitates the process of comprehension. Our study focused on the effect of the title on text comprehension. Thus we compared the ability of three groups of subjects (7, 9 and 11 years old children) to understand a narrative text and to recall it after a different delay (immediate or two weeks later). We make the predictions that the title will help the children to recall the text and to produce inferences. In a previous work, we have showed that children are able to recognize inferences from 7 years old (de la Haye & al., 1996) and in this work, we are interested by the ability of children to recall bridging inferences (necessary for the local coherence) and elaborative inferences (necessary for the global coherence).

2. EXPERIMENT

2.1. Subjects

60 subjects have participated to this experiment.

TABLE I: Characteristics of subjects.

	7 years old	9 years old	11 years old
Total number	20	20	20
Younger	6;11	9	10;7
Older	8	10	11;5
Mean age	7;5	9;6	11

2.2. Material

All subjects, whatever their age, heard the same text. It is a narrative text extracted from a lecture book. The teachers have verified that the text was adapted to the children's capacities.

Learning material

La sorcière qui fait du vélo

La sorcière Séraphine aimait beaucoup rouler à vélo. Surtout dans les descentes! Elle pouvait rouler très vite sans pédaler. Mais sa tenue de sorcière n'était pas très pratique. Le vent emportait son chapeau pointu et soulevait ses jupons. Un jour, le vent particulièrement fort souleva les jupons plus encore que d'habitude. Séraphine, aveuglée, alla s'écraser contre un mur. Une grosse bosse se forma sur sa tête. Séraphine dut mettre un pansement sur son nez qui saignait. Son vélo était réduit en mille morceaux. Séraphine décida de ne plus jamais rouler à vélo habillée comme une sorcière. Maintenant, elle porte toujours un pantalon noir et un foulard à fleurs sur la tête. Et ceux qui la voient sur la route, pédalant sur son vélo tout neuf, ne peuvent imaginer que c'est une sorcière.

2.3. Method

A preliminary stage, with 30 children different of those who have participated to this experiment, permitted us to select a title. After heard the text, the subjects had to produce a title and we have selected the title which had the more great frequency: «La sorcière qui fait du vélo».

In each age group, 10 subjects heard the text with the title and 10 subjects heard it without the title. The passation was individual. The subjects heard the text twice.

After the learning stage, the subjects were submitted to two recall tests:

- an immediate recall test: immediately after the reading of the text,
- a delayed recall test: 2 weeks after.

3. RESULTS

The data were analyzed by a 3 (7, 9 and 11 years old children) × 2 (with and without title) × 2 (immediate and delayed recall) analysis of variance (ANOVA). We made three analysis: one for the global production (it concerned all propositions) and two for the inferences (one for the bridging inferences and one for the elaborative inferences).

3.1 Global production:

Figure 1 shows the mean number of propositions recalled by all subjects in conditions with and without title when the recall is immediate and delayed.

Figure 1: Mean number of propositions recalled by 7, 9 and 11 years old children in conditions with and without title in immediate recall (I) and delayed recall (D).

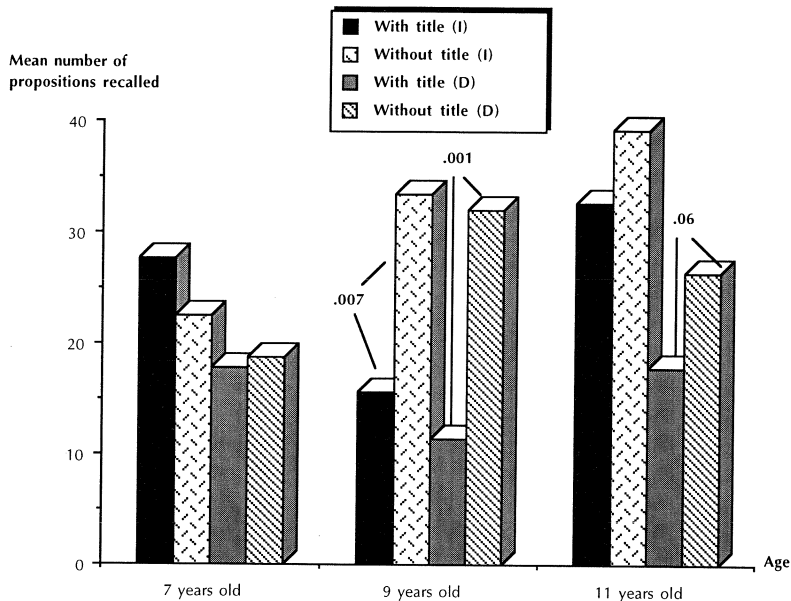


Figure 1 shows that the 11 years old children recall more propositions than the 7 and 9 years old children ($F(2-54) = 3,160$; $p < .05$).

We can note any effect of title on 7 years old children's performances.

We can observe a negative effect of title on 9 years old children's performances when the recall is immediate and delayed.

Finally, we can note any effect of title on 11 years old children's performances when the recall is immediate and a negative effect of title when the recall is delayed.

3.2. Bridging inferences:

Figure 2 shows the mean number of bridging inferences recalled by all subjects in conditions with and without title when the recall is immediate and delayed.

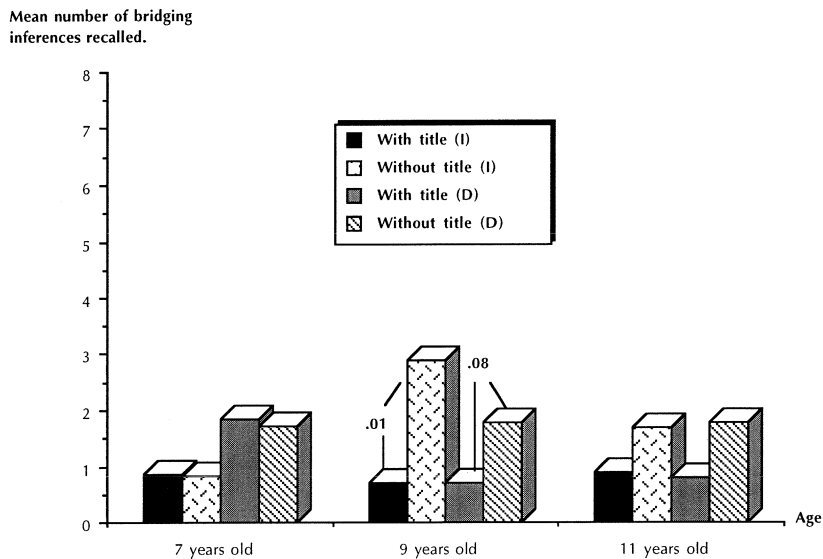
Figure 2 shows a low recall of bridging inferences whatever the age.

We note any effect of title on 7 and 11 years old children's performances whatever the moment of recall.

We can observe an effect of title only on 9 years old children's performances when the recall is immediate and delayed.

The analysis of variance didn't reveal any effect of delay. Whatever the moment of recall, all subjects recall approximately the same number of bridging inferences ($F(1-54) = 1,847$; p : NS).

Figure 2: Mean number of bridging inferences recalled by 7, 9 and 11 years old children in conditions with and without title in immediate recall (I) and delayed recall (D).



3.3. Elaborative inferences:

Figure 3 shows the mean number of elaborative inferences recalled by all subjects in conditions with and without title when the recall is immediate and delayed.

The recall of elaborative inferences is influenced by the age ($F(2-54) = 4,639$; $p < .01$). The 11 years old children recall more elaborative inferences than the others (7 and 9 years old children).

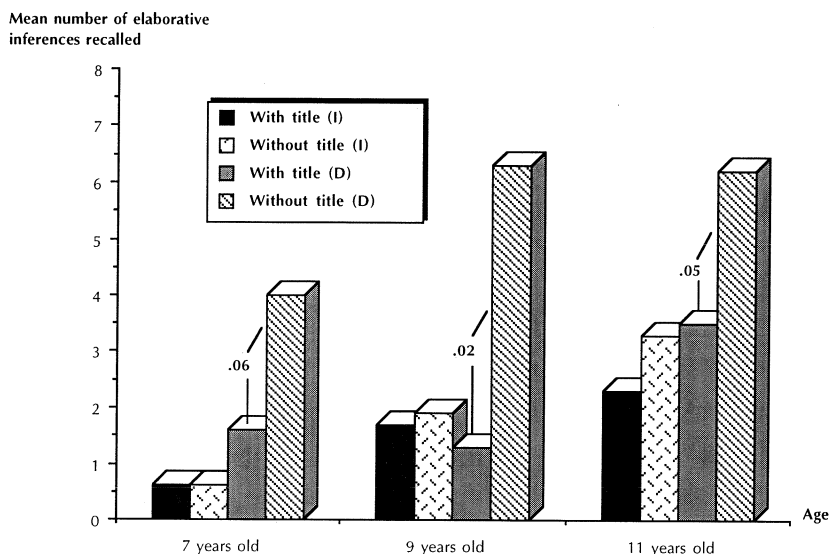
The analysis of the data revealed an effect of title ($F(1-54) = 10,927$; $p < .001$). When the subjects hear the title, they recall less elaborative inferences than when they don't. However, this effect appears only when the recall is delayed. When the recall is immediate, the analysis didn't reveal any effect of title.

4. CONCLUSION

The title of a text doesn't act on the same way on all subjects. We can note a negative effect of the title on global production only by 9 years old children. We can explain this negative effect of the title by the fact that these subjects elaborate a certain situation model when they hear the title. If this situation model doesn't agree exactly with the situation model of the text, the two information sources can interfere. The 9 years old children seems to be nearest to the surface structure than the others.

Whatever the age of subjects, the recall of bridging inferences is comparable. We can

Figure 3: Mean number of elaborative inferences recalled by 7, 9 and 11 years old children in conditions with and without title in immediate recall (I) and delayed recall (D).



explain this result by the fact that these inferences are essential for the establishment of the text coherence (Kintsch & van Dijk, 1978 ; van Dijk & Kintsch, 1983).

The elaborative inferences are the situation model 's expression. The subjects recall more elaborative inferences after a delay. Immediately after the reading of the text, when the subjects recall it, they recall more original sentences than intrusions like inferences. This result shows that the establishment of situation model forms by various stages and enriches with time. To elaborate the situation model, it is necessary for children to have a delay.

5. REFERENCES

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