Pitta-Pitta, Case Marking, and Transitivity

Claire Bowern
Harvard University

1. Introduction

Several Australian languages have come to the notice of syntacticians in recent years because of their unusual tense marking strategies (see, for example, Hale 1998 and Pesetsky and Torrego 2000). We find in these languages a number of ways in which tense may be marked in a clause, not all of these involving the verb. In Kayardild (Evans 1995), for example, tense can be marked on all non-subject arguments; the tense is signalled by the case used. In Baagandji (Hercus 1982), however, non-verbal tense marking appears only on subject pronouns. The situation is different again in the Karnic language Pitta-Pitta (Roth 1897, Blake and Breen 1971, Blake 1979), where tense is marked on both subject and (depending on the dialect) object. This paper focuses on Pitta-Pitta and the very closely related Wangkajutjuru.

The first part of the paper is a description of Pitta-Pitta's tense marking (verbal and non-verbal). In the remainder of the paper I will examine the comparative/historical evidence for the etymology of the construction and draw some parallels with other Pama-Nyungan languages. There are at least three possible origins for this type of case marking in Pitta-Pitta. Two of them are an antipassive (suggested by Hopper and Thompson 1980 for Pitta-Pitta) and 'insubordination' (as suggested by Evans 1995 for Kayardild). I argue here that neither of these is the origin of Pitta-Pitta's tense marking, which instead is parallel historically to the 'reduced transitivity' (or conative) construction of some other Pama-Nyungan languages such as Jalarnnga and Warlpiri.

1.1 The languages

Pitta-Pitta is a member of the Karnic subgroup of Pama-Nyungan. There are no longer any full speakers of this language. The linguistic situation of the Boulia district was quite complicated, and the language usually referred to as 'Pitta-Pitta' was in fact only one of a number of dialects in the area. These dialects fall into an Eastern group, comprising Pitta-Pitta and a number of very badly attested other dialects, such as Rangwa, Kunkalanya, Ngulupulu and Ringa-Ringa, and a Western group, comprising Wangkajutjuru and Lhanima. The groups were not mutually intelligible although they were grammatically very close. Here I use Pitta-Pitta as the representative dialect of the Eastern languages, and Wangkajutjuru as the representative of the Western languages.

MIT Working Papers in Linguistics 40, 25–38

My data for Pitta-Pitta and Wangkajutjuru are from Blake and Breen (1971), Blake (1979), and Roth (1897). Blake (1979) and Blake and Breen (1971) are based on the same material; Roth (1897) was written after travels in Western Queensland as Protector of Aborigines. While Blake (1979) is the most quoted source on Pitta-Pitta, and is the easiest to use, it has a number of faults. It is a sketch, and as such it has omissions in a number of areas. Also, a few of the labels used by Blake for case functions are misleading. His dative case, for example, does not fulfil the functions of the case generally labelled 'dative' in Australian languages. Blake's 'dative' marks the object of verbs in the future tense and the goal of certain verbs such as *wapa-* 'look for'. The form *-ku* has additional functions (according to Roth 1897) which are omitted by Blake, including 'circumstantial' (ie, 'around in a place'). Blake's 'dative' is not used for possessives, for goals, for beneficiaries, nor in any of the other functions which one labels 'dative' in Karnic languages.

Blake and Breen (1971) is a preliminary analysis of fieldwork conducted by Gavan Breen and Barry Blake in the mid to late 1960s. It contains a large number of examples but it is not a complete analysis of the language and there are many points on which there are either conflicting data or (more often) an absence of data. Roth (1897) also has faults. It has many omissions, and reads rather like an elementary Victorian Latin Primer, but Roth gives many example sentences, including fairly complicated constructions. His data show less interference from English than later recordings—while Roth's informants would have still spoken Pitta-Pitta amongst themselves, Blake's and Breen's informants all used English as their primary language of communication. There are still many omissions and some inconsistencies, and the data must be used with caution; Roth (1897) is, however, our oldest source for Pitta-Pitta and its contents deserve consideration.

2. Synchronic analysis

2.1 Tense and nouns

In both Pitta-Pitta and Wangkajutjuru the forms of the structural cases[1] are affected by the tense of the clause. Tense is marked on the verb (by a null suffix in the future, and an overt suffix in the present and past), on the subject of the clause and on the object (if the verb is transitive). In Pitta-Pitta both subject and object cases vary for tense, whereas in Wangkajutjuru only the subject marking varies.

[1] The ergative and instrumental are homophonous, and indeed are probably the same case, since the instrumental also participates in the tense alternations seen in the data (an example is given in (3d)). Other cases include a dative (used for possession and to mark goals, as well as indirect objects), a locative, an allative, an ablative, an aversive, and a comitative.

Nominals are marked according to a nominative/accusative pattern in the future, while in other tenses an ergative/nominative/accusative is used.[2]

2.1.1 The forms and their etymologies

Apart from the first person singular pronoun, which is synchronically (although not historically) suppletive, nominals in Pitta-Pitta exhibit a suffix *-ngu* for the future ergative/nominative and *-ku* for the accusative. The form *-ngu* is a reflex of the ergative suffix reconstructed for Proto Karnic as **-ngu* and for Proto Pama-Nyungan (the ancestor language of Proto Karnic and a number of other subgroups) as **-ngku*; *-ku* is clearly a reflex of the Proto Pama-Nyungan and Proto Karnic nominal dative suffix **-ku*. Table 1 shows the shift in case forms and functions between Stage I (approximately the stage of Proto Karnic)[3] and Stage II, which is the state of the modern languages.

Table 1: Case 'shuffling' in earlier stages of Pitta-Pitta and Wangkujutjuru

Stage I

	Erg/Inst	Nom	Acc	Dat	Loc
All tenses	*-lu, -ngu*	*-ø*	*-nha*	*-ku*	*-nga*

Stage II

	Erg/Inst	Nom	Acc	Dat	Loc
Non-Future (PP)	*-lu*	*-ø*	*-nha*	*-nga*	*-ina*
Non-Future (WJ)	*-ru*	*-ø*	*-nha*	*-nga*	*-na*
Future (PP)	*-ngu*		*-ku*, (*-nha*)	*-nga*	*-ina*
Future (WJ)	*-ngu*		*-nha*	*-nga*	*-na*

The phonological correspondence *l* (PP) to *r* (WJ) is regular. Both ergative allomorphs at Stage I (*-lu* and *-ngu*) are reconstructable to Proto Karnic and are common in Karnic languages. Their exact allomorphy conditions in Proto

[2] I follow here standard Australianist practice (see also Goddard 1982) for these types of systems and I restrict the term ergative to the case usually used for the subject of a transitive verb, and nominative for the subject of an intransitive verb. Thus ergative and nominative are syncretised in the future tense in Pitta-Pitta and Wangkajutjuru, and will be referred to in the glosses as fe/n. The accusative is always distinct, and ergative and nominative are distinct in the non-future tenses.

[3] Proto Karnic probably had a combined nominative/accusative (that is, absolutive) case for nouns; *-nha* occurred only on pronouns. At some point between Proto Karnic and the modern, attested languages, the accusative *-nha* was generalised in Pitta-Pitta and Wangkajutjuru from the pronouns to all nominals. In all respects other than the accusative Stage I is equivalent to Proto Karnic.

Karnic, however, cannot be determined (in Proto Pama-Nyungan **-ngku*, which became **-ngu* in Proto Karnic, was used with disyllabic stems, but this cannot be reconstructed for certain for Proto Karnic).

2.1.2 Synchronic forms and functions

As seen from Table 1, the Eastern and Western languages differ in the case allomorphs used in the future. In Pitta-Pitta *-ku* is used for future accusatives without exception, according to Roth (1897). That is, all examples that contain a transitive verb in the future have the object marked with *-ku*. In Blake and Breen (1971), however, the use of *-ku* appears to be optional; *-nha* also occurs in sentences in the future tense. I assume that since the corpus on which Blake and Breen (1971) is based was recorded when the language was already moribund, the last speakers of Pitta-Pitta could have reanalysed the allomorphy conditions. The rules in Wangkajutjuru are different again; in these Western dialects, the accusative case is always *-nha*; *-ku* does not occur. There is thus allomorphic conditioning of the accusative case by tense in Pitta-Pitta but not in Wangkajutjuru. Another way of describing the phenomenon is that the structural case desinences surface as portmanteau morphemes, which carry information about both tense and case.

In both languages, the set of case allomorphs which have been previously referred to as 'future' are in fact used in the future tense, the potential and purposive modalities (and their equivalent in subordinate clauses) and with imperatives.[4] In both Pitta-Pitta and Wangkajutjuru, *-ku* is regularly used with a few other verbs, whatever the tense (such as *wapa-* 'look for'). These are all verbs which take goals or 'intentions' as internal arguments. Thus the accusative allomorph *-ku* occurs in situations where we find intensional objects, and one of these situations is grammatical (the future); it seems in the grammar that all futures are intensional.

2.2 Tense and verbs

Pitta-Pitta and Wangkajutjuru are unusual amongst Karnic languages in that the future tense is marked by a zero morpheme. Table 2 gives the relevant suffixes (from Blake and Breen 1971 and Blake 1979).

[4] Because sentences in the future tense are by far the most common instantiations of the marking system, I will continue to refer to the allomorphs as the 'future' allomorphs, even though they occur in other situations.

Table 2: Pitta-Pitta and Wangkajutjuru verbal tense, aspect and mood suffixes

Tense	Pitta-Pitta	Wangkajutjuru
Present	*-ya*	*-ngi*
Imperfective		*-nga*
Past	*-ka*	*-nya*
Future	*-ø*	*-ø*
Imperative	*-nha*	*-nha*
Potential/Lest	*-kala* *-lia*	*-liʀa*
Conditional		*-ya*
Purposive	*-linga*	*-linga*

A few comments are required on the purposive *-linga*. The purposive is not really a tense; it does not belong structurally to the tense paradigm given in Table 2. Historically, *-linga* comprises the nominaliser *-li* and the dative *-nga*. This is reflected synchronically in the structural fact that verbs with *-linga* are clauses in miniature; they are nominalised, subjectless verbs and function as predicative dative nominals within the clause. In this analysis, a sentence such as (1a) is structurally parallel to (1b), not to (1c):[5]

(1) a. *ngapu nhua-i watyi-linga, nhua-i thima-linga*
water this.NOM-UNDEF wash-PURP, this.NOM-UNDEF drink-PURP
N Pro N, Pro N
"This water's for washing, this one's for drinking."
(Blake and Breen 1971:54)

b. *ngapu nhua-i kutya*
water this.NOM-UNDEF bad, stinking
N Pro N/Adj
"This water's stinky" (my example)

[5]Abbreviations used in this paper are: abl, ablative; acc, accusative; all, allative; comit, comitative; dat, dative; deix, general deixis; dist, distal deixis; erg, ergative; fem, feminine; fe/n, future ergative/nominative; finst, future instrumental; fut, future; gen, genitive; imper, imperative; inst, instrumental; loc, locative; mabl, modal ablative; masc, masculine; mloc, modal locative; mprop, modal proprietive; N, noun; nf, non-future; nfacc, non-future accusative; neg, negative; nom, nominative; nom'l, nominaliser; pot, potential; PP, Pitta-Pitta; pres, present; pro, pronoun; prop, proprietive; pst, past; purp, purposive; sg, singular; undef, undefined deixis; WJ, Wangkajutjuru.

c. *ngapu nhua-ka rtirnpa-ya*
water that.NOM-DIST run-PRES
N Pro V
"That water's running." (Blake and Breen 1971:134)

2.3 Examples

In this section there are a number of examples illustrating different aspects of the workings of tense marking in Pitta-Pitta and Wangkajutjuru. (WJ) denotes an example from Wangkajutjuru; all others are from Pitta-Pitta.

(2) (Past Transitive and Intransitive)

a. *warra nha-para ngura-minya karnrta-nya*
woman-NOM 3SG.FEM.NOM-DEIX camp-ABL go-PST
"The woman walked away from the camp." (WJ)

b. *waiRa-nha ngathu thari-nya nhana-yi wakira-nha*
heart-ACC 1SG.ERG spear-PST 3SG.ACC.PROX kangaroo-ACC
"I speared the kangaroo right in the heart." (WJ)

In all these examples we see transitive and intransitive clauses using the non-future allomorphs of the structural case markers. The following examples are a collection of imperatives, potentials and futures, all of which show the future allomorphs. Examples (3a) and (3b) are from Pitta-Pitta. Example (3c) is from Wangkajutjuru and (3d) is from Lhanima, another Western dialect.

(3) (Examples in Future Contexts)

a. *yin-ngu pani nganupali-nha*
2SG.FE/N not enter-IMPER
"Don't you go in."

b. *tyira-maru-ngu nganyu karnta-ϕ*
boomerang-PROP-FE/N 1SG.FE/N go-FUT
"I'll be going with the boomerang."

c. *yun-ngu nhana-para thatyi-ya, ira-lhiRa yunngu*
2SG.FE/N 3SG.ACC-DEIX eat-COND, sick-POT 2SG.FE/N
"If you eat that meat, you'll get sick." (WJ)

d. *ngapiRi-ngu tyilatyila-ngu thawa-ϕ paya-nha*
father-FE/N boomerang-FUT.INST kill-FUT bird-ACC
"Father will kill some birds with a boomerang." (Lhanima)

(Blake and Breen 1971:133)

The sentences in (4) are from Roth (1897) and show Pitta-Pitta's use of a different accusative case in the future. In these examples, the first line is Roth's transcription of the sentences. The second line is my conversion of Roth's transcription to phonemic transcription in the standard Karnic orthography.

(4) a. "Umma-ngo berdaje-ko kanari-ko woonje."
ngama-ngu parta-tya-ku kiniyari-ku nguntyi-ø
mother-FUT hold-NOM'L-FUT.ACC girl-FUT.ACC give-FUT
"Mother will give the dilly-bag to her daughter."
(Roth 1897:15, ex. 24a)

b. "Berdaje-nunkatiye-ko mare nunyo."
parta-tya nhangka-tha-a(R)i-ku mari ngunyu.
hold-NOM'L this.FEM-PROP?-DAT-FUT.ACC bring-ø 1SG.FE/N
"I will fetch the woman's dilly-bag for her." (Roth 1897:10, ex. 12.8)

c. "Kunda-linga -nari nunyo tinungara-eno pari-pari-nga?"
karnta-linga nhari ngunyu thinikara-inu paripari-nga
go-POT now 1SG.FE/N north-ALL swag-PURP
"Shall I go to the north for my belongings?"
(Roth 1897:28, ex. 40.a.iii)

d. "Piouli-nga-ko pokara-ko toka nunyo."
piyawarli-nga-ku pukarra-ku thuka-ø nganyu
dog-DAT-FUT.ACC grass-FUT.ACC take-FUT 1SG.FE/N
"I will bring grass for the dog." (Roth 1897:15, ex. 24c)

This last example is particularly interesting as the 'future object' case appears both on the direct object and on the goal. This is parallel to non-future marked sentences such as example (5), from Wangkajutjuru:

(5) *pungkuwaRi-minya-nha kathi-nha kutu-Ru*
bag-ABL-ACC meat-ACC pull-IMPER
"Pull the meat out of the bag." (WJ)

The distinction in case marking between the future and non-future also applies in subordinate clauses, as shown in examples (6a) to (6c). In (6a), *inhaka nguntyilinganha* is the object of the matrix verb *pipaka* 'see-PST'. Recall from the discussion in section 2.2 and the examples in (1) that verbs with *-linga* are nominalised. So, the subordinated and nominalised verb agrees in case with *inhaka*, the argument to which it is predicated, but the arguments of *nguntyilinganha* itself, that is, *inku* and *makuwartaku*, have future marking. The sentence can be literally translated as something like 'I saw him, who is that to whom you will give a spear'; 'I saw the you-will-give-a-spear-to man'. Example (6b) shows past tense marking in a subordinate clause, and (6c) is another example with non-future marking in the matrix clause and future marking in the subordinate clause.

(6) a. “innaka ingo- woonje-linga-na
inha-ka *inku* *nguntyi-linga-nha*
3SG.MASC.NFACC-DEIX 2SG.FE/N give-POT-NFACC
makowata-ko pipa-ka nutto.”
makuwarta-ku *pipa-ka* *ngathu*
spear-FUT.ACC see-PAST 1SG.NFUT.ERG
“I saw the man to whom you will give a spear.”
(Roth 1897:25, ex 34.b)

b. *yanka-ka ngathu* *murra-nha* *mari-linga*
tell-PAST 1SG.NFUT.ERG STICK-NFACC get-PURP
“I told him to pick up sticks.” (Blake 1979:210, ex 89)

c. *karnta-yangu* *ngantya* *thatyi-linga* *kathi-ku*
go-PRES.HITHER 1SG.NFUT.NOM eat-PURP meat-FUT.ACC
“I’m coming here to eat meat.” (Blake 1979:210, ex 90)

2.4 Summary of data

We can summarise the following synchronic and diachronic facts about tense marking in Pitta-Pitta and Wangkajutjuru:

A Diachronic

i. The future tense subject marker (assigned to external arguments and to instrumental arguments) is historically an allomorph of the ergative, the object marker (assigned to internal arguments) is historically, but not synchronically, an allomorph of the dative;

B Synchronic

i. *-ngu* has no function other than to mark future nominative, ergative or instrumental arguments;
ii. the future accusative *-ku* is used in Roth’s Pitta-Pitta data as the allomorph of the accusative used in the future tenses; in Blake and Breen (1971) it is used optionally and rarely; in Wangkajutjuru it is not used at all;
iii. the form *-ku* is also used in a limited function as a circumstantive (evidence from Roth (1897) only);
iv. in both languages a few verbs take objects marked *-ku* whatever the tense, such as *wapa-* ‘look for’;
v. The allomorphs *-ngu* and (optionally) *-ku* are used in the ‘future’ tense, potential and purposive modalities (and their equivalent in subordinate clauses) and with imperatives;
vi. the future tense verbal suffix is -ø; this is typologically unusual for an Australian language (and languages generally).

3. Reconstruction

It is interesting to consider how such a tense-marking pattern arose. There are three plausible origins of this construction. The first is 'insubordination' (the terminology is from Evans 1995). This is the process whereby a subordinating construction ceases over time to be used with a matrix clause. Subordinative morphology remains, although the matrix clause does not. The second possible etymological source is the 'less-affected object' or 'conative' construction very common in Australian languages, including Kalkatungu, Jalarnnga and Warlpiri. The third is a reanalysed anti-passive, the solution suggested in passing by Hopper and Thompson (1980) in their discussions on this type of tense marking. Each hypothesis will be evaluated in the following sections.

3.1 Insubordination

3.1.1 Kayardild

In Kayardild the tense of a clause is marked not only on the verb (as a suffix), but also on all non-subject constituents. The case of non-subject arguments varies according to the tense and mood of the verb.[6] The term 'modal case' was coined for this in Evans (1995). For example, the unmarked choice for the case for non-subject constituents in the past tense is ablative, but in the potential, the proprietive in used. The verbal suffixes for tense play a somewhat secondary role to the modal case system, but tense marking on verbs does exist. In many instances, the suffixes are cognate with (or identical to) nominal/modal case suffixes. See Evans (1995:253ff) for discussion. A few examples are given in (7):[7]

(7) (Kayardild)

a. *ngada dathin-kiring-ku kamarr-iring-ku*
1SG.NOM that-ALL-MPROP stone-ALL-MPROP
"I will (go) to that stone." (Evans 1995:403, ex. 10-7)

b. *ngada kurri-nangku mala-wu (balambi-wu)*
1SG.NOM see-NEG.POT sea-MPROP morrow-MPROP
"I won't (be able to) see the sea (tomorrow)."
(Evans 1995:404, ex. 10-12)

c. *ngada kurri-nangku mala-y (barruntha-y)*
1SG.NOM see-NEG.POT sea-MLOC yesterday-MLOC
"I could not see the sea (yesterday)." (Evans 1995:404, ex. 10-13)

---

6 Kayardild morphology is extremely complicated and the facts have been somewhat simplified here.

7 Note, incidentally, that the 'modal proprietive' case used in example (7a) is cognate with the Pitta-Pitta future accusative *-ku*.

The tense marking on nouns here is superficially similar to the strategy used in Pitta-Pitta and Wangkajutjuru, although recall that in the latter languages, the subject cases (ergative and nominative) have future allomorphs, whereas in Kayardild it is normally the internal arguments and adjuncts that have case assigned on the basis of tense.

3.1.2 Diachronic description

It is fairly clear that in Kayardild the tense marking on nouns is derived historically from marking all arguments in a subordinate clause with certain case suffixes (the case used depending on the type of subordination). (Evans) argues that such clauses were originally nominalised subordinate clauses. Over time the matrix clause was omitted or implied, but the nominalised clause (and the nominal marking) remained as the sole indication of the meaning of the implied matrix clause. Given the case marking patterns, as well as the fact that many verbal tense suffixes in Kayardild consist of an element and a form homophonous with the modal case marker used in that tense, this is certainly the correct historical explanation for the Kayardild's synchronic tense marking.

Now, applying this type of change to the situation in Pitta-Pitta and Wangkajutjuru would imply that at one stage there were nominalised clauses which took the dative case after some matrix verbs (remember that although *-ku* is *not* the modern Pitta-Pitta dative, it was the dative in a previous stage of the language). These matrix verbs probably denoted some potential meaning, such as *it's possible that ...; I think that ... (might happen)*. At some stage the matrix clause was lost, leaving the modal case and synchronic tense-determined case allomorphy.

I do not favour this solution for Pitta-Pitta and Wangkajutjuru, although it is obviously correct for Kayardild. There are a number of reasons for this. Firstly, in both Pitta-Pitta and Wangkajutjuru, the suffix on the verb in the future tense is a null morpheme. If Pitta-Pitta's tense based case marking came from insubordination, we would expect an overt suffix on the verb, some relic of the nominaliser and the case marker which would have also appeared on the verb. Secondly and more importantly, however, Pitta-Pitta does actually have a number of structures that are very similar, if not identical, to an earlier stages of 'insubordination' (that is, subordinate clauses with case marking on all (including verbal) constituents); these are different from the future tense-marked constructions. Pitta-Pitta has nominalised embedded clauses which may take a number of cases. These are represented both in the corpus of Blake and Breen (1971) and Roth (1897). Some examples are given in (8) below (compare also example (6) above):

(8) a. *rtipu-nha ngathu nhatyi-ka rtarri-ka(-maru)-inya-nha*
rock-ACC 1SG.ACC see-PST jump-PST(-COMIT)-ABL-ACC
"I saw the rock he jumped from." (Blake 1979:218, ex 120)

b. *thatyi-ka-inya mutyi-ka nhari ngantya*
eat-PST-ABL sleep-PST now 1SG.NOM
"After I ate, I had a sleep." (Blake and Breen 1971:141)

c. *ngathu thala pithi-ka nhatyi-ka-inya-lu*
1SG.ERG COND hit-PST see-PST-ABL-ERG
"I would have hit him if I'd seen him." (Blake and Breen 1971:141)

Therefore it seems that arguments regarding insubordination as the donor construction are not tenable. The examples in (8) are the matches of the Kayardild's forerunners of insubordination; the verb is nominalised and given the case appropriate to its grammatical role in the matrix clause. These sentences are clearly different from those that have given rise to tense-determined case marking. The historical changes required to transform one into the other are complex (such as the loss of all verbal suffixes and the generalisation of one case (dative), to name just two). It is better to look elsewhere.

3.2 Less-affected objects

It is quite common in Australian languages for 'less affected arguments' (using terminology from Hopper and Thompson 1980) of transitive verbs, such as intensional objects, unattained goals, and the like, to be marked differently from 'more affected arguments'. In Kalkatungu, for example, clauses with imperfective aspect mark direct objects with dative case:

(9) (Kalkatungu)

a. *thuku nguli ityai ruupu-wu ai ingka*
dog CONT bite rope-DAT COMP.3S go
"The dog keeps chewing at the rope to get away."

b. *thuku-yu yuru-ø ityai-nha*
dog-ERG man-ABS bite-PST
"The dog bit the man." (Blake 1977:17)

A link is noted in Hopper and Thompson (1980) between the future tense and 'reduced transitivity' (future or irrealis is one of the factors on their transitivity hierarchy). Now, since we can trace the Pitta-Pitta and Wangkajutjuru forms marking future tense on nouns to an allomorph of the Proto Karnic ergative and the Proto Karnic dative, we should look in other related Australian languages for a construction using these two cases which marks unattained goals, less affected objects, or reduced transitivity.

In Warlpiri there is a construction whereby the object is demoted from absolutive to dative, and ergative case marking remains (as described in Nash 1986). This occurs with certain verbs, such as *warri-rni* 'seek' and the preverb *wapal*, 'in search of' (cognate with the Pitta-Pitta verb *wapa-* 'look for', which as noted above always takes *-ku*), as well as some verbs where the object is also the goal of motion (for details see Nash 1986:198, quoting Hale 1978:47).

(10) (Warlpiri)

a. *Kurdu-ngku ka-ju ngaju paka-rni.*
child-ERG PRES:3SG-1SG.OBJ 1SG:ABS hit-PRES
"The child is striking me."

b. *Kurdu-ngku ka-ju-rla ngaju-ku paka-rni*
child-ERG PRES:3SG-1SG.OBJ 1SG:DAT hit-PRES
"The child is striking at me." (Nash 1986:199)

I suggest an origin of the Pitta-Pitta marking in this type of construction.[8] The path of semantic change from intensional object in the present (that is, a 'goal') to an object in the future (which is also a goal not yet attained) is a plausible one. The shift is in the focus of the construction from the unattained nature of the object, with action taking place in the present (eg, 'I am striking at the dog, *but I am not currently actually hitting it*') to the possibility that the object will be attained in the future (e.g., '*I am not currently actually hitting the dog*, but in the future I might/will strike (at) it').

3.3 Anti-passives

Hopper and Thompson (1980:273-4) tie the tense-determined case marking of Pitta-Pitta to antipassives; they suggest that Pitta-Pitta's case split is in origin an active/anti-passive split. There are two reasons why this argument is impossible. Firstly, the anti-passive construction in languages in which it occurs in Australia is marked with an overt suffix on the verb (see, for example, Blake (1969) for Kalkatungu and Terrill (1997) for a survey of antipassives in Australia). Neither Pitta-Pitta nor Wangkajutjuru shows an overt suffix, and we are left with the same reasoning as in section 3.2 above; why invent an unusual historical change when there is an alternative solution which fits the situation better? Secondly, and much more damningly, the origin of the most common future subject suffix appears without much doubt to be the ergative; the anti-passive is the one construction

[8]Note also that in a solution such as this the typological oddity of the future tense being null-marked is not a problem; if the construction is a reanalysed present tense construction with an object marked as an unattained goal, a matrix verb in the present tense with a null morpheme is not so odd. It is only when we consider arguments of insubordination or reanalysis of other clause types that the absence of verbal morphology becomes important.

where an ergative suffix, by the definition of the construction type, would be excluded! Thus I do not consider the anti-passive to be a viable 'donor' construction for tense-based case marking in Pitta-Pitta.

4. Conclusions

One of the aims of this was to show that the data are much less clear-cut than appears from Blake (1979); Pitta-Pitta has never been properly described in adequate detail, and since the last speakers have now died there is no possibility of collecting more data. The synchronic conditions for marking tense on nominals have been briefly summarised. It can be seen that the facts of the language are considerably more complicated than Blake (1979) implies. The dialects differ as to their treatment of tense marking and the last speakers were not consistent in their use of the separate future suffixes. Three possible etymologies of Pitta-Pitta's tense-determined case marking have been discussed. Of these, the anti-passive is untenable because it required us to assume the marking of transitive subjects as ergative in an environment where they cannot possibly have been marked with such a case. The reanalysis of a subordinate clause as a matrix clause is an appealing solution, but it does not hold here, since the inherited structures which would have been the donors are still present in the modern language. The analysis of the construction as a reanalysed present 'conative' has the advantages that it requires no explanation of the absence of an overt verbal suffix in the future and that there are examples of this construction in neighbouring and related languages which match the Pitta-Pitta construction in almost every detail.

References

Blake, Barry J. (1969). *The Kalkatungu Language: A brief description*, Volume 8 of *Linguistic Series*. Canberra: Australian Institute of Aboriginal Studies.

Blake, Barry J. (1977). *Case Marking in Australian Languages*, Volume 23 of *Linguistic Series*. Canberra: Australian Institute of Aboriginal Studies.

Blake, Barry J. (1979). Pitta-Pitta. In R. M. W. Dixon and B. J. Blake (eds.), *Handbook of Australian Languages*, Volume 1, pp. 182–242. Canberra: ANU Press.

Blake, Barry J. and Gavan Breen (1971). The Pitta-Pitta dialects. In *Linguistic Communications*, Volume 4. Melbourne: Monash University. Monash University, Melbourne.

Dixon, R. M. W. and Barry J. Blake (1979). *Handbook of Australian Languages*, Volume 1. Canberra: ANU Press.

Evans, Nicholas (1995). *A Grammar of Kayardild, with Historical-Comparative Notes on Tangkic*. Berlin: Mouton de Gruyter.

Goddard, Cliff (1982). Case marking in Australia: a new interpretation. *Australian Journal of Linguistics 2*, 167–196.

Hale, Ken (1978). The essential features of Walbiri main clauses. Mimeo. MIT.

Hale, Ken (1998). A note on Pittapitta nominative case and the future tense. Ms., MIT.

Hercus, Luise Anna (1982). *The Baagandji Language*. Canberra: Pacific Linguistics.

Hopper, Paul and S. Thompson (1980). Transitivity in grammar and discourse. *Language 56*(1), 251–95.

Nash, David (1986). *Topics in Warlpiri Grammar*. Outstanding Dissertations in Linguistics. New York: Garland Publishing Inc.

Pesetsky, David and Esther Torrego (2000). T-to-C movement: Causes and consequences. In M. Kenstowicz (ed.), *Ken Hale: A life in language*. Cambridge: MIT Press.

Roth, Walter E. (1897). *Ethnological Studies among the North-West Central Queensland Aborigines*. Brisbane: Government Printer.

Terrill, Angela (1997). The development of antipassive constructions in Australian languages. *Australian Journal of Linguistics 17*(1), 71–88.

Department of Linguistics
Harvard University
305 Boylston Hall
Cambridge, MA, 02138

bowern@fas.harvard.edu