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Author(s): Edith L. Bavin and Tim Shopen

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THE DEVELOPMENT OF NARRATIVE BY WARLPIRI CHILDREN

Edith L. Bavin, LaTrobe University
Tim Shopen, Australian National University

1. INTRODUCTION. As children grow older and mature linguistically, we assume they will show increased sophistication in grammatical structures as well as vocabulary. In addition, the relationships between propositions in a narrative are likely to be expressed more clearly by such means as foregrounding and backgrounding. However, as Karmiloff-Smith (1981) has pointed out, a child will not be able to organize events into a structured narrative until the necessary cognitive capacities for organization have developed.

Peterson and McCabe (1983) discuss three approaches to analyzing children's narrative. The high point analysis focuses on the build-up of events to a high point, after which there is some resolution. The episode analysis concentrates on the problem-solving nature of narrative: a problem is established, goals are set, the protagonist attempts to achieve these goals, and there is some resolution. We have found this analysis to be useful in describing the stories we have collected. Finally, the syntactic dependency approach concentrates on the syntactic relationships among propositions, rather than their context.

These three approaches have been used generally in describing children's recapitulations of past experience, or their retelling of stories. The narratives we collected from 30 Warlpiri children are not retellings of familiar stories nor recapitulations of past experience. They were elicited using picture prompts, and since the children had not seen the pictures before and only saw one at a time, they could not plan ahead for the stories they told. We expected, therefore, that the narratives would not necessarily reflect the most cohesive structures. We did, however, expect to find out at what age the children started to relate events, and which linguistic means they used to show these relationships. We deliberately did not ask the children to tell a story since the emphasis was on when the children would relate the events in the pictures, organize the information, and relate this organization to the linking and focussing morphology available in Warlpiri.

2. ADULT DISCOURSE. Before discussing the study in detail, we will briefly describe some of the discourse features of standard Warlpiri. It is basically a free word order language. Although it is difficult to make any predictions about when adult speakers use one word
order over another, adult speakers do sometimes use word order for stylistic reasons. For example, both initial and final position may provide a focussing effect. An example from Laughren (1984) is given in (1). Note that wararrji is both in initial and final position.

1) Wararrji, ngula -ji watiya ka wariri manu creeper, that -TOP plant IMPF wrap around and wari-yani yukuri-yukuri-nyayirni wararrji -ji. climb green -green -very creeper -TOP 'Wararrji, it wraps around and climbs upon trees and is very green wararrji is.'

A restriction on word order is the position of the cross reference markers which indicate the person and number of core arguments. These cross reference markers appear in second position; they are attached to an auxiliary base\(^2\) when there is one, as in (2); otherwise, they are attached to the first element of the clause, as in (3):

2) a. Luwarni ka -rna marlu (ngajulu-rlu). shoot IMPF -1SGSU kangaroo I-ERG 'I am shooting the kangaroo.'

3) a. Luwarnu -rna marlu.
   shoot(PAST) -1SGSU kangaroo
   'I shot the kangaroo.'

   b. Marlu-rna luwarnu.
   'I shot the kangaroo.'

   c. Luwarnu.
   shoot(PAST)
   'He/She/It shot him/her/it.'

Note that the third person singular subject and object cross reference markers are \(\emptyset\), as illustrated above in (3c).

An argument may be topicalized into clause initial position as in (4b). Here karnta 'woman' is topicalized (as indicated by the position of -lu, '3rd plural subject') and so the ergative case marking is optional (Hale p.c.)

   tell(PAST) -PLSU woman -ERG anger -ERG
   'The women told him off.'

   b. Karnta ngarrurnu -lu kulu -ngku.
   woman tell(PAST) -PLSU anger -ERG
   'As for the women, they told him off.'

Morphemes that may be used for focussing include the following:
-ju/-ji\(^3\) -assumed by the speaker to be known by the hearer
-jala -emphasis/contradiction
-nya -presentative

Those that may be used for linking include:
manu 'and'
ngula 'then'
kala 'but'
kuja 'thus'
ngula jangka 'after that'
-lku/-lki 'now, then' (used mainly on predicates)

Warlpiri has a series of independent pronouns although for third person the definite determiners are used as pronouns. For example:
nyanangu -'the aforementioned'
ngula -antecedent appears in previous clause
yangka -antecedent is more distant (= 'The one you know about')

Other properties of Warlpiri that are relevant to discourse organization include the following:
  a. subordination: information may be backgrounded in subordinate structures
  b. aspect: a distinction may be made between completed and on-going action
  c. particles: the speaker's attitude may be signalled with the use of a number of propositional particles, e.g., nganta 'it seems'
  d. zero anaphora: core arguments do not have to be overt in the clause (the cross-reference system provides information on person and number).

So the language provides a number of means for linking clauses and propositions into a narrative and/or focussing upon specific elements in a clause.

In our study, we hypothesized that the narratives from the older children would display more of the morphological properties discussed above; we made no predictions about word order. We hoped, in fact, to find some revealing trends in the use of word order to organize narrative.

3. METHOD. Following the methodology described in Karmiloff-Smith (1981), we collected narratives from 30 Warlpiri children in the Yuendumu community. We presented each child with pictures bound into book form. The first 'book' contained 6 pictures depicting the following:
  1. Man with rifle; tracks on ground.
  2. Kangaroo by rocks.
  3. Man sees kangaroo.
  4. Kangaroo sees man moving with his rifle.
  5. Man stops and shoots as kangaroo runs.
  6. Kangaroo lies on ground as man approaches.

The second 'book' also contained 6 pictures depicting the following:
  1. Boy walking.
2. Boy approaches old man with bird.
3. Exchange of bird.
4. Boy walks away with bird.
5. Bird is flying away.

The subjects ranged in age from 4:10 years to 12:4 years. Fifteen children were under 9, and 15 were older, as indicated in Table 1:

<table>
<thead>
<tr>
<th>Age</th>
<th>N</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:10</td>
<td>1</td>
<td>F=1</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td>F=3, M=1</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>F=1, M=2</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>F=1, M=3</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>F=2, M=1</td>
</tr>
<tr>
<td>9</td>
<td>5</td>
<td>F=3, M=2</td>
</tr>
<tr>
<td>10</td>
<td>3</td>
<td>F=2, M=1</td>
</tr>
<tr>
<td>11</td>
<td>5</td>
<td>F=3, M=2</td>
</tr>
<tr>
<td>12</td>
<td>2</td>
<td>F=1, M=1</td>
</tr>
</tbody>
</table>

Each child was shown the first picture of Book 1 and was asked, 'Nyarrpa-jarri ka?' (What is happening?). After the child responded, the page was turned; no other prompt was given. The pages were turned at the end of each utterance. When Book 1 had been completed, the child was praised and the second book was started. The third story followed. Two subjects (15 and 17) were not asked to respond to Book 3.

The third 'book' contained 12 pictures; these were taken from a published book and they depicted part of a traditional aboriginal story (although not traditional to the Warlpiri tribe). These 12 pictures were more detailed than those for the earlier stories. They show a giant dingo chasing two men; the men then chase and spear the dingo; other people come up to see the dead animal.

4. RESULTS. For the youngest subjects, short descriptive utterances were generally given in response to the pictures. For example, the responses from subject 1 (4:10 years, female) consisted of just 4 verbs and 2 nouns. The responses from subject 2 (5:3 years, male) are similar and are given below. In contrast, subject 3, also 5:3 years, (female), included more orientation and evaluation material; she used the past continuous verb form to provide background information and the future tense to make predictions. The last utterance for story 2 included an inference (=He is going along for the bird). Her story 3 contained details about the setting, and the utterances averaged more than 9 morphemes for
Subject 2, Story 1 (5:3 years):

1. Marlu -ku.
   kangaroo -DAT
   'For kangaroo.'
2. Kani ka, yani ka.
   ? IMPF go IMPF
   'It is going.'
3. Luwarni ka.
   shoot IMPF
   'He is shooting it.'
   see(PAST)
   'It saw him.'
5. Parnkami ka.
   run IMPF
   'It is running.'
   shoot(PAST)
   'He shot it.'

Sample Texts

Subject 2, Story 2 (5:3 years):

1. Yani ka.
   go IMPF
   'He is going.'
2. Wangkami ka -rla.
   talk IMPF-DAT
   'He is talking to him.'
3. Yinyi ka -rla.
   give IMPF-DAT
   'He is giving it to him.'
   carry IMPF
   'He is carrying it.'
5. Parrparija.
   fly(PAST)
   'It flew.'
   go IMPF
   'He is going.'

Subject 2, Story 3 (5:3 years):

1. Yani-rni ka -pala.
   go -DIR IMPF-DUSU
   'The two are coming.'
2. Nyanyi ka.
   see IMPF
   'She is looking at it/
   It is looking at her.'
3. Parnkam(i) ka -pala.
   run IMPF-DUSU
   'The two are running.'
4. Yani ka.
   go IMPF
   'It is going.'
5. Parnkami-rni ka.
   run -DIR IMPF
   'It's running this way.'
6. Parnkam(i) ka -pala.
   run IMPF-DUSU
   'The two are running.'
7. Luwarn(i) ka -pala.
   shoot IMPF-DUSU
   'The two are shooting it.'
8. Luwarn(i) ka -pala.
   shoot IMPF-DUSU
   'The two are shooting it.'
9. Luwarni ka.
   shoot IMPF
   'He is shooting it.'
10. Luwarni.
    shoot
    'Shooting.'
11. Luwarnu -lu.
    shoot(PAST) -PLSU
    'They shot it.'
12. Luwarni ka -lu.
    shoot IMPF-PLSU
    'They are shooting it.'

(Note: the parts of Warlpiri words in parenthesis were not articulated.)
SAMPLE TEXTS

Subject 3, Story 1 (5:3 years):

1. Panyu -1pa.
come(PAST) -CONT
'He was coming.'

2. Pankanjanu -lp(a) kangkaru.
run along(PAST) -CONT kangaroo
'The kangaroo was running along.'

3. Kangkaru kapu luwa(rni) rayipul-kurlu__.
kangaroo FUT shoot rifle -with __
'He will shoot the kangaroo with a rifle.'

kangaroo FUT rifle -with shoot
'He will shoot the kangaroo with a rifle.'

kangaroo IMPF-DAT go -DIR Kapu mijī-(lu)warni.
FUT miss shoot
'He is coming towards the kangaroo. He will miss it.'

6. Kap(u) kangkaru luwarni.
FUT kangaroo shoot
'He will shoot the kangaroo.'

Subject 7, Story 2 (6:6 years):

1. Wati ka yani.
man IMPF go
'The/A man is going.'

2. Wati ka payirni purlka.
man IMPF ask old man
'He is asking the man, the old man.'

3. Jurlpu ka -rla yinyi wati-ng(ki)
bird IMPF-DAT give man -ERG purlka -ng(ki).
old man -ERG
'The old man is giving him a bird.'

bird IMPF-DAT carry man -ERG
'The man is carrying the bird.'

5. Jurlpu ka yilyam(i) wati-ng(ki).
bird IMPF send man -ERG
'The man is sending/letting go of the bird.'

go IMPF bird -without man
'The man is going without the bird.'

(Note: __ means missing case marker.)
each picture. However, subjects 4, 5, and 6 used short content utterances for the stories. Below 6-1/2 years, the children generally did not use clauses with overt arguments. After that age, the children were much more likely to name the participants in the clause. Subject 7 (6:6 years, male) not only named the participants in the clause, but also showed some attempts to organize the discourse. If a sequence of clauses had the same subject, this boy named the subject argument at the end of the clause once it had been established as the theme. His story 2 is given as an example, but the same pattern is also used in his other stories.

Focussing. For the 15 children under 9 years, there was very little use of focussing or linking morphology. There were no instances of -ju/-ji for the under 6-1/2 year olds. Subjects 8 (6:10 years, female), 9 (7:6 years, female) and 13 (8:1 years, female) all used -ju/-ji but never before the third utterance. For the over 9 year olds, 6 children used the focus marker, but never in utterance 1. The focus marker was not limited to one per clause: for some subjects any overt nominal was marked, and not just those previously mentioned in the discourse. In other words, it seemed as if -ju/-ji was being used as a definitive marker by some of the speakers. As well as being used with nouns, -ju may be used on anaphoric pronouns and temporal linking morphemes (e.g., ngula jangka 'after that'). In this respect, subject 25 (11:2 years, male) followed the adult pattern, using -ju on both pronominal forms and temporal linking morphemes.

In story 2, only subjects 8 and 13 used -ju/-ji in the under 9 years group. Of the 15 children over 9, 10 used this morpheme. It seems, then, that as the children grow older, they are more likely to use -ju/-ji. This undoubtedly is linked to the fact that as the children grow older, they are more likely to use overt nominals in the clause. However, not all children will use the focus marker, and those who do may use it on any nominal for which the speaker assumes the hearer knows the specific referent, either from the non-linguistic content or from previous mention. Because -ju/-ji was not used generally in the first two utterances for each story, it seems as if some discourse principles governed its use: the child recognized that a participant had been previously introduced, although not necessarily linguistically.

For story 3, there were over 90 instances of -ju/-ji from the 14 speakers over 9 years. This number is partly due to the longer utterances produced for the story 3 pictures. Overall, these pictures provided
more opportunity for the children to elaborate. We believe that the details in the pictures encouraged the children to become more involved in the story. In addition, there were 12 pictures (not 6 as in the first two stories), so the children were given more opportunity to establish protagonists and goals, and to describe the resolving of conflict. This hypothesis is supported by the fact that although some children did make evaluations and draw inferences in story 1 and story 2, more children produced utterances with evaluations and inference in story 3. Also the children generally gave more details about the setting, and a number of children included direct quotation (e.g., the two men talking to each other about how and when to spear the dingo). In addition, syntactic constructions in story 3 were more complex: embedded sentences and complex verb constructions were frequent in the stories from some of the older children.

Linking Morphology. Linking morphology was rarely used in story 1. Only subjects 8, 9 and 13 used any in the under 9 years group, and only 5 of the over 9 year olds used any. Most instances were for the last picture (=Then he went along). For story 2, only subjects 9 and 13 used linking morphology, and only 7 of the over 9 year olds. For this group, subjects 20 (9:9 years, male), 25 (11:2 years, male) and 30 (12:4 years, male) were the most prolific users.

SAMPLE TEXT

Subject 20, Story 1 (9-9 years):

1. Wati ka yani wirinyi.
   man IMPF go hunt
   'The/A man is going hunting.'

2. Ngula janka marlu, pirli -wana -lp a nyinaja that after kangaroo, rocks -by -CONT sit(PAST)
   kalku -rnu -purda.
   facing -DIR -towards
   'After a kangaroo was by the rocks facing this way.'

3. Ngula wati -ji yurakangu -rla pulya -ngku then man -FOC creep up(PAST) -DAT slow -ERG
   marlu -ku -ju pirli -wana.
   kangaroo -DAT -FOC rocks -by
   'Then the man stalked the kangaroo by the rocks.'

   then man -ERG -FOC shoot kangaroo -FOC
   'Now the man may shoot the kangaroo.'

   then kangaroo -FOC shoot(PAST) for good -to
   'Then he shot the kangaroo for good.'

6. Wati -ji ngula nyanu wardinyi -jarrija
   man -FOC that are self happy -INCO(PAST)
   nyanungu -lk u.
   he -then/now
   'That man became happy.'
However, while only 5 of the under 9 year olds used any linking morphology in story 3, for the over 9 group only 1 subject did not. The number of morphemes used varied from speaker to speaker but some children used them in every clause other than the first two.

Clearly, the child will only use linking morphemes when the forms have been acquired, but the forms will only be used when the speaker is able to relate the events.

Anaphora. We found very few instances of pronominal forms; subjects 20, 24 and 25 were the only users. Subject 25 used nyanangu frequently as in:

nyanangu-jarra-palangu lani -manu
DEM -DU -DUOB fear -have(PAST)
'Those two were frightened.'

Subject 24 was the only one to use yangka (once). Note that ngula is ambiguous in initial position: it can mean 'then' or 'that one'; but for most of the instances of ngula in initial position, our Warlpiri consultants gave the temporal interpretation.

There is a relationship between word order and ellipsis. For example, if a subject argument is not overt, it cannot be clause initial. Generally, we found the youngest children did not name participants, so ellipsis was deictic not anaphoric. For the older children, participants were generally named. Whether there was then anaphoric ellipsis depended on the individual speaker but, more particularly, the story. While a few children did use anaphoric ellipsis in stories 1 and 2, more used ellipsis of named participants in story 3. Our finding is that if the children were able to organize the events into a structured narrative with a thematic subject, there would be more subject ellipsis. Because the children were able to establish a thematic subject in story 3, there was more ellipsis. Table 2 indicates that for subjects 18-28 (with some exceptions) most of the utterances for stories 1 and 2 are subject initial. This contrasts with the younger children who produced more verb initial utterances. However, for story 3, subjects 18-28 (9:4-11:11 years) used variation in word order and many of the utterances for pictures 7-12 had no overt subject. Note that before picture 6 the dingo had been chasing the men, and in picture 6, one man falls down. This event was both a high-point in the story and a turning point. After this, the two men become the chasers; they plan to capture the dingo and finally succeed in their goal. So after picture 6, the two men could be clearly established as the protagonists, and for many of the older children the two men then became the subject of most of the
remaining clauses.

We should note, however, that although **wati-jarra** '2 men' was frequently not overt, there was overt marking for the subject in the form of the cross-reference marker **-pala**. Because this marking clearly identified the subject, it may have influenced the amount of ellipsis. Note that in story 1 and story 2 there was potential ambiguity as to the identity of the subject since, in story 1, man and kangaroo are both singular and, in story 2, man, boy and bird are all singular.

A number of children used anaphoric ellipsis for the subject in clauses describing story 3 picture 12; but the cross-reference marker **-lu** clearly established a plural subject (the people who came to look at the dingo).

### TABLE 2: Word Order for Subj. 16-30 in the 3 Stories

<table>
<thead>
<tr>
<th>Subject</th>
<th>Story 1</th>
<th>Story 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>6 clauses</td>
<td>6 clauses</td>
</tr>
<tr>
<td>(1=subject initial) (3 have overt subject)</td>
<td>all=verb initial</td>
<td>all=verb initial</td>
</tr>
<tr>
<td>17</td>
<td>4 clauses</td>
<td>6 clauses</td>
</tr>
<tr>
<td>all=verb initial</td>
<td>all=verb initial</td>
<td></td>
</tr>
<tr>
<td>(no overt subjects)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>6 clauses</td>
<td>6 clauses</td>
</tr>
<tr>
<td>5=subject initial</td>
<td>all=subject initial</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>6 clauses</td>
<td>6 clauses</td>
</tr>
<tr>
<td>5=subject initial</td>
<td>all=subject initial</td>
<td></td>
</tr>
<tr>
<td>(1=no overt subject)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>6 clauses</td>
<td>6 clauses</td>
</tr>
<tr>
<td>5=subject initial</td>
<td>4=subject initial</td>
<td></td>
</tr>
<tr>
<td>(1=no overt subject)</td>
<td>(1=no overt subject)</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>6 clauses</td>
<td>6 clauses</td>
</tr>
<tr>
<td>all=subject initial</td>
<td>5=subject initial</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>6 clauses</td>
<td>6 clauses</td>
</tr>
<tr>
<td>all=subject initial</td>
<td>all=subject initial</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>6 clauses</td>
<td>6 clauses</td>
</tr>
<tr>
<td>all=subject initial</td>
<td>all=subject initial</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>6 clauses</td>
<td>5=subject initial</td>
</tr>
<tr>
<td>5=subject initial</td>
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<td>(1=no overt subject)</td>
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</tr>
<tr>
<td>25</td>
<td>12 clauses</td>
<td>9 clauses</td>
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<td>5=subject initial</td>
<td>1=subject initial</td>
<td></td>
</tr>
<tr>
<td>(7=no overt subject)</td>
<td>(7=no overt subject)</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>6 clauses</td>
<td>6 clauses</td>
</tr>
<tr>
<td>2=subject initial</td>
<td>all=subject initial</td>
<td></td>
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<tr>
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<td>27</td>
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<td>5=subject initial</td>
<td></td>
</tr>
<tr>
<td>(1=no overt subject)</td>
<td>(1=no overt subject)</td>
<td></td>
</tr>
</tbody>
</table>
28 6 clauses
   all=subject initial
29 11 clauses
   7=subject initial
   (4=no overt subject)
30 9 clauses
   3=subject initial
   (4=no overt subject)

6 clauses
   all=subject initial

Story 3

Subj.
16 14 clauses: 6 no overt subj.; 3=subj. initial
18 12 clauses: 8 no overt subj.; 1=subj. initial
19 13 clauses: 6 no overt subj.; 7=subj. initial
20 32 clauses: 14 no overt subj.; 13=subj. initial
21 20 clauses: 6 no overt subj.; 14=subj. initial
22 15 clauses: 6 no overt subj.; 8=subj. initial
23 13 clauses: 1 no overt subj.; 10=subj. initial
24 15 clauses: 5 no overt subj.; 7=subj. initial
25 27 clauses: 13 no overt subj.; 12=subj. initial
26 18 clauses: 2 no overt subj.; 14=subj. initial
27 22 clauses: 9 no overt subj.; 10=subj. initial
28 15 clauses: 2 no overt subj.; 11=subj. initial
29 20 clauses: 5 no overt subj.; 11=subj. initial
30 26 clauses: 8 no overt subj.; 12=subj. initial

Note: Subject initial clauses include those which have a linking word. So, technically, the clauses are either subject-initial or the subject is the first core argument.

Aspect. Because the prompt was given in the non-perfective verb form, the children generally responded with that form for their first utterances. However, the switches to perfective verb form were not totally idiosyncratic: some story events seemed to condition a switch. For example, in story 1, 25 children used the perfective verb form in utterance 6, indicating they perceived the man had achieved his goal of shooting the kangaroo. In story 2, 20 children used the perfective verb form in utterance 5, when the bird had flown away or been released. Then for the last utterance of the story the non-perfective form was used in the coda (=The boy is going along). For story 3, utterance 6 elicited perfective responses from 21 children. This is the picture in which one man fell; possibly the children perceived this as the end of an episode, thinking the dingo would capture the men. In story 3 the perfective form was also used by 21 children in utterance 9, 23 in utterance 10, and 20 in utterance 11. In all these pictures, the men were spearing the dingo; the children perceived the
spearing as the achievement of a goal and so the end of an episode.

5. CONCLUSION. The children in the study did not generally use temporal links or focussing morphology until they were 9. However, some children seem to be better story tellers than others in that given restricted information they will link events and use the linguistic means available for linking and focussing. Others will only use their narrative skills when they are given more details and so become more involved. Possibly in this type of task 6 events is not enough to illustrate organizing skills. When the children do become involved, the older ones will organize events into a coherent narrative.

The youngest children in the study used ellipsis deictically; they stressed actions, not participants. They also missed out necessary content details to show how the events were related. At a later stage the children did name participants, and attempted to organize the narrative. When a clear thematic subject could be established, more anaphoric (subject) ellipsis was used. We found a correlation among varied word order, the use of focussing and linking morphology, and syntactic complexity. All of these properties are cues to the child's linguistic maturity.

We have argued elsewhere (1985a) that some of the Warlpiri children's use of subject initial clauses results from contact with English. While this is undoubtedly true for some of the children, it also seems that the use of subject initial clauses may reflect a development stage, a stage at which the child is attempting to structure discourse.

Karmiloff-Smith (1981) found that the youngest French children she worked with used pronouns deictically, but older children used pronominal forms only after establishing the referents linguistically. The older children focussed more on organizing the utterances into a cohesive narrative, and tried to establish a thematic subject. Evidence from self-correctives supports this claim: some of the children reordered utterances to maintain the same subject. When the same subject could not be retained, the children were careful to use the noun, not pronoun. Although Warlpiri is quite different structurally, we also found the older children (10 and 11 years) attempted to organize story 3 around a protagonist. Because the dual subject marker -pala uniquely identified the dual subject in story 3, more ellipsis was found than in stories 1 and 2 when ambiguity might
have arisen if the third singular subject had not been overt in the clause.

FOOTNOTES

1. The data was collected as part of a long-term study of the children's acquisition of Warlpiri. We are grateful to the Yuendumu community for their support. We are particularly grateful to Jeanie Nungarayi Egan. The study is funded by the Australian Institute for Aboriginal Studies and the Australian Research Grants Scheme.

2. See Hale (1982) for details of which arguments are cross-referenced.

3. The alternation is conditioned by vowel harmony rules.

REFERENCES


Laughren, M., 1984, Handout from Australian Linguistics Meeting, Alice Springs.


