

Inter-Episodic Relationships in Children's Narrative

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The imaginative narrative is one of the first forms of discourse which young children encounter. They meet it in the stories which they are told both at home and at school and its organisational principles underlie most of the early reading materials with which they come into contact in the course of their first years of education. Likewise, it is among the earliest types of sustained discourse organisation that they themselves are asked to encode in the written form. It is, therefore, of considerable importance that the teachers of young children develop an awareness of the main features of narrative discourse, an understanding of the way in which those discourse features may be organised in order to create a coherent text and some knowledge of the likely developmental progression of the child's awareness of narrative discourse organisation. Such knowledge is essential, for example, if teachers are either to pinpoint a specific problem of comprehension caused by a complexity of discourse organisation in a text that a child is reading or to offer truly instructive assistance to a pupil having difficulty in organising the material contained in a narrative text of his or her own creation. Furthermore, an awareness of which features of narrative organisation may be acquired by children at particular stages in their developmental progression enables a teacher to plan a programme of work which has built into it opportunities for children to attempt in the course of practical and meaningful tasks ways of organising narrative material which they have not previously explored.

This paper considers just one feature of narrative discourse organisation, the way in which the 'episodes' which comprise a narrative text are organised in relation one to another. It compares that organisation as it is exemplified by two sets of data, the first containing twenty-three published texts written by adults

for children, the second twenty-three texts written by children of between six and eleven years of age. It then goes on to suggest how the insights thus gained into this particular aspect of discourse organisation can be of assistance to a teacher in respect of both the assessment of pupils' texts and the planning of future work programmes.

An important feature of many theories of discourse analysis is the premise that a narrative can be sub-divided into smaller constituents known as 'episodes'. Among those who have suggested this are Rumelhart (1975, 1977), Longacre (1976, (with Levinsohn) 1978, 1983), Botvin and Sutton-Smith (1977), Mandler and Johnson (1977), Applebee (1978), van Dijk and Kintsch (1978), Pollard-Gott, McClosky and Todres (1979), Stein and Glenn (1979), Black and Bower (1979, 1980), Kress (1982), Wade (1983, 1984), and Kroll and Anson (1984). Various means of delimiting the extent of any particular episode have been posited and basically these means fall into two groups, those which define the episode by reference to its own internal constituents, (Rumelhart (1975, 1977), Mandler and Johnson (1977), Stein and Glenn (1979) and those which make reference to specific linguistic markers which have been observed, in the course of numerous analyses, to occur with some frequency at the onset of a new episode (Longacre (1976, (with Levinsohn) 1978, 1983).

Neither method of analysis is entirely satisfactory, but for the purpose of this paper the second option has been adopted. Thus, any stretch of text discussed here as an episode has been defined as such by reference to markers of episode which occur at its onset, albeit with a certain amount of subjective intuition brought into play as well.

The work reported here forms part of on-going research concerned with the awareness of narrative organisation demonstrated by children in the stories that they write as compared with the models of narrative organisation exemplified in the texts of published authors writing for children. A first analysis of the data collected from children of between six and eleven years of age indicated that even young children have a well developed concept of episode and clearly delimit the extent of these constituents in their

narratives. Nicky's story, quoted below, for example, is divided into a setting section followed by two episodes both of which are marked at their onset by a time-horizon. In addition, Nicky also marks their conclusion, as he endstops only at the finish of each episode. Here, as in all examples taken from the corpus of children's work, the text is presented uncorrected.

A Rabbit called bill

Once upon a time there was a rabbit called bill and bill lived in a box in the Street. One day he went for a hop in the field over the road and when he went in the field he found other rabbits one called Jane and one called peter they were in cages he told them that he would get them out tonight. That night he was there he jumped up and started to bite the hinges of the cage and finally he broke through the cage and they were free.

Nicky 9yrs.

When the children's stories were compared with those written for children by published authors there was no statistical significance between the frequency with which the two groups clearly marked the onset of a new episode. It would seem, therefore, from this analysis, that the concept of the episode is acquired at a very early stage in the child's developing awareness of narrative organisation, a conclusion which is supported by the findings of Kress (1982) and Wade (1983, 1984).

A second analysis was therefore carried out in order to establish whether or not there was any statistical significance between the two groups in the manner in which the episodes within a text were related one to another as it was felt that this might provide an insight into further stages of development in respect of the episode.

In order to carry out such an analysis it was first necessary to establish a model which would provide a satisfactory representation of the relationships pertaining between the episodes contained in any narrative text. A consideration of only immediately adjacent episodes intended to elicit an index of frequency for the occurrence of various

types of inter-episodic relationships proved to be less than satisfactory, primarily because it did not provide an adequate means of analysing those narratives in which an episode was either caused or enabled by or ran concurrent with a second episode to which it was not immediately prior or subsequent in the printed text. Thus, for example, it was not possible to show by this method of analysis that the episode in **Alfie Gets in First** (Hughes: 1981), part of the corpus of published texts, in which the small boy, Alfie, fetches his chair and opens the door occurs simultaneously with two preceding episodes rather than with just one, nor that P.C. Plod's suggestion to Noddy in **Noddy Makes Everyone Cross** (Anon: 1979) that someone has stolen his bell is the cause of not one but of four subsequent episodes. Therefore, because of the obvious inadequacy of such a system, an alternative method of analysis was sought.

One possible model was suggested by the research of Trabasso, Secco and Van Den Broek into causal cohesion and story coherence (1984). They propose a method of analysing narratives according to the causality relations pertaining between various propositions. They formally define the conditions for these relations as

1. A is sufficient for B in the circumstances and causally prior to B provided that if A is put into the world in the circumstances and the world runs on from these, B will occur.
2. A is necessary in the circumstances for B and causally prior to B provided that if A were kept out of the world (in the circumstances referred to) and the world were allowed to run on from there, B would not occur.

These definitions allow the drawing up of a 'causal network' for any narrative, in which the conceptualisations of the events are shown as nodes and the inferences as arcs. From this 'causal network' a 'causal chain' comprising the important events in the narrative can then be found, using specified criteria for opening, continuing and closing the chain.

Events which are not contained on the 'causal chain', but are part of a pathway that does not continue or lead to goal-satisfaction are regarded as 'dead-end' events (1984:87) a term borrowed by

Trabasso et al from Schank (1975). It is therefore possible to distinguish between those propositions which belong on a 'causal chain' and those, which in relation to the overall discourse pattern, are 'dead-end' material.

This particular form of analysis does have its weaknesses. The texts analysed as examples in the original paper (1984) are all based on artificially created data and consequently the effectiveness of the model in coping with empirically collected material is not demonstrated. Neither does the original form of analysis allow for more than one relationship holding between two propositions. However, despite these objections, because of its emphasis upon a network rather than upon a linear representation of relationships, the work of Trabasso et al does suggest a possible approach to the representation of inter-episodic relationships in narrative texts, a representation in which the conceptualisations of the episodes are shown as nodes and the relationships between those episodes as arcs. In addition, as not all the inter-episodic relations are necessarily those of causality, arcs can be labelled in order to indicate the nature of the relationship pertaining between the two nodes that they join, 'C' indicating a causal relationship, 'E' one of enablement, 'S' a simultaneous relationship and 'F' an instance where it appears possible that the episodes could reasonably have been reversed without in any way altering the logical progression of the narrative.

A description of the analysis of **Little Red Riding Hood** (Southgate: 1972) will help to indicate how this method was applied.

As it is encoded in the **Ladybird Well-Loved Tales** series, **Little Red Riding Hood** comprises an initial setting section and eight subsequent episodes. The setting is in an enablement relationship with the first episode which begins 'One day Little Red Riding Hood's mother called her' (1972:10) and which concerns Little Red Riding Hood's mother sending the child to visit her sick grandmother. (Fig. 1)

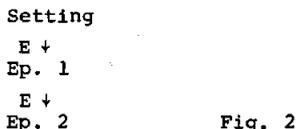
Setting

E ↓

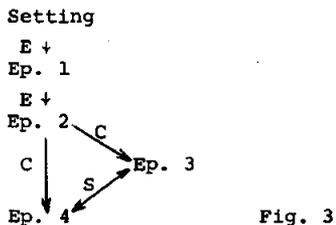
Ep. I

Fig. 1

(The diagrams used to illustrate this and other networks are topological, and horizontal, vertical and diagonal relationships are of no significance.) Episode I then enables Episode 2 which details Little Red Riding Hood's entrance to the forest and her meeting with the wolf. (Fig. 2)

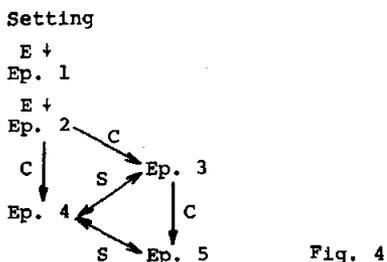


During the course of Episode 2 the wolf decides that he will go to grandmother's cottage himself and therefore suggests to Little Red Riding Hood that rather than hurrying on her way she should take time to enjoy being in the forest. Thus, Episode 2 causes both Episode 3, which begins 'Little Red Riding Hood did as the wolf suggested and looked around her' (1972:22) and also Episode 4 the episode in which the wolf, complete with ill-intentions, arrives at grandmother's cottage. In addition, Episode 3 and Episode 4 are in a simultaneous relationship as the events which they contain happen concurrently. (Fig. 3)

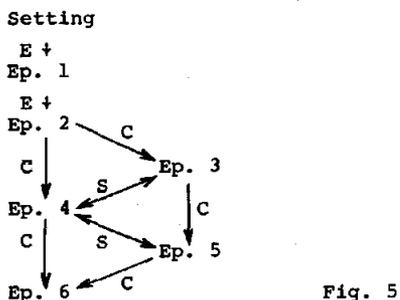


Also in a simultaneous relationship with Episode 4 is Episode 5, which begins 'Meanwhile Little Red Riding Hood had wandered far from the path' (1972:30) and in which the child gathers flowers before continuing on her original errand. However, Episode 5 is at the same time in a causal relationship with Episode 3, the episode in which Little Red Riding Hood had first decided to linger in the

forest. (Fig. 4)



Episode 6 beginning 'When Little Red Riding Hood arrived at her grandmother's cottage' (1972:32) is caused by both Episode 4 and Episode 5, Episode 5 containing the girl's decision to go on her way when she remembers her grandmother lying ill in bed (1972:30) and Episode 4 having set up the situation to which she then reacts in Episode 6. (Fig. 5)



The events in Episode 6 then cause those in the following episode which begins 'Just at that time Little Red Riding Hood's father was passing near by' (1972:40) and the story is concluded by the eighth episode which is concerned with Little Red Riding Hood's return home. Thus, the completed network is that illustrated by Fig. 6.

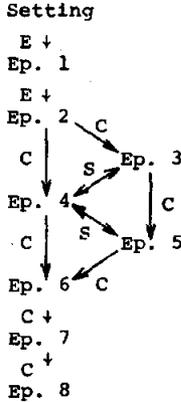


Fig. 6

Needless to say this method of analysis is not, itself, without drawbacks. It is still necessary to build into the model a means of expressing the existence of two different types of relationship between the same pair of episodes. As Hoey points out it is 'quite possible for a pair of clauses to be semantically related in a number of different ways' (1983:21) and there is no reason to suppose that the same is not true of a pair of episodes. Nor is it difficult to represent such a dual relationship in terms of a network. A diagram such as that in Fig. 7 will suffice.



Fig. 7

However, what such a diagram cannot show is that in relationships represented as above not all the propositions contained in Episode 2 are necessarily in both a simultaneous relationship and a causal relationship with Episode 3. Some may form part of only one of the two relationships. Similarly, where one episode causes the occurrence of two others it may be that it is events in the first half of the initial episode which cause one of the subsequent episodes and those in the second half the other, but again this is not made apparent by

the use of this particular form of analysis.

Nevertheless, the advantages of being able to represent the complexity of inter-episodic relationships not only more accurately than by means of a linear analysis, but also in a format which is immediately comprehensive, more than outweigh any disadvantages. There is, for example, no longer any difficulty in displaying the complex relationships between the various episodes in *Alfie Gets In First* (Hughes 1981). (Fig. 8)

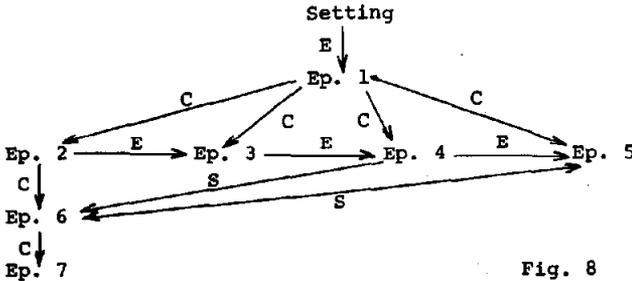


Fig. 8

Episode 6 is the episode (partially subsumed within the illustrations) in which Alfie fetches his chair and opens the front door. This is causally linked to Episode 2 because it is in that episode that his mother suggests such a course of action, while also being linked simultaneously to Episodes 4 and 5 both of which take place on the outside of the door at the same time as Alfie is in the act of fetching the chair on the inside.

Use of the network also makes it possible to calculate a co-efficient of complexity for each episode, thus providing a statistical measure of any given narrative's complexity. Such a co-efficient is arrived at by finding the number of episodes by which any particular episode is caused or enabled or with which it is in a simultaneous relationship and stating the total as the first figure, while finding the second figure by calculating the number of episodes which the episode in question itself causes, enables or runs concurrent with. Thus, for Episode 2 in *Little Red Riding Hood* (Fig. 9) the co-efficient of complexity would be 1, 2.

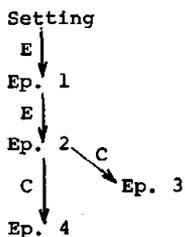
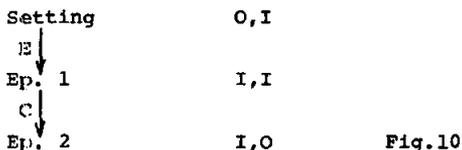


Fig. 9

Having drawn up the networks for the corpus of children's texts and also for that of the published adults' texts written for children, reference to these co-efficients makes possible a valid statistical comparison between the two sets of data and it is here that a significant difference between the complexity of discourse organisation employed by the two groups becomes apparent. The children include more episodes with the co-efficients O,I I,O or I,I than do the writers of the published texts and the difference is of statistical significance. Episodes which have these co-efficients are characteristic of the more simply organised narratives in which each episode is directly related only to those to which it is immediately adjacent. Thus, the representation of a narrative that was composed entirely of such episodes would be linear in format. Nicky's text, quoted above, provides an example of such a story. The first episode is in an enablement relationship with the setting and the second in a causal relationship with the first. Thus, the text can be represented by Fig. 10.



There is a statistically significant difference between the number of such linear representations resulting from the analysis of the children's stories when compared with the analysis of the published

writers' texts. The children produce far more. Conversely, the published texts contain a significantly greater number of episodes with co-efficients which include 2 or a higher figure, thus indicating a tendency on the part of their authors to write more complex stories in which the inter-episodic relationships have to be represented by a network system. Thus, it is evident that one major difference between the discourse organisations of the stories written by the children and that exemplified in the texts of the published writers is the comparative simplicity of the inter-episodic relationships in the children's work.

At this point it is necessary to add a cautionary note. It must be borne in mind that the representations described in this paper account for only one specific type of logical relationship. That the discourse organisation within a story may be expressed by means of a linear format as opposed to requiring a network system does not, however, necessarily imply that all the relationships at work within that text are of a simple nature. **The Very Hungry Caterpillar** (Carle 1970), for example, which is comprised of a setting followed by a series of episodes each of which encodes the events that occur on one of a number of succeeding days, is represented according to the model described here as in Fig. 11. (see text in Appendix)

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Setting
E +
Ep. 1
C +
Ep. 2
C +
Ep. 3
C +
Ep. 4
C +
Ep. 5
C +
Ep. 6
C +
Ep. 7
C +
Ep. 8
C +
Ep. 9
C +
Ep. 10

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Fig. 11

that Sally squeaked, "As usually he didn't he me.

Tanya 9yrs.

From their position within the narrative it is possible for the reader to infer that these propositions constitute a separate episode which takes place during the birds' long winter sleep. However, when an attempt is made to analyse the inter-episodic relationship of the whole narrative and to draw up a representation of those relationships there is insufficient information within the text to enable those propositions to be accurately included. Indeed, it is only intuition which marks them off as a separate episode in the first instance, for part of the difficulty which the reader encounters in integrating this propositional sequence into the narrative as a whole stems from the fact that it is not prefaced by any episode markers. The presence of a time-horizon, for example, would at least indicate its relationship with the other episodes in terms of temporal organisation and establish an enablement relationship between it and the preceding episode. However, such a marker is absent. An understanding of the need to clarify the relationships between these propositions and their preceding and succeeding episodes would present the teacher with a specific teaching point upon which to focus any discussion with the writer and would enable a positive contribution to be made to that writer's own awareness of this particular feature of discourse organisation.

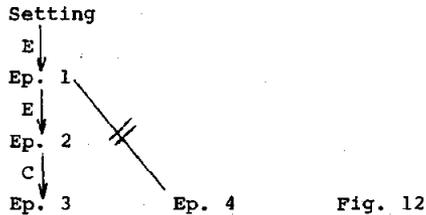
A different type of problem occurs in the story written by seven year old Claire. In her text an enablement relationship is signalled between the last two episodes which is denied by information supplied earlier in the narrative. Claire's penultimate episode, Episode 3, is located in Ireland where the narrator is on holiday. Her final episode, apparently still located in Ireland, begins

then I heard someone calling me when I turned round I saw
my friend

Claire 7yrs.

and the two children then proceed to have a conversation about a

disco. However, in Episode 1 Claire has told her reader that the friend has been left behind in England. Thus, in the terms already established within the story, it is not possible for Episodes 3 and 4 to stand in the enablement relationship signalled by the marker 'then'. Episode 1 denies the possibility. This denial of one episode by another can be indicated by the use of the symbol \perp , so that the representation of Claire's story is as in Fig. 12.



For the classroom teacher, access to the concept underlying such a representation makes it possible to discuss certain strategies with the writer which could help her to overcome the problem she has created. The teacher could, for example, draw the child's attention to the information which creates the difficulty and suggest that Episode 1 be re-drafted to take into account Episode 3 and Episode 4. A second possibility that could be offered is the inclusion of an additional episode between 3 and 4 to include new information which makes it possible for the existing Episode 1 to stand in a viable relationship with the existing final episode, the new episode thus becoming Episode 4 and the previous Episode 4, Episode 5. In either instance it is the teacher's explicit awareness of which discourse organisation features are causing the problem that makes such a positive contribution possible.

There is a second way in which a teacher benefits from an awareness of those features of discourse organisation which influence the types of inter-episodic relationships encoded in a text. This is the assistance such an awareness provides in drawing up a programme of work which will create opportunities where it is not only possible but also appropriate that a child should produce a text that requires

representation by means of a network.

One useful means of promoting such an opportunity is to encourage children to write a story which features two or more important characters or groups of characters, for where two or more characters of equal or compatible importance are involved in a story it is always possible that the need will arise to encode events happening to each one of them at the same time, but in different locations, thereby automatically creating a 'network text'. Botvin and Sutton-Smith (1977) suggest that this is something which children find particularly difficult and research carried out concurrent with that at present under discussion corroborates their findings. This indicates one possible reason why children do not write many 'network texts', for if they do not attempt stories in which several important characters appear then the opportunities for them to produce texts which have to be represented by a network must be significantly lessened.

Children can be encouraged to introduce more characters into their stories by means of their own analysis of texts with which they are familiar and in which a number of important participants interact. **Little Red Riding Hood** would be one example of a written text, but perhaps of greater use in this instance are videos of television films. In the context of a **Dr. Who** adventure even very young children quite happily handle the relationships between events occurring at the same time in two very different parts of an alien world.

One class of ten year olds, stimulated by such analyses, created a list of possible situations where two groups of characters might be functioning in different locations and yet the reader still need to be aware of the simultaneous activities of both. Their list could be classified into two main themes, the hunter and the hunted and that of the quest which is pursued by more than one person. Of the stories which they wrote following this discussion it was necessary to represent 30% by means of a network system. A far higher percentage than had previously been the case.

Whether or not primary children, having being helped to develop a conscious awareness of the writer's organisational option of

encoding within separate episodes two or more simultaneously occurring events, can then learn to use that knowledge to deliberately craft and shape their stories, remains to be seen. However, it would seem to be the case that an understanding of the relationship between the episodes of a narrative text is a feature of discourse organisation subject to a process of development during the primary years of schooling and that it is therefore an area upon which teachers might profitably focus their own study when attempting to extend their ability to assist children in the growth of narrative awareness.

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APPENDIX

THE VERY HUNGRY CATERPILLAR

(E. Carle, 1980)

In the light of the moon a little egg lay on a leaf.

One Sunday morning the warm sun came up and pop, out of the egg came a tiny and very hungry caterpillar.

He started to look for some food.

One Monday he ate through one apple. But he was still very hungry.

On Tuesday he ate through two pears, but he was still very hungry.

On Wednesday he ate through three plums, but he was still very hungry. On Thursday he ate four strawberries, but he was still hungry.

On Friday he ate through one piece of chocolate cake, one ice cream cone, one pickle, one slice of Swiss cheese, one piece of Salami, one lollipop, one piece of cherry pie, one sausage, one cupcake, and one slice of watermelon.

That night he had a stomachache.

The caterpillar ate through one nice green leaf and after that he felt much better.

Now he wasn't hungry any more. He was a big, fat caterpillar.

He built a small house, called a cocoon, around himself. He stayed inside for more than two weeks. Then he nibbled a hole in the cocoon, pushed his way out and....

HE WAS A BEAUTIFUL BUTTERFLY.

(Colourful picture of a big butterfly)