Qualitative comparison in Warlpiri: semantic case, adposition and/or derivational affix?

Jane Helen Simpson

Australian National University

Abstract

The Central Australian Pama-Nyungan language Warlpiri has a suffix *–piya* expressing resemblance. Morphologically, it is a semantic case, and not a derivational affix. Semantically it is a two-place predicate. Syntactically, it acts in a similar way to adpositions. As the main predicate of a clause it is subcategorised for SUBJECT and OBJECT. As the predicate of an ADJUNCT it is subcategorised for an OBJECT (at least) and bears a case feature which allows the ADJUNCT to consist of more than one element through agreement. *–piya* takes additional case marking ('case stacking') to indicate which argument or adjunct it is predicated of. In main clause and ADJUNCT use it is prototypically used to compare entities, but it can be used to compare events through pragmatic inference. Rarely, it attaches to verbs (nominalised or finite), and compares events directly. In this latter use it is a discourse particle with no syntactic arguments. Its LFG lexical entry allows a simple representation of the relation between its different functions.

1   Introduction

The Central Australian Pama-Nyungan language Warlpiri has a suffix *–piya* whose meaning covers 'similarity' (1)[1] and 'simulation' (2) (Treis 2018). It attaches to the elements acting as the standard of comparison.

(1)   Jarrurlujarrurlu ka=rnalu   ngarri-rni   <u>jurlpu</u>
       parrot.sp   PRES:=we   call-NPST   bird
       lapaji-piya   – purturlu   wajirrki-wajirrki.
       parrot.sp-LIKE   back   green
       'Jarrurlujarrurlu is what we call **a bird** which is like <u>the Port Lincoln parrot</u>. Its back is green.' [jarrurlujarrurlu]

(2)   Yiki-nyina-mi   ka=<u>rla</u>   **kurdu wita-piya-ku**.
       try.to.warn-NPST   PRES=DAT   child   little-LIKE-DAT
       'She tries to dissuade <u>him</u> **as though he's a little child**. [yiki-nyina]

---

[1] Examples are sourced from the Warlpiri Dictionary (Laughren et al, in press) and referred to by the lemma in which they appear, or else from Kenneth Hale's recordings (Hale 1966-67). Warlpiri gloss abbreviations: ASSOC Associative, DAT Dative, E.G. For example, ERG Ergative, FOC Focus, LOC Locative, NOM Nominalising, NPST Nonpast, POSS Possessive, PRES Present, TOP Topic.

In (1) the *–piya*-marked nominal in boldface is used to assert the similarity between the entity denoted by the underlined form (*jurlpu* 'bird') and the entity denoted by the bold-faced form (*lapaji* 'Port Lincoln parrot'). In (2) the clause compares the manner of the action denoted by the verb with the manner of an imagined action on a different type of person (*kurdu wita* 'little child'). Formally the comparee is expressed as the Dative object of the verb (underlined)[3] and the standard of comparison is an expression marked with the ending *–piya* and Dative case (bold-faced).

The goal of this paper is to argue that the ending *–piya* has the following properties:
(i) it expresses semantically a two argument predicate, one argument of which is the comparee, and the other of which is the standard of comparison.
(ii) it can be pragmatically interpreted as comparing some aspect of an event with another event.
(iii) morphologically, the ending *–piya* behaves like a semantic case in Warlpiri, but not like a derivational affix.
(iv) it carries a case feature *PIYA* which allows construal of several nominals as part of the same expression.
(v) syntactically, the ending *–piya* can act as the main predicate of a clause, or as the predicate of an ADJUNCT, or, rarely, as a discourse particle
(vi) it receives additional case marking in agreement with the case of the nominal expression representing the comparee.

2   General properties of *–piya*

Warlpiri has a system of case-marking which is used both to indicate grammatical functions and to indicate what nominals are construed with each other (through agreement) (Hale 1982, Nash 1986, Simpson 1991). Unmarked nominals are interpreted as main predicates or as having Absolutive case[4]. Cases are usually divided into grammatical cases such as Ergative which primarily mark arguments of verbs, and semantic cases such as Allative which play much the same role as adpositions (Simpson, in press).

The form *–piya* has much in common with semantic cases, and is sometimes glossed as the Semblative case. It can attach to nominals, nominalised verbs and, marginally, to finite verbs. In terms of grammatical function, the

---

[3] The form *rla* is polysemous: =*rla* is a third person Dative clitic on the auxiliary, -*rla* is a Locative semantic case suffix on nominals, and a same subject complementiser on nominalised clauses.

[4] A nominal acting as a predicate agrees in case with its subject. In main clauses, both the subject and the nominal predicate acting as the main predicate are unmarked for case, which can be interpreted as Absolutive case.

nominal marked with –*piya* can act as the main predicate of a clause (1), as an adjunct (2), or, as I will show later, a discourse particle.

Warlpiri freely allows nominals to act as main clause predicates or as adjuncts (Simpson 1991). So it might be argued that –*piya* marked nominals are behaving just like regular nominals, and that –*piya* is a derivational affix comparable to English *dog-like, childlike*. However, while the Warlpiri Dictionary (Laughren et al in press) contains many examples of derived words as sub-entries, it contains no clear examples of lexicalised –*piya* forms[5]. A second argument against treating –*piya* as a derivational affix comes from its attachment to anaphors. (3) and (4) illustrate –*piya* attaching to pronouns, performing a similar function to the preposition *like* in English. This indicates that morphologically –*piya* is not a derivational affix.

(3) Kardirri=nya   ka   nyina <u>wiringarri=ji</u>.   Kakutu=ju
     white=FOC   PRES   sit.NPST barn.owl=TOP   boobook.owl=TOP
     nyanungu-piya=juku=jala,
     he-LIKE=STILL=ACTUALLY
     'The Barn owl is white. <u>The Boobook owl</u> is **just like him** …'
     [kakutu]

(4) <u>Yangka old man-rli</u>   **ngaju-piya-rlu** kala   para-ja
     the   old.man-ERG   me-LIKE-ERG   USED.TO   follow-PAST
     '<u>That old man</u> **like me** *followed it*.' [Hale Tape 2.19 1966]

I suggest that in these examples –*piya* acts similarly to an adposition, taking as one argument the comparee and as the other argument the standard of comparison (Treis 2018). –*piya* is comparable to English 'like' in *John is like his mother*. It does not seem to be a nominal, since it cannot occur on its own without a preceding nominal, nominalised verb or finite verb.

In languages like English it has been argued in LFG that one argument of an adposition is realised as a complement, but the other argument is not expressed directly as, say, a subject in main clauses, because there is a mediating copula, and the English PP bears the function PREDLINK:

     (↑PRED) = '*be*' <(↑SUBJ) (↑PREDLINK)>
     where PREDLINK could be a Nominal Phrase, an Adjective Phrase or
     a Prepositional Phrase (Butt et al 1999) .

---

[5] I found just two examples: *jalya-kurlu-piya* 'like healthy' = used as a predicate to say that someone is not to be messed with, and *ngukunypa ngapa-piya* 'brains like water' = 'careless'.

Warlpiri does have copula uses of stance verbs, as in the first clause in (3), where *nyina* 'sit' acts like a copula, and copula verbs can appear with *–piya* marked nominals as in (5). But copulas are not essential, as in the second clause in (3). Therefore, when the semantically two-place predicate *–piya* is the main predicate it must take both subject and a complement. I will call this complement OBJECT, as is not uncommon in LFG representations of adpositional objects. Its lexical entry can be represented initially as follows

$$(\uparrow\text{PRED}) = \text{`}\textit{–piya} <(\uparrow\text{SUBJ}), (\uparrow\text{OBJ})>\text{'}$$

Thus, in (3) the *–piya*-marked nominal *nyanungu-piya=juku=jala* 'he-LIKE=STILL=ACTUALLY' contains both the main predicate, *–piya*, and the complement of that predicate, the nominal *nyanungu*.

A possible f-structure follows for the second clause in (3) *Kakutu=ju nyanungu-piya=juku=jala*, 'The Boobook owl is just like him'. I have not included the discourse clitics *=ju*, *=juku* and *=jala*. Note that clauses not headed by finite verbs are tenseless.

F-structure 1   Example (3)

$$
\begin{bmatrix}
\text{PRED} & \text{`PIYA <SUBJ, OBJ>'} \\[2ex]
\text{SUBJ} & \begin{bmatrix} \text{PRED} & \text{`KAKUTU'} \\ \text{PERS} & 3 \\ \text{CASE} & \text{ABS} \end{bmatrix} \\[4ex]
\text{OBJ} & \begin{bmatrix} \text{PRED} & \text{`PRO'} \\ \text{PERS} & 3 \\ \text{CASE} & \text{PIYA} \end{bmatrix}
\end{bmatrix}
$$

The OBJECT *nyanungu* is a type of pronoun. The assignation of a case feature to the OBJECT is required because more than one word ending in *–piya* can act jointly as the nominal predicate. Agreement is discussed in section 4.

3   *–piya* as predicate of an adjunct

We have seen that *–piya* can act like an adposition and be the main predicate of a clause. It can also act as the predicate of an ADJUNCT, as in (4), where the nominal phrase marked with *–piya* occurs inside a nominal phrase preceding the auxiliary marker *kala* 'USED.TO'. Both elements of the nominal

phrase are also marked with Ergative case, indicating the function of the nominal phrase as SUBJECT.

(5) provides another example of a *–piya*-marked nominal being predicated of the SUBJECT. In (5) the SUBJECT *yartarali* 'Achilles tendon' is unmarked for case, and is interpreted as Absolutive (=*ji* is a topic marker that is not part of the case-marking system). Both elements of the phrase *pulyku wiri-piya* 'like a big sinew' are unmarked for case, and can be interpreted as Absolutive. The lack of overt case marking on both *pulyku wiri-piya* and *yartarali* allows *pulyku wiri-piya* to be construed as an ADJUNCT modifying *yartarali*.

(5)   Luku-ngka   ka   karri   **pulyku wiri-piya** –
       heel-LOC   PRES   stand.NPST   sinew   big-LIKE
       <u>yartarali=ji</u>
       Achilles.tendon=TOP
       '*In the heel is [something] **like a big sinew** – <u>the Achilles tendon</u>.*'
       [yartarali]

The translation 'something' indicates that the *–piya* word is best interpreted as modifying an understood element. This is quite common.

When the *–piya* marked word is not part of the same nominal phrase as what it modifies, additional case-marking indicates what it is construed with (unless, as in (5) both are unmarked i.e. have Absolutive case). In (2), repeated here as (6), the Dative OBJECT is expressed as a pronominal clitic =*rla*. This Dative OBJECT is modified by the phrase *kurdu wita-piya-ku* 'as though he's a little child' which acts as an ADJUNCT[6]. The PRED of this ADJUNCT is *–piya*, (like an adposition). The complement of *–piya* is *kurdu wita*. The whole phrase *kurdu wita-piya-ku* has Dative case indicating that the ADJUNCT modifies something with Dative case.

(6=2)   Yiki-nyina-mi   ka=<u>rla</u>   **kurdu wita-piya-ku**.
        try.to.warn-NPST   PRES=DAT   child   little-LIKE-DAT
        'She tries to dissuade <u>him</u> **as though he's a little child**. [yiki-nyina]

We have now seen the *–piya*-marked word acting as ADJUNCT to SUBJECTs, whether Absolutive (3) or Ergative (4), or OBJECTs, whether Absolutive (1) or Dative (6=2). When it modifies an Ergative or Dative case-marked nominal, the *–piya*-marked word receives additional case-marking in agreement. Occasionally a verb can require Locative case of an argument, as

---

[6] Inside this ADJUNCT, *wita* acts as an ADJUNCT modifying *kurdu*.

the verb *manyu.karri* 'play'. A –*piya*-marked word can modify such a Locative-marked argument, as in (7).

(7)   kuyukari-kuyukari,   nyurrpukari-nyurrpukari kala=lu
         same.gen.moiety   opp.gen.moiety   USED.TO=they
         manyu.karri-ja <u>purlja-ngka</u>   –   yangka **putupurlu-piya-rla**.
         play-PAST   hairstring.ball-LOC   the   football-LIKE-LOC
         'One generation moiety against the other, they would play *purlja* **which is like football.**' [purlja]

Examples such as (2, 4, 6, 7) are typical examples of case-stacking where a grammatical case attaches to a semantic case (used like an adposition).

Warlpiri also allows the stacking of semantic cases used as adpositions. The Locative is most commonly treated as a semantic case, which is used as an adposition, rather than as the case of an argument of the verb as in (7). When it acts as an adposition, its complement can be a –*piya*-marked word. In (8) the nominal phrase *rdakurlpa-rla kurdiji-piya-rla* 'in the   hollow part of what is like a shield' acts as an ADJUNCT to the main clause. The ADJUNCT predicate is the Locative *-rla*. The semantic head of the complement of the Locative is 'hollowed.part', which is modified by the ADJUNCT *kurdiji-piya*.

(8)   Parraja   ngulaji yangka kuja=ka=lu=jana
         coolamon   that   the   WHICH=PRES=THEY=THEM
         kurdu-kurdu   ngati-nyanu-rlu   rdakurl-ka-nyi
         child-child   mother-POSS-ERG   carry.around-PRES
         wita-wita   pirltirrka,   <u>rdakurlpa</u>-rla **kurdiji-piya**-rla.
         little-little   baby   hollow-LOC   shield-LIKE-LOC
         'A *parraja* is what mothers carry their little babies around in – in <u>the hollow part</u> **of what is like a shield**. '[parraja PPJ <9/86]

A –*piya*-marked word can also act as the ADJUNCT to the complement of another adposition. In (9) the Locative *-rla* acts like an adposition. The sentence contains a topicalised Locative ADJUNCT *yilyampuru-rla yatujumparra* 'on those sandhills to the north'. It agrees with *nyanungu-piya-rla*, a Locative ADJUNCT.

(9)   <u>Yilyampuru-rla yatujumparra</u>, kula=lpa   murdukayi
         sandhill-LOC   north   not=PAST   car
         nyanungu-piya-rla   ya-ntarla,   lawa.
         it-LIKE-LOC   go-IRREALIS   no
         '<u>On those sandhills to the north</u>, a car can't go on such ones.' [juul nyanyi]

In this example, the understood head of the complement of the Locative in the main clause is null - translated into English as 'ones'. This understood head is further specified by the ADJUNCT *nyanungu-piya* 'ones like it/them'. *nyanungu* is coreferential with the topicalised Locative ADJUNCT *yilyampuru-rla yatujumparra*. *(Observe again that –piya can attach to an anaphor).*

For the main predicate use of *–piya*, I proposed that the semantically two-place predicate is represented with two grammatical functions.

$$(\uparrow\text{PRED}) = \text{'}–piya < (\uparrow\text{SUBJ}), (\uparrow\text{OBJ})\text{>'}$$

For the ADJUNCT predicate use of *–piya*, two possibilities arise. One is to keep the same representation as for main clauses (Simpson 1991). The other is to have two representations, one for main clause uses, and one for ADJUNCTs. The ADJUNCT use then follows common LFG treatments of adpositions as having an complement but no SUBJECT (Butt et al 1999). Additional case-marking, such as Dative case (6=2), Ergative case (4) or Locative case (7-9), links the ADJUNCT to the element it modifies, perhaps by inside-out construction of OBJECT with the case (Nordlinger 1998).

Under the second approach, the semantically two-place adposition predicate is represented as being subcategorised by one grammatical function.

$$(\uparrow\text{PRED}) = \text{'}–piya < (\uparrow\text{OBJ})\text{>'}$$

The two uses can be collapsed by making the SUBJECT optional, represented by (()).

$$(\uparrow\text{PRED}) = \text{'}–piya <((\uparrow\text{SUBJ})), (\uparrow\text{OBJ})\text{>'}$$

In sum, *–piya* can be the main clause predicate or the predicate for ADJUNCTs that modify SUBJECT, OBJECT or complements to other ADJUNCTs. It can be followed by grammatical or semantic cases which indicate what it modifies.

Two f-structures follow, both showing case agreement. The first f-structure for (4) contains a *–piya*-marked word *ngaju-piya-rlu* modifying an Ergative nominal *Yangka old man-rli* inside a nominal phrase *Yangka old man-rli ngaju-piya-rlu* 'that old man like me'. The second f-structure for (6=2) shows a *–piya*-marked nominal phrase headed by *kurdu* 'child' which contains its own ADJUNCT *wita* 'small'. In turn this *–piya*-marked nominal modifies the understood Dative OBJECT. (In (6=2) neither the SUBJECT nor the OBJECT is overtly realised.)

F-structure 2: Example (4) *Yangka old man-rli ngaju-piya-rlu kala para-ja*. 'That old man like me followed it.'

```
┌                                                                      ┐
│  PRED            'PARA- <SUBJ, OBJ>'                                 │
│  TENSE           REMOTE PAST                                         │
│                                                                      │
│  SUBJ            PRED            'OLD.MAN'                            │
│                  PERSON          3                                   │
│                  SPEC            yangka                              │
│                  CASE             ERG                                │
│                  ADJUNCT         PRED     '–piya <OBJ>'              │
│                                  CASE    ERGATIVE                    │
│                                  OBJ     PRED           'PRO'        │
│                                          PERSON         1            │
│                                          NUMBER         sing         │
│                                          CASE           PIYA         │
│   OBJ            PRED            'PRO'                                │
│                  PERSON         3                                    │
│                  CASE            ABSOLUTIVE                          │
└                                                                      ┘
```

F-structure 3: Example (6=2) *Yiki-nyina-mi ka=rla kurdu wita-piya-ku*. 'She tries to dissuade him as though he's a little child.'

```
┌                                                                      ┐
│  PRED            'YIKI-NYINA-  <SUBJ, OBJ>'                          │
│  TENSE           PRESENT                                             │
│                                                                      │
│  SUBJ            PRED            'PRO'                                │
│                  PERSON          3                                   │
│                  CASE            ABSOLUTIVE                          │
│                                                                      │
│  OBJ             PRED            'PRO'                                │
│                  PERSON          3                                   │
│                  CASE            DATIVE                              │
│                  ADJUNCT         PRED    '–piya <OBJ>'               │
│                                  OBJ     PRED   'KURDU'              │
│                                          CASE   PIYA                 │
│                                          ADJUNCT  PRED 'WITA'        │
│                                                   CASE PIYA          │
│                                  CASE    DATIVE                      │
└                                                                      ┘
```

357

4 –*piya* as adposition and case feature

While –*piya* acts as an adposition, it can also behave like other semantic cases in Warlpiri (Simpson, in press) in taking part in agreement. In (5) and (6), the first element of the nominal phrase is unmarked, and –*piya* only occurs on the rightmost element (right edge-marking). But in (10) *yayirni-piya kardiya-kurlangu-piya* 'like the white man's corrugated iron' is an ADJUNCT modifying the unmarked Absolutive object *ngulanya* 'that'. Both the semantic head *yayirni* 'iron', and the ADJUNCT modifying that head *kardiya-kurlangu* 'white.man-POSS' can both be marked with –*piya*. The OBJECT complement of the –*piya* is *yayirni kardiya-kurlangu* (*kardiya-kurlangu* is an ADJUNCT modifying *yayirni*).

(10) <u>Ngulanya</u>   kala=lu=nyanu   yujuku-rla   kankarlarni
      that   USED.TO=THEY=SELF   humpy-LOC   top
      yirra-rnu   ngapa-kujaku,   **yayirni-piya**
      put-PAST   rain-LEST,   iron-LIKE
      kardiya-kurlangu-piya
      white.man-POSS-LIKE
      '<u>That</u> is what they would put over the top of their humpy to keep out the rain – **like the white man's corrugated iron**,' [pijipiji]

The possibility of appearing on more than one word in a nominal phrase differentiates Warlpiri cases from their counterparts in neighbouring Pitjantjatjara, which only has right edge marking (Wilmoth and Nordlinger 2019).

Since –*piya*-marked nominals can agree in case, –*piya* must also be a case feature as well as an adposition. But if both *yayirni-piya* 'iron-LIKE'   and *kardiya-kurlangu-piya* '**white.man-POSS-LIKE**' have PRED values, then these will compete (violating functional uniqueness) So a solution is to allow –*piya* to have a CASE value, (which will enforce consistency of –*piya* marking) and for the PRED value to be optional. This allows both elements to be marked with –*piya* but for only one of them to act as the PRED.

(($\uparrow$PRED) = '–*piya* <(($\uparrow$SUBJ)), ($\uparrow$OBJ)>')
($\uparrow$CASE) = PIYA

If the PRED value is absent on both –*piya* marked words, and just a CASE feature remains, then the ADJUNCT will have only the meaning of the nominal (e.g. 'iron') as the PRED. The meaning of comparison will be missing.

The nominal to which –*piya* attaches (its OBJECT complement or an ADJUNCT of that complement) can be a bare nominal or, as in (10) a case-marked nominal. In (10) *kardiya-kurlangu* is an ADJUNCT modifying *yayirni*. It comprises a semantic case affix *-kurlangu* and its OBJECT complement *kardiya*. This is a type of case stacking.

Semantic case stacking of this type cannot be treated simply as stacking of case features (Sadler & Nordlinger 2006), since the semantic cases, like adpositions, take arguments. They are more comparable to the nested PPs of English e.g. *from up above the tree*.

5   Comparing events with –*piya*

We have seen that –*piya* can attach to bare nominals (1-9), and to nominals already marked with an adposition-like semantic case suffix (10). When attached to a nominal, –*piya* often compares one entity with another entity. But, pragmatically, –*piya*-marked nominals can assert similarity between two actions via a participant in an action. In (11) 'water' is not compared with 'tea', even though –*piya* attaches to *nalija* 'tea'. Rather two actions are compared: flood water overflows as boiling tea overflows.

(11)   Pupu.wangka   ka**.**   **Nalija-piya**   ka   karlarr.yarnka.
         gush.NPST   PRES   tea-LIKE   PRES   overflow.NPST
         '[It (fast flowing water)] gushes along. It overflows **like (boiling)
         tea'**. [karlarr-yarnkami]

Assertion of event similarity can be done by attaching –*piya* to a nominal which is a propositional anaphor or textual deictic, as in (12) where the anaphor *ngula-piya* 'that-LIKE' points to the act of grinding mulga seeds.

(12)   Yangka kujaka=lu   wardiji=rlangu   yurrpa-rni,
         the   when=THEY   mulga.seeds=E.G.   grind-NPST
         ngula-piya=yijala   karrawari-warnu=ju   ka=rnalu
         that-LIKE=ALSO   coolibah-ASSOC=TOP   PRES=WE
         – nga-rni   ngurlu=yijala
         – eat-NPST   seed=ALSO
         'Just like when they grind mulga seeds, **in the same way** [the stuff]
         from the coolibah we – eat the seeds also.' [Hale 1966: 149]

Rarely, the similarity of events or actions is expressed by attaching –*piya* to nominalised verbs (13) as *mapa-rninja-warnu-piya=lku* 'rub-NOM-ASSOC-LIKE=NOW'.

(13)   Panjara-yuka-mi   ka   ngulya-ngka   yangka
           smearing-enter-NPST   PRES   burrow-LOC   the
           ngapa-jangka-rla   <u>palya=lku</u>,
           water-FROM-LOC   dirt=NOW
           mapa-rninja-warnu-piya=lku wardapi.
           rub-NOM-ASSOC-LIKE=NOW   <u>goanna</u>
           '*[It] enters into a wet burrow and gets coated with <u>dirt</u>, as though rubbed with it, <u>the goanna</u>.* [panjara]

In (13) *mapa-rninja-warnu-piya* is an ADJUNCT modifying the matrix SUBJECT *wardapi* 'goanna'. Both ADJUNCT and SUBJECT are unmarked and interpreted as bearing Absolutive case. The PRED of the ADJUNCT is –*piya*, and –*piya*'s complement is *mapa-rninja-warnu* 'having been rubbed'.

In the multiply case-marked example (14), the ADJUNCT consists of a –*piya*-marked nominalised verb which is the complement to the semantic case form -*jangka* 'from'. This ADJUNCT has a Dative case indicating that it is predicated of the main clause's Dative OBJECT.

(14)   <u>Ngaju-ku=ju</u>   nyampuju   wapirdi   nyunyurr-nyina-ja
           me-DAT=TOP   this   on.arrival   grab.hold-PAST
           yinngirri-nya-nja-warnu-piya-jangka-ku,
           appearance-see-NOM-ASSOC-LIKE-FROM-DAT
           'Well he just came up and grabbed hold <u>of me</u> with no **introduction as if [he] knew [me] already**' [nyunnyurr(pa)]

Very rarely, assertion of similarity between properties of events can be done by attaching –*piya* to finite verbs (15).

(15)   Kala –   <u>yuka-ja</u>   <u>yangka</u> kujaka   puluku   yangka
           AND   enter-PAST   the   when   bullock   the
           yuka-piya   –   **ngula-piya**
           enter.NPST-LIKE   that-LIKE
           '**There it (kangaroo) would sink in the way a cow sinks in and gets bogged – like that..**' [Hale 1966:1102]

Here –*piya* compares two events. The standard of comparison is more than just the verb *yuka* 'enter.NPST'. It is probably the proposition denoted by the clause 'when a cow enters'. In fact, in this example, the standard of comparison is repeated with the anaphor *ngula* 'that' which is used for

propositions among other things. When attached to a finite verb, it is hard to claim that *–piya* is an adposition-like semantic case affix with a syntactic complement since semantic case suffixes don't generally attach to finite verbs. Instead, it seems that *–piya* is moving towards becoming an enclitic discourse particle.

However, there are too few examples to analyse this further.

6   Conclusion

Table 1 sums up the possibilities for *-piya*-marked words with their agreement options.

Main predicate.	Adjunct predicated of entities	Adjunct predicated of entities & events	Particle modifying events
on nominal	*on nominal*	*on nominal or nominalised verb*	*on finite verb*
No visible agreement	Agreement Case feature	Agreement Case feature	No visible agreement

The four different functions of *–piya* can be lexically represented in LFG as follows:
- as the predicate of the main clause with syntactically expressed SUBJECT (comparee) and OBJECT (standard of comparison).
     (↑PRED) = '*–piya* <(↑SUBJ), (↑OBJ)>'

- as the predicate of an ADJUNCT with at least a syntactically expressed OBJECT (standard of comparison),
     (↑PRED) = '*–piya* < (↑OBJ)>'
     (↑CASE) = PIYA

- agreeing with the OBJECT of the *-piya* predicate via a case feature PIYA, and making the PRED feature optional.
     ((↑PRED) = '*–piya* <(↑OBJ)>')
     (↑CASE) = PIYA

- as a discourse particle where the standard of comparison is pragmatically inferrable from the nominal to which *-piya* is attached, and the comparee is pragmatically inferrable from the whole context.
     (↑PRED) = '*–piya*'

We do not as yet have the comparative and historical data on the evolution of the form –*piya* as a marker of resemblance, and thus as to which of the uses ADJUNCT or main clause is prior (I assume that the agreement use is secondary, and that the discourse particle use is emerging). But, the LFG lexical representations make it clear how the functions of a semantically two-place predicate like –*piya* could evolve: by allowing one or both arguments to bear grammatical functions, by allowing the presence or absence of a case feature, and by the optionality of the PRED feature itself to express agreement.

References

Butt, Miriam, King, Tracy Holloway, Nino, María-Eugenia, and Segond, Frédérique. 1999. *A grammar writer's cookbook*. CSL Lecture Notes No. 95. Stanford CA: CSLI Publications.

Hale, Kenneth Locke. 1966-67. Warlpiri field notes: Yuendumu, Hooker Creek, Lander River, Warrabri, N.T. ms 3171. Canberra: Australian Institute of Aboriginal and Torres Strait Islander Studies.

Hale, Kenneth Locke. 1982. Some essential features of Warlpiri main clauses. In Stephen Swartz (ed.) *Papers in Warlpiri grammar: in memory of Lothar Jagst*, pages 217-315. Berrimah, Australia: Summer Institute of Linguistics.

Laughren, Mary. 1982. A preliminary description of propositional particles in Warlpiri. In Stephen Swartz (ed.) *Papers in Warlpiri grammar: in memory of Lothar Jagst,* pages 129-163. Berrimah, Australia: Summer Institute of Linguistics.

Laughren, Mary, Hale, Kenneth, Egan, Jeannie Nungarrayi, Patrick, Marlurrku Paddy Jangala, Hoogenraad, Robert, Nash, David, and Simpson, Jane. in press 2020. *Warlpiri to English Encyclopaedic Dictionary*. Canberra: Aboriginal Studies Press.

Nash, David. 1986 (1980). *Topics in Warlpiri Grammar*. New York/London: Garland.

Nordlinger, Rachel. 1998. *Constructive case: evidence from Australia*. Stanford CA: CSLI Publications.

Sadler, Louisa, and Nordlinger, Rachel. 2006. Case stacking in realizational morphology. *Linguistics* 44: pages 459-487.

Simpson, Jane. 1991. *Warlpiri morphosyntax: a lexicalist approach*. Dordrecht: Kluwer.

Simpson, Jane. in press. Semantic case. In Claire Bowern (ed.) *Oxford Handbook of Australian Languages*. Oxford: Oxford University Press.

Treis, Yvonne. 2018. Comparative constructions: An introduction. *Linguistic Discovery* 16 (On the expression of comparison) pages i-xxvi.

Wilmoth, Sasha & Rachel Nordlinger. 2019. Case-marking and nominal structure in Pitjantjatjara. Paper presented at the *Australian Linguistics Society* Macquarie University.