

## WARLPIRI AND ENGLISH: LANGUAGES IN CONTACT

Edith Bavin and Tim Shopen

### 1. WARLPIRI: THE FIRST LANGUAGE OF YUENDUMU

In this paper we will discuss the influence of English on the Warlpiri spoken by children at Yuendumu,<sup>1</sup> a town 300km. north-west of Alice Springs. There are from seven to eight hundred Aboriginal people and about 70 non-Aboriginal. Warlpiri is the first language of the community; while a few Aboriginal families use it extensively, English is very much a second language.

Since 1974 official support for Warlpiri has been manifested through government funding for bilingual education in the Yuendumu school. It has been a 'transition' program with most Warlpiri in the early school years and most of the teaching of academic subject matter in English; nevertheless, it has been an important factor in language maintenance and a program in which Aboriginal children have been able to adapt to formal educational standards. Outside the school, there is little functional use of Warlpiri literacy. To the extent that literacy is used for the management of the community, people rely on English. But unlike other Aboriginal groups and many migrants in Australia, the Warlpiri people feel their language has more prestige than English and want to maintain it.

In spite of the fact that Warlpiri is the first language of the community, contact with English has had considerable effect. When two languages are in contact in one community, unless each has separate functions, as in a diglossic situation, it is likely that there will be interference. One of the languages may eventually be lost. Dorian (1982) states that the displacement of one language by another occurs most typically when there is a sharp difference in prestige and in levels of official support for the two languages, and that usually there are marked differences in the utility of the two. At Yuendumu, there is official support for Warlpiri as well as English, but there are a number of domains where English is used in preference to Warlpiri, where Warlpiri is used with a high level of interference from English, or even where there is code switching. These domains include all those involving contact with Europeans, as well as communication among Warlpiri people about topics introduced from European culture, and among younger Warlpiri speakers, interference from English is evident even on topics traditional for Aborigines.

---

Michael Clyne, ed. *Australia, meeting place of languages*, 81-94. *Pacific Linguistics*, C-92, 1985.

© Edith Bavin and Tim Shopen.

## 2. LEXICAL BORROWINGS

Many of the words incorporated into the Warlpiri language from English reflect new situations or new concepts. Examples include rayipul *rifle*, jijiji *scissors*, turaki *truck*, juka *sugar*, pulawa *flour*, jati *shirt*, and wijipitirli *hospital*. Borrowed English words show varying degrees of assimilation to the Warlpiri sound system. Warlpiri words end in vowels and so we see the borrowings for *scissors*, *truck*, and *hospital* with a final vowel added, though the pronunciation we cite for *rifle*, common in the community, remains more like English with no final vowel. Warlpiri lacks fricatives, and so substitutes /p/ for English /f v/ as in the words for *rifle* and *flour*, and the lamino-alveolar stop /j/ for the other English fricatives, /θ ð s z ʃ ʒ/, as in the words for *scissors*, *sugar*, *shirt* and *hospital*. Warlpiri lacks /h/, and we note the substitution of the Warlpiri phoneme /w/ for the /h/ in *hospital*. Non-Warlpiri consonant clusters tend to be broken up by vowels, as in the words for *truck*, *flour* and *hospital* (see Nash 1983).

Other pronunciations of English borrowings show less adaptation to the Warlpiri phonological system; however, in English verb borrowings, the morphological system is maintained. Warlpiri has a productive system of compound verb derivation using the pattern 'preverb' + verb, with the verb carrying all the inflections for the compound expression. All English verbs we have heard borrowed into Warlpiri become preverbs: verbs borrowed with intransitive meanings are usually attached to the inchoative jarrimi, and those borrowed with transitive meanings to mani *to get, take, affect*, a verb used to form many compound causative expressions in traditional Warlpiri. Jarrimi and mani then carry all the regular Warlpiri verbal inflections (suffixes). In the chart below we give examples of these derivations. (We have used English spelling in words that have not adapted to the Warlpiri sound system.)

## Intransitive verbs (non-past forms)

English	Warlpiri
<i>grow</i>	grow-jarrimi
<i>sleep</i>	sliipi-jarrimi
<i>play</i>	play-jarrimi
<i>swim</i>	juwimi-jarrimi
<i>win</i>	wina-jarrimi
<i>jump</i>	jampi-jarrimi
<i>work</i>	warrki-jarrimi
<i>hide</i>	ayiti-jarrimi

## Transitive verbs

English	Warlpiri
<i>hold</i>	hold-mani
<i>chew</i>	ju-mani
<i>miss</i>	misi-mani
<i>smell</i>	smeli-mani
<i>taste</i>	tasti-mani
<i>chase</i>	jasi-mani
<i>wash</i>	waji-mani
<i>sweep</i>	jiwipi-mani

In many instances, English borrowings are used when there are traditional words with the same meanings. For example, among verbs, *play-jarrimi* is used alongside *manyu-karrimi* *to play*, a verb compound made up of the preverb *manyu*, a noun meaning *fun, enjoyment, play*, and the verb *karrimi* *to stand*; *slipi-jarrimi* is used alongside *jarda-ngunami* *to sleep*, a compound verb made up of the noun *jarda* *sleep* and the verb *ngunami* *to lie*; *hold-mani* is used alongside *mardarni* *to hold, to have, to keep*; *tasti-mani* is used alongside *pajarni* *to taste*; and *jasi-mani* is used alongside *wajili-pinyi* *to chase*, a compound verb made up of the preverb *wajili* *running* and the verb *pinyi* *to attack*. This is also true of other parts of speech, for example, *nayipi* *knife* is used as well as *junma* *knife*.

In addition to single verbs, other expressions may be borrowed and verbalised with the addition of *jarrimi* or *mani*. For example, *happi-jarrimi* *to become happy*, *jatimapi-mani* *to shut up, close*,<sup>2</sup> and *goround-mani* *to go around* which we heard used transitively in *to go around the house*.

In Warlpiri, there is no part of speech adjective; adjective-like meanings are expressed by nouns, so when English adjectives are borrowed into Warlpiri, it is not surprising that they are nominalised with the suffix *one*, sometimes pronounced *wani*. We should point out, however, that the use of *one* with adjectives is common in Aboriginal English. Examples follow (English spelling):

English	Warlpiri
<i>black</i>	black-one
<i>hot</i>	hot-one
<i>sweet</i>	sweet-one
<i>slippery</i>	slippery-one
<i>short</i>	shorty-one
<i>good</i>	good-one
<i>new</i>	new-one
<i>same</i>	same-one

In addition to these, the conjunctions *and* (*an, ani*) and *or* (*o*) are both heard in Warlpiri utterances, as are interjections, particles and adverbs such as *well* (*wali*), *isn't it* (*inti*), *too much* (*tumaji*), *not* (*nati*), *no* (*nuu*), *still* (*jili*), *anyway* (*yiniwayi*) and *inside* (*yinjayiti*).

### 3. SEMANTIC EXTENSION

Not only may words be borrowed, but senses may also be borrowed for words already in the language. In traditional Warlpiri, *ngurrju-mani* means *to make* in the sense of *to fabricate, to manufacture*; it can also mean *to improve, to make better*. This is a compound verb formed from the noun *ngurrju* *good* used as a preverb, and the verb *mani* *to get, take, affect*. It traditionally takes only noun objects, to express meanings such as *to make (a spear)* or *to repair (a truck)*. However, we have heard it used with an infinitive (INF) complement in sentences such as the following (DAT = dative, lsgS = first person singular subject):

- (1)a. Kurda-rna            ngurrju-manu    yulanja-ku.  
*child*(ABS)-lsgS *make*(PAST)    *cry*(INF)-DAT  
*I made the child cry.*

- b. Ngurru-manu-rna Jampijinpa kuyu ngarninja-ku.  
*make (PAST)-1sgS Jampijinpa (ABS) meat (ABS) eat (INF) -DAT*  
*I made Jampijinpa eat meat.*

One Warlpiri speaker said that (1b) was interchangeable with the following traditional Warlpiri sentence (jinyjinyi is the preverb instead of ngurrju):

- (2) Jinyjinyi-manu-rna Jampijinpa kuyu ngarninja-ku.  
*make (PAST)-1sgS Jampijinpa (ABS) meat (ABS) eat (INF) -DAT*  
*I made Jampijinpa eat meat.*

#### 4. SYNTACTIC INTERFERENCE

Interference from English in the vocabulary is easily identified. Less obvious is the syntactic interference.

##### 4.1. Properties of standard Warlpiri

Three of the properties of Warlpiri that we will discuss in terms of interference from English are case markings, word order and cross-referencing.

##### 4.1.1. Case markings

Warlpiri has a complex system of case marking, complex because there is a large number of cases (18 by our count), and because there are three basic case frames for transitive verbs. A sentence describing an event uses a verb to convey the plot. In Warlpiri, if the plot involves two participants, case markings always signal who does what to whom, but different verbs select different case frames. Most transitive verbs take the ergative-absolutive case frame (ERG/ABS). Out of a list of 119 transitive and intransitive verb roots listed in Nash (1980), 74 take the ERG/ABS case frame in which the transitive subject is marked by the ergative and the object by the absolutive. These include the verbs *pakarni* to hit and *kanyi* to carry. Twelve others take the absolutive-dative case frame (ABS/DAT). These include *pardarni* to wait for, and *japirdimi* to threaten. Here the subject is absolutive and the object is dative. One verb root, *warrirni* to look for takes an ergative-dative case frame (ERG/DAT), with the subject in the ergative and the object in the dative. These three case frames are illustrated below (NPST = non-past, AUX = auxiliary base):

- (3)a. Karnta-ngku ka ngarrka pakarni.  
*woman-ERG AUX man (ABS) hit (NPST)*  
*The woman is hitting the man.*
- b. Karnta ka-rla ngarrka-ku japirdimi.  
*woman (ABS) AUX-DAT man-DAT threaten (NPST)*  
*The woman is threatening the man.*
- c. Karnta-ngku ka-rla ngarrka-ku warrirni.  
*woman-ERG AUX-DAT man-DAT look for (NPST)*  
*The woman is looking for the man.*

Warlpiri has many more transitive verbs that use these three case frames: compound verbs are derived from verb roots; both simple and compound verbs may be derived from the verb roots with alternate case frames (see Hale 1982 and Nash 1982).

In addition to the case markings, core and peripheral, Warlpiri uses other endings on nominals and verbs to express a wide range of concepts. An example, provided by a three-and-a-half year old, follows. The girl was playing with a friend and asked for some chocolate (IMPER = imperative, lsgO = first person singular object):

- (4) Ngaju-rlangu-ku-ju yungka-rni.  
*me-also-DAT-lsgO give (IMPER)-here*  
*Give some to me over here too.*

The first word, the first person singular pronoun, is marked with the dative case to identify it as the recipient for the action of giving. But the dative case marker *-ku*, an enclitic, is flanked by two other enclitics. To its left is the morpheme meaning *also, too* and to its right is the cross-reference marker for the first person singular indirect object; this is part of the auxiliary, appearing in second position.

#### 4.1.2. Word order

The case marking system facilitates an almost completely free word order. There are no syntactic slots for core or peripheral arguments. The examples given above in (3) can occur with any word order so long as the imperfect auxiliary *ka* appears in second position. Speakers will understand any of these variants as repetitions of the same utterance; in addition, modifying words may be separated from the head nouns that they modify.

Closely related to the free word order is the fact that traditional Warlpiri makes extensive use of anaphoric ellipsis (zero anaphora; see Hale 1983). When anaphoric pronouns are used, they have a foregrounding effect. Because the subject and object functions are not signalled by word order, there is no need to fill any position with the anaphoric pronouns. This use of anaphoric ellipsis complements the free word order.

#### 4.1.3. Cross-referencing

Anaphoric ellipsis in turn is facilitated by cross-referencing. Warlpiri cross-references subjects and objects with a set of bound pronouns that follow a nominative-accusative pattern. These pronouns occur as enclitics on the auxiliary base, which generally occurs in second position, and carry information about person and number for subjects, objects and indirect objects (see Laughren 1977). Thus, for example, to distinguish *I see you* from *you see me* there is no need for independent subject and object constituents. The subject and object will be clearly signalled in the auxiliary. The bracketed portions of the following examples can be ellipsed.<sup>3</sup>

- (5)a. Nyanyi ka-rna-ngku (ngajulu-rlu) (nyuntu).  
*see (NPST) AUX-lsgS-2sgO I-ERG you*  
*I see you.*

- b. Nyanyi ka-npa-ju (nyuntulu-rlu) (ngaju).  
*see*(NPST) AUX-2sgS-1sgO *you*-ERG *me*  
*You see me.*

In summary, Warlpiri has three properties which we will discuss in the next section in terms of interference from English: case marking, free word order and cross-referencing.

## 4.2. Interference

### 4.2.1. Word order

We conducted a series of comprehension tests with the children at Yuendumu using varied word order and the three case frames for transitive sentences described above. The tests included subject-before-object and object-before-subject sentences (Bavin and Shopen, forthcoming). The children were asked to act out the sentences with plastic toy animals, sentences such as:

- (6) Marlu-ngku ka maliki pakarni.  
*kangaroo*-ERG AUX *dog* *hit*(NPST)  
*The kangaroo is hitting the dog.*

The children made no errors in the nature of the actions, only errors in choosing which of the two animals named was the actor and which the patient. We found that as the children got older there were fewer errors, but the proportion of errors in sentences with object-before-subject word order was higher for the older children than for the younger. The results for the comprehension test on transitive sentences are given in Table 1.

Table 1: Errors in transitive sentences by word order

Group	N	Mean age	School level	% Sentences with errors	% Errors in S-O sentences	% Errors in O-S sentences
a	6	3.2	-	47.22	52.94	47.05
b	5	4.4	-	45.55	51.21	48.78
c	5	5.5	-	37.77	50.00	50.00
d	17	5.5	Preschool	36.60	40.18	59.82
e	14	6.2	Transition	26.98	38.23	61.77
f	16	6.0	Grade 1	19.10	32.73	67.28
g	13	8.3	Grade 2	23.50	40.00	60.00
h	13	11.0	Grades 5/6	11.97	25.00	75.00
i	12	16.4	-	12.5	11.00	89.00

Note that for the groups older than c, when an error is made it is more likely to be in a sentence with the object-before-subject word order. That is, the most likely error is to take the first noun as the subject, regardless of case marking. We believe that contact with English is an important factor here.

We have listened to the children speaking in a variety of contexts. Most of the data we report on here is from situations where we withdrew children from classes one or two at a time, and where we controlled the content of what they

were saying.<sup>4</sup> We have noticed that as the children progress through school, most of them appear to speak more with the subject as the first constituent of the sentence. See Table 2.

Table 2: The development of subject-first word order		
A.	% of sentences with independent subjects	% of those sentences with subject first
Transition. (14 children 518 sentences recorded)	26.8%	38.8%
Grades 1 & 2. (9 children 447 sentences recorded)	48.3%	71.8%
Grade 3. (7 children 141 sentences recorded)	89.4%	95.2%
Grade 4-7. (7 children 109 sentences recorded)	91.7%	100%
B.	% of sentences with independent subjects and objects	% of those sentences with subject preceding object
Transition. (14 children 518 sentences recorded)	20.3%	48.6%
Grades 1 & 2. (9 children 447 sentences recorded)	38.9%	86.8%
Grade 3. (7 children 141 sentences recorded)	83.7%	95.8%
Grades 4-7. (7 children 109 sentences recorded)	80.7%	100%

These figures correlate with the results of the comprehension tests, in which the older children made fewer errors in transitive sentences in which the subject preceded the object. The high percentage of subject-first sentences among many of the older school children is made possible by their relatively infrequent use of subject ellipsis (see Table 2A). We have noted that speakers who use free word order appear to name subjects only for specific purposes, such as naming a topic for the first time or re-establishing one; when they do name them, they often place them at the beginning of the sentence, a focus position. At least in some discourse contexts, there appears to be a number of young speakers who can talk at length without using subject ellipsis, always naming the subject even when there is no new topic, and always putting it at the beginning of the sentence. Adult speakers of standard Warlpiri and some younger speakers do not converse this way, and we infer that it is because of the contact with English that many young people have adopted this style. Sentences without independent subjects are a major variant to subject-first sentences. If a sentence has no subject constituent, then it cannot have SVO word order.

As long as the cross-reference system for subjects and objects is maintained, the ellipsis of these arguments in anaphoric situations can occur with little loss of information. However, once this system breaks down, there is more motivation to retain overt arguments. We surveyed 169 speakers under 35 for their use of the third person cross-reference markers for subjects and objects. Table 3 shows the statistics on the percentage of speakers supplying complete combinations of overtly marked subjects and objects in the third person, when both the subject and object are either dual or plural.

Age	N	Sp+CC	%
4-10	51	3	5.9
11-18	50	12	24.0
19-26	41	26	63.4
27-34	27	23	85.2

Ten of the speakers in the 4-10 age group (19.6%) produced at least one of the four combinations of overt subject and object markers, and the other 41 produced none. This compares with 30 of the 11-18 age group (60%) who had at least one of the combinations marked, 33 in the 19-26 age group (80.5%), and 26 in the 27-34 age group (96.3%). Only 13 in the youngest group (25.5%) appear to have the standard *-palangu* as the marker for dual object, as compared with 29 of the 11-18 group (58%), 33 in the 19-26 group (80.5%), and 24 in the 27-34 group (88.9%). The other third person standard forms were produced by most of the children tested, *-pala* as the dual subject marker, *-lu* as the plural subject, and *-jana* as the plural object. However, each of these forms is used by some of the children in the youngest age group with incorrect meanings; for example, seven (13.7%) used *-lu* sometimes as the plural object marker and 12 (23.5%) used *-pala* for the dual object marker; in both cases, the subject-object contrast was neutralised in favour of the subject. Many children showed variability as to whether they included the cross-reference markers or not, leaving them out in contexts that did not appear to justify their omission.

#### 4.2.2. Case marking

The children make mistakes with case markers, not so much by using the wrong ones as by sometimes leaving them out. This may be related to the use of a more fixed word order. If speakers can rely on word order to signal core grammatical relations, then case markers become redundant. In fact, we have examples of missing case markers for peripheral as well as core arguments, where word order could not be a signal for grammatical function. Some examples follow (--- represents a missing case marker; INS = instrumental):

- (7)a. *Wati--- ka payirni purlka*  
*man-ERG AUX ask(NPST) old man*  
*The man is asking the old man.*



- b. Luwarnu-lu maliki yapa---.  
*shoot (PAST)-3plS dog person-ERG*  
*The person shot the dog.*
- c. Marlu--- ka wapa.  
*kangaroo-DAT AUX walk*  
*(He) is going for a kangaroo.*
- d. Warnapari ka muku-luwarni kularda---.  
*dingo AUX all-shoot (NPST) spear-INS*  
*Everyone is shooting the dingo with a spear.*

In addition, we have recorded some wrong allomorphs, some of which are presented below. Note that for two syllable words in Warlpiri, the ergative and instrumental case marking is -ngku/ngki, but for words longer than two syllables -rlu/rli is used<sup>5</sup> (FOC = focus):

- (8)a. kurlarda-ngku  
*spear-INS (should be -rlu for instrumental)*
- b. yapa-rlu-ju  
*person-ERG-FOC (should be -ngku for ergative)*
- c. wirriya-ngku-ju  
*boy-ERG-FOC (should be -rlu for ergative)*

## 5. TWO ELEVEN-YEAR-OLD SPEAKERS COMPARED

### 5.1. The Kangaroo Story

In this section we will compare the Warlpiri of two 11-year-olds. One is a girl who seems to be typical of the regular school attenders from whom we obtained the data summarised in Table 2, and the other is a boy who has been referred to as a 'non-schoolie', one who seems to have spent more time out of school than in. The girl recently won a prize at the Yuendumu school for English. Her Warlpiri displays a great deal of influence from English. In contrast, the boy has a number of English loan words in his Warlpiri, but in both lexicon and structure his language adheres to many characteristics of traditional Warlpiri. In fact he comes from a family of 'good talkers' and is particularly articulate.

As part of our investigation into the development of discourse structure, we had 36 speakers describe three sets of pictures for us; each set was bound into book form and each subject saw the pictures in sequence, one at a time. We asked the subjects to describe what was happening. The speakers ranged in age from four to 49.

One of the 'books' contained six pictures showing:

1. a man out hunting with a rifle
2. a kangaroo
3. the man discovering the kangaroo
4. the kangaroo seeing the man as he comes towards it firing his rifle
5. the man stopping and taking more careful aim, hitting the kangaroo as it runs away
6. the kangaroo lying on the ground as the man approaches.

We will call this the Kangaroo Story. The two versions are given below in Figure 1 (numbers correspond to the pictures being described; brackets around part of a Warlpiri word indicate it was not pronounced):

## THE GIRL

1. Wati ka yani marlu-ku.  
man AUX go (NPST) kangaroo-DAT  
*The man is going for kangaroo.*
2. Marlu ka nyinami  
kangaroo AUX sit (NPST)  
pirli-wana.  
rock-along  
*A kangaroo is sitting near the rocks.*
3. Wati-ng(k)i nyangu marlu  
man-ERG see (PAST) kangaroo  
ngarinja-kurra.  
eat (INF)-while  
*The man saw the kangaroo eating.*
4. Wati-ng(k)i ka luwarni  
man-ERG AUX shoot (NPST)  
marlu.  
kangaroo  
*The man is shooting the kangaroo.*
5. Marlu ka parnkami  
kangaroo AUX run (NPST)  
ngurra-kurra.  
home-towards  
*The kangaroo is running home.*

## THE BOY

1. Wati ka yani wirlinyi  
man AUX go (NPST) hunting  
marlu-ku.  
kangaroo-DAT  
*The man is going hunting for kangaroo.*
2. Pirli-nga(wu)rrpa-ku  
rock-dweller-DAT  
nayimi-ki-ji kanyarla-ku.  
name-DAT-FOC rock-wallaby-DAT  
*For the rock-dweller that goes by the name of kanyarla.*
3. Ngula-jangka-ju luwarnu-lku.  
that-after-FOC shoot- (PAST)-then  
Marlaja-kutu-kanjani-lki  
because-close-go along carrying  
(NPST)-then  
ka-rla.  
AUX-DAT  
*After that he shot it. He got closer because of it.*
4. Nyangu-lku. Kiripi-kanja-rla  
see (PAST)-then creep-carry (INF)-  
LOC  
nyangu. An marna-lpa  
see (PAST) and grass-AUX  
warru-ngarnu.  
around eat (PAST)  
*Then he saw it. Having crept up, he saw it. And it was moving around eating grass.*
- Wati-ji yanu-rnu pirli-wana.  
man-FOC go (PAST)-here rock-around  
*The man came this way around the rocks.*
5. Nyan(ung)u-ju parnkanja-ku-lku  
this one-FOC run (INF)-DAT-then  
jata-nyangu.  
confusion-see (PAST)  
*It was too confused to run.*

- |                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>6. Wati-ng(k)i luwarnu<br/> <i>man-ERG shoot (PAST)</i></p> <p>marlu.<br/> <i>kangaroo</i><br/> <i>The man shot the kangaroo.</i></p> | <p>6. Ngula-jangka-ju wantija-lku.<br/> <i>that-after-FOC fall (PAST)-then</i></p> <p>Wardinyi-lki ka wati-ji<br/> <i>happy-then AUX man-FOC</i></p> <p>yani-rni marlu-ku-ju<br/> <i>go (NPST)-here kangaroo-DAT-FOC</i></p> <p>maninja-ku-ju.<br/> <i>get (INF)-DAT-FOC</i><br/> <i>Then after that it fell down.</i><br/> <i>Happily the man is coming this</i><br/> <i>way to get the kangaroo.</i></p> |
|------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Figure 1: The Kangaroo Story

We will use these texts to demonstrate differences between these two speakers in terms of (a) fixed versus varied word order and anaphoric ellipsis, (b) vocabulary, and (c) the structure of narrative. The stories from most of the children (male and female) were more like that of the girl. We should point out that the boy whose story is presented here not only demonstrates a good command of standard Warlpiri, but also an extremely fluent style. Some of the differences between the two speakers are individual and are not the result of contact with English. However, it is clear that the girl's speech is influenced more by English, and that in this respect she is representative of her peer group.

The girl uses one sentence per picture. In this story, as in the other two she told, there are no English loan words. However, we have heard her using English loan words in talk with her peers. Every sentence in the text is grammatically correct, and the third one contains a complex infinitive construction ngarninja-kurra *eat (INF)while*; here the suffix -kurra marks the subject of the infinitive as being coreferential with the object of the main verb. However, every sentence has English word order. In spite of the fact that the man and the kangaroo occur repeatedly in the pictures, there is no instance of anaphoric ellipsis; this in turn makes it possible for every sentence to begin with a subject, and for every transitive sentence to have SVO word order. In the three stories told by the girl, there were 27 sentences; only at the end of the third story did she deviate from English word order. Two of the 27 sentences had subject ellipsis and one named the subject in non-initial position; the other sentences had English word order.

The boy's story includes three English loan words (name, creep and and). Such loan words are common in Warlpiri. The word order is notably free; there are ten sentences: four begin with adverbial constituents, three with subjects, two with verbs, and one with an object. Six of the sentences have subject ellipsis; of the four sentences with overt subjects, three are subject initial.

In the three stories told by the boy, 48 sentences were used, 29 with subject ellipsis and 19 with overt subjects. Thirty-six out of his 48 sentences begin with a constituent other than the subject, and more than half have subject ellipsis; when subjects are overt, they appear in initial position 12 out of 19 times. When it is in initial position, the subject is always a new topic. This is true for all of his three stories.

## 5.2. Compound verbs

The boy has a wide vocabulary. He uses many Warlpiri words with standard meanings; for example, in the third story he uses three words for different types of spears. He also displays innovations including reanalysis of traditional meanings and borrowings from English. An outstanding aspect of his Warlpiri is the use of compound verbs. Traditional Warlpiri has a relatively small set of verb roots, but a productive system of verb compounding yields numerous verbal expressions that are in use.

In the first two stories the girl did not use any compound verbs; she used three in her third story. Altogether, the boy used fifteen; there are four in the kangaroo story, in the sentences for pictures three, four and five.

Warlpiri is a living language with internally motivated historical change as well as the changes resulting from language contact. For example, the first compound verb the boy used is in his description of the third picture:

- (9) Marlaja-kutu-kanjani-lki                      ka-rla.  
*because-close-go along carrying-then*    AUX-DAT  
*He got closer to it.*

The core of the compound verb is *kanjani to go along carrying* (NPST), one which some older speakers still pronounce *kanja-yani carry* (INF)-*go* (NPST). It is a preverb-verb construction where the preverb is an infinitive. In the speech of most of the community, the infinitive suffix has now become fused with the verb for *to go* to produce a new form meaning *to go along doing X*.

Kanjani is combined with the preverb *kutu close* to produce *kutu-kanjani to go along getting closer*. This use of *kutu* appears to be an innovation: standard Warlpiri has the adverbial nominal *kutu close* but this has not been reported as a preverb. Instead, there is a homophone, a preverb *kutu to do it in any way* which can be used, for example, with the verb *yinyi to give* to mean *to give anything at all*.

To the already complex expression *kutu-kanjani*, the boy adds *marlaja*, a standard Warlpiri preverb for *because*. *Marlaja* is one of four dative preverbs the boy used in the three stories, preverbs which add a dative argument extending the propositional structure of the verb to which they are attached. *Marlaja* makes reference to the kangaroo as the cause of the hunter's getting closer. This cause is an argument for the verb and is cross-referenced with the *-rla* on the auxiliary. In this way, what would otherwise be just an intransitive verb with a single argument becomes a two-place predicate and makes reference to both the hunter and the kangaroo.

The second compound verb the boy used, in his description of the fourth picture, shows the result of contact with English:

- (10) Kiripi-kanja-rla                      nyangu.  
*creep-carry* (INF)-LOC    *see* (PAST)  
*Having crept up, he saw it.*

*Kiripi-ka-* (*creep-carry*) *to crawl*, *creep* exhibits a well-established feature of Warlpiri word formation. This derived verb is intransitive with just one argument in the absolutive even though it is based on the transitive root *ka-* *to carry*. With data from an earlier generation, Hale (1974) lists *kiripi-ka-* with the same meaning. Traditional Warlpiri has two other verbs of motion with *ka-* as stem, both meaning *to sneak up on*, *yura-ka-* and *wurru-ka-*. *Ka-* on its own is ERG/ABS (fully transitive), but *yura-ka-* and *wurru-ka-* are ABS/DAT;

the innovation *kutu-ka-* to *get closer*, discussed for picture 3, is another instance of an intransitive verb of motion with *ka-*. Harold Koch has suggested to us that this root might be contributing a durative meaning to the compound expressions (compare English to carry on meaning *to continue*).

### 5.3. Discourse structure

A mastery of standard Warlpiri entails being able to use discourse-linking strategies. Some of these have already been discussed: the use of ellipsis for nominals, and the use of word order for foregrounding. In addition, the boy's use of preverbs with dative adjuncts allows him to make reference to more participants in a single clause; this provides a more cohesive unit. Another factor is the use of morphology to focus and link elements. In the text above, the girl uses no ellipsis, no focus marker and no linking morphology to connect the sentences into a coherent story. However, the boy uses all of these. He names the hunter as *wati man*, for the first picture; for the third and fourth pictures he uses this argument as the subject for a succession of five verbs but with subject ellipsis each time; when he re-establishes the hunter as the topic with *wati*, the focus marker *-ju/-ji* is attached.<sup>6</sup> This is used to foreground nominals already mentioned in the discourse or which are assumed to be known to the listener. In the boy's story, *-ju* is used eight times; in the three stories with 48 sentences, *-ju* is used 25 times. The girl only used *-ju* once; this was in her third story.

The boy uses other morphology to link the utterances. In the kangaroo story, he uses *-lku/-lki* *after, then, now* on six predicates, five verbs and one predicate nominal. In the other two stories, he uses this morpheme 14 times. The girl only used it once, in the third story. *-lku/-lki* has the effect of focussing the constituent on which it is attached, and it relates an event or situation to what has previously occurred. For example, its use in (6) in *wardinyi-lki happy-then*, has the effect of focussing the hunter's happiness and relating it to what has just happened: it implies that the hunter is happy because the kangaroo has fallen down. This is not fully captured in the English translation.

### 5.4. Summary

The Warlpiri of these two 11-year-olds shows the result of contact with English in different ways. The boy shows influence from English in his lexicon, but the grammar and structure of his stories follow standard Warlpiri. The girl shows a great deal of influence from English in word order. In addition, she rarely used the linking devices available in standard Warlpiri.

## 6. CONCLUSION

When a culture borrows new concepts from another, we can expect the associated vocabulary to be borrowed as well. But in young people's Warlpiri at Yuendumu, we see the beginnings of an influence from English on grammatical structure, and this change in grammatical structure has implications for discourse style.

As the children grow older, they are increasingly influenced by peers.<sup>7</sup> We assume that because the Warlpiri of the peer group has more features of English in it than that of older generations, there is an acceleration of English influence.

## NOTES

1. We would like to thank the Yuendumu community for its support. In particular, we would like to thank Jeannie Nungarrayi Egan, Leonard Japanangka Granites and Wendy Baarda for their help. Our thanks also to David Nash for his helpful comments on this chapter in an earlier form.

Funding for the project is from Australian Research Grants Scheme and the Australian Institute of Aboriginal Studies.

Permission to work in the school was given by the Northern Territory Department of Education.

2. Jatimapi *shut up* probably comes from some variety of Aboriginal English in which it is common to have -im as a transitive marker.
3. In all further examples, we will not mark the absolutive case; when a noun appears without a case marker, it should be assumed that it is the absolutive form.
4. We have spent extended periods of time in Yuendumu over the past two years, and have made a point of using Warlpiri, not English, with the children. We are well known to the children, and we are confident that our presence has not influenced their Warlpiri. In addition, we have compared our results with those when Aboriginal assistants have interviewed the children and found no differences.
5. The final vowel of the morpheme depends on the preceding vowel: [i] is used with a preceding front vowel; otherwise [u] is used.
6. The vowel harmony rule applies to the focus marker as to other morphemes.
7. See Schmidt's paper, this volume, for a discussion of peer groups in another Aboriginal community.