Differential Object Marking in dialects of the Western Desert in Australia
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1 Introduction
Pitjantjatjara, Yankunytjatjara and Ngaanyatjarra (PYN) are three closely related dialects of Australia’s Western Desert language group. They are part of the Pama-Nyungan family which contains most languages outside the Top End of Australia, and are classified as suffixing languages. In this paper we look at how the direct and indirect object is marked in PYN, and where such marking is differentiated. The material in this paper is from written sources.

Role and Reference Grammar (RRG) is a structural-functional theory of grammar that represents syntactic structure through the meaning and function of words (Pavey 2010: 53), combining a semantic and communicative approach (Nolan 2012: 2ff). Van Valin & LaPolla (1997: 25) draw two universal semantic distinctions in language: predicating versus non-predicating elements; and phrases that are arguments of the predicate versus those that are not. These are shown in the syntactic categories of nucleus, core and periphery in the layered structure of the clause (LSC) (Nolan 2012: 5) shown in figure 1:

![Figure 1: Layered structure of the clause (LSC)](image)

Arguments of predicates fill semantic roles such as agent, patient, experiencer, theme, benefactive and others (Kim & Sells 2008: 43-45). These arguments may be grouped into two macroroles, agent like ACTORS and patient like UNDERGOERS.

![Figure 2: Actor Undergoer hierarchy](image)

Subject and object are not considered universal (Pavey 2004), and the term subject must be treated with care in Australian languages with ergative systems (Dixon 2011: 438).

![Figure 3: PSA selection hierarchy](image)

2 Defining an object
Three roles are associated with intransitive and transitive verbs: S, the single argument of an intransitive verb; A, the subject of a transitive verb, with a semantic role of agent; O, the object of a transitive verb (Dixon 2011: 285-286). For the purposes of this paper, “object” will be used for the O argument. Dixon (2011: 267) describes this as object ‘function’. The object in a sentence can be identified by word order where there is no case marking such as in English on nouns. The subject and object are identified by their position around the verb.

(1) The dog bit the child
   \[do' (dog, bite') (dog, child)]

(2) The child was bitten (by the dog)
(3) ‘Bean soup I can’t stand.’ (Van Valin 2005: 5-7).

PYN has case marking, which can lead to freedom in word order (Pavey 2010: 316), but sentences in PYN have a basic SOV order (Bowe 1990: viii, Glass 2006: 28).
3 Types of object
Two roles are ‘A’ the subject of a transitive verb with a semantic role of agent; and ‘O’, the object of a transitive verb. Trivalent verbs may have an A, R (Receiver) and T (Theme) argument (for example ‘give’) or A, G (Goal) and T argument (for example ‘put’).

(4) [do’ (x, Ø)] CAUSE [BECOME have’ (y, z)]

(5) [do’ (Mary, Ø)] CAUSE [BECOME have’ (John, book)]

‘Mary gave John the book.’

4 Differential Object Making
Differential object marking (DOM) is invoked in the context of the dependent marking of patient arguments (Van Lier 2012). Variation in DOM is structured by animacy and definiteness. There is a definiteness scale: pronoun/ name/ definite/ indefinite specific/ non-specific (Aissen 2003). Blake (1987: 20-21) draws up the following subclasses of nominal hierarchy based on the Silverstein (1976) hierarchy.

- 1st and 2nd pronouns
- 3rd pronouns
- Personal names, kin terms
- Human
- Animate
- Inanimate

5 PYN nominals
In Pitjantjatjara, nouns and adjectives have similar endings and along with demonstratives can head a noun phrase (NP), so they are together classed as nominals (Bowe 1990: 4).

Table 1: Nominal case endings in PYN

<table>
<thead>
<tr>
<th>Core</th>
<th>Common</th>
<th>Proper</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABSolute (S, O)</td>
<td>-Ø (-pa)</td>
<td>-nya, -nga</td>
</tr>
<tr>
<td>ERGative (A)</td>
<td>-ngku (-tju, -tu), -lu</td>
<td>-lu</td>
</tr>
<tr>
<td>VOCative</td>
<td>-Ø</td>
<td></td>
</tr>
<tr>
<td>LOCative</td>
<td>-ngka (-tja, -ta)</td>
<td>-la</td>
</tr>
<tr>
<td>ALLative</td>
<td>PURP + -tu</td>
<td>LOC + PURP+ -tu</td>
</tr>
<tr>
<td>ABLative</td>
<td>-nguru</td>
<td>LOC + -nguru</td>
</tr>
<tr>
<td>TRANSverse</td>
<td>-wanu</td>
<td>LOC + -wanu</td>
</tr>
<tr>
<td>Syntactic peripheral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DATIVE</td>
<td>LOC</td>
<td></td>
</tr>
<tr>
<td>PURPosive</td>
<td>-ku</td>
<td></td>
</tr>
<tr>
<td>CAUSal</td>
<td>-tjara, LOC, ABL</td>
<td></td>
</tr>
<tr>
<td>INSTRumental</td>
<td>LOC</td>
<td></td>
</tr>
<tr>
<td>AVERSitive</td>
<td>LOC + -tawara</td>
<td></td>
</tr>
<tr>
<td>GENitive</td>
<td>PURP</td>
<td></td>
</tr>
</tbody>
</table>

5.1 Common nouns
(6) *Papa yula-rра*
Dog.ABS cry-PRES
‘The dog is howling.’

*do’ (dog, howl'(dog))

(7) *Papa-lу тijiku patju-rnu*
dog-ERG child.ABS bite-PST
‘The dog bit the child.’
5.2 Names, proper nouns and question words

The absolutive case is marked with -nya in proper nouns in P/Y, or –nga in Ngaanyatjarra. In this Pitjantjatjara example from Sheppard (1975: 73), the name of the character Alitji gets the nya absolutive marking, the object of nyakuwiya.

(10) Ka ngururpa Malu Piran-pa wangka-ri=nangi Alitji-nya nya-kuwiya
    And.DS on.the.way roo white-ABS speech-INCH-PRES.CONT, Alitji-ABS see-NEG
    ‘The white roo was talking hurriedly on the way (he) did not notice Alitji.’

(11) Katayin-nga tjiki-ra
    Katayin-ABS drink-PA
    ‘Having drunk (water at) Katayin.’

6 Pronouns

Pronouns have a nominative/accusative case system in Pitjantjatjara (Bowe 1990: 8) and singular, dual and plural number (Bowe 1990: 11).

(12) Ngayu-lu tjiti tjiti ngayu-nya
    1SG-NOM child.ABS see-PST
    ‘I saw the child.’

(13) Ngayu-lu a-nu
    1SG-NOM go-PST
    ‘I went.’

(14) Tjitji-ngku ngayu-nya ngayu-nya
    Child-ERG 1SG-ACC see-PST
    ‘The child saw me.’

(15) Palu kutjupa-ngku ngali-nya tjiti-ni,
    Of.course someone-ERG 2DU-ACC pick.fight-PRES
    ka paluru ma-laka-ni.
    and.DS 3SG-NOM away-half.dead-PRES
    ‘If anyone picks a fight with us two, he’ll go off half-dead.’

(16) Wanarn-ta-nguru pitja-ngu
    Wanarn-LOC-ABL come-PST
    ‘(He) came from Wanarn.’
Table 2: Pronominals in PYN

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Subject</td>
<td>Object</td>
<td>Purposive</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Full</td>
<td>Clitic</td>
<td>Full</td>
<td>Clitic</td>
<td></td>
</tr>
<tr>
<td>1st Person</td>
<td>ngayulu</td>
<td>-n/a</td>
<td>ngayunya</td>
<td>-n</td>
<td>ngayuku</td>
</tr>
<tr>
<td>2nd Person</td>
<td>nyuntu/nyuntulu</td>
<td>-n</td>
<td>nyuntanya</td>
<td>-nta</td>
<td>nyuntumpa</td>
</tr>
<tr>
<td>3rd Person</td>
<td>paluru</td>
<td>-0</td>
<td>palunya</td>
<td>-0/lu</td>
<td>palumpa</td>
</tr>
<tr>
<td>Dual</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st Person</td>
<td>ngali</td>
<td>-li/litju/lin</td>
<td>ngalinya</td>
<td>-linya/linyatju/linyanta</td>
<td>ngalimpa</td>
</tr>
<tr>
<td>2nd Person</td>
<td>nyupali</td>
<td>-pula/pulan</td>
<td>nyupalinya</td>
<td>-/pulanyanta</td>
<td>nyupalimpa</td>
</tr>
<tr>
<td>3rd Person</td>
<td>pula</td>
<td>-pula</td>
<td>pulanya</td>
<td>-/pulanya</td>
<td>pulampa</td>
</tr>
<tr>
<td>Plural</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1st Person</td>
<td>nganana</td>
<td>-la/latju/lan</td>
<td>nganananya</td>
<td>-lanya/lanyatju/ lanyanta</td>
<td>nganampa</td>
</tr>
<tr>
<td>2nd Person</td>
<td>nyura</td>
<td>-ya/yan</td>
<td>nyuranya</td>
<td>-/tjananyanta</td>
<td>nyurampa</td>
</tr>
<tr>
<td>3rd Person</td>
<td>tjana</td>
<td>-ya</td>
<td>tjananya</td>
<td>-/tjananya</td>
<td>tjanampa</td>
</tr>
</tbody>
</table>

Target of emotion

The purposive/genitive case can be used with the target of a verb of emotion (Bowe 1990: 16).

(17) Ngayu-ku malpa nyuntu-mpa mukuri-nganyi
1SG-POS friend.ABS 2SG-PURP like-PRES
‘My friend fancies you (in courting).’

(18) A Pedro le gusta l a música
Pedro.DAT IO is.pleasing DET music.NOM
‘Pedro likes the music.’

(19) Kamuri-ku ngurlu
Camel-POS afraid
‘(He’s) afraid of the camel.’

(20) Kurun-pa unngu=na nyuntu-mpa mukuri-nganyi.
Heart-ABS deep=1SG.NOM 2SG-PURP love-PRES
‘I love you in my heart.’

In their remarks on a transitivity spectrum, Hopper & Thomson (1980) show that verbs of emotion are low on transitivity and may be coded like intransitives.

Indirect object

A ditransitive verb such as u ‘to give’ has two objects, both in absolutive or accusative case (Bowe 1990: 24). The recipient usually comes first if both are mentioned (Goddard 1996: 199).

(21) Minyma-ngku tjitji mai u-ngu
Woman-ERG child.ABS bread.ABS give-PST
‘The woman gave the child some bread.’

(22) Paluru=mi tiliyka yu-ngu
3SG.NOM=1SG.ACC fat.ABS give-PST
‘He just gave me a small piece of emu fat.’

Goddard (1996: 199) shows this with a serial verb in P/Y and ellipsis of objects. The subject is the same as that of the previous clause as indicated by munu.

(23) Munu pau-qa tjana-nya u-ngu
And.SS roast-SS 3PL-ACC give-PST
And he roasted (it) and gave them (some)

(24) Minyma-ngku tjitji tjukur-pa wangka-ngu
Woman-ERG child.ABS story-ABS tell-PST
‘The woman told the child a story.’

(25) Minyma-ngku tjiti-ngka tjukur-pa wangka-ngu
Woman-ERG child-LOC story-ABS tell-PST
‘The woman told the child a story.’

A core argument, the indirect object, gets the locative peripheral case. The direct object is closest to the verb and remains in absolutive case.

9 Ellipsis of object or undergoer

Ellipsis is very common in PYN. Arguments are dropped where they are recoverable by context. The object has been dropped in (26) and the undergoer subject in (27). However, by changing the order of words, attention is focussed respectively on the agent li:ru ‘snake’ or the elided default undergoer ‘he’.

    What-ERG bite-PST snake-ERG bite-PST
    ‘What bit (him)? A snake bit (him).’

    What-INCH-PST-TURN bite-PST snake-ERG
    ‘What happened (to him)? (He) was bitten by a snake.’

10 Discussion

As the notion of subject and object are problematic in RRG and in Australian languages, we use the concepts of A, S and O, as well as Receiver, Theme and Goal in trivalent predicates. We see that the argument O of a transitive verb is accusative with prononominals, but absolutive in nominals. Names, proper nouns and question words regarding people have a marked absolutive case, while in other nouns the absolutive has zero realisation.

The purpose peripheral case is used to mark the target of an emotion, with the experiencer in the absolutive case; the predicate is syntactically intransitive while semantically transitive. With ditransitive verbs like ‘give’ the receiver and the patient are in in absolutive or accusative case, with obligatory direct object or patient being closest to the verb. With trivalent verbs like ‘tell’ there is an alternative, beneficiary or addressee can get the locative case. There may be factors influencing canonical vs non-canonical forms of the ditransitive.

Such splits in case marking parallel the Silverstein (1976) hierarchy whereby actants are treated differently not only as subject/object, but as to their place on an agentivity scale. Some things are seen as more likely to act on other things, in other words be more active than passive. This typically has a continuum running from the 1st person pronoun to inanimate nouns In addition terms higher up the scale show greater marking of number: singular, plural, dual than lower ones. As we saw in (8) nominals have no marking for number whereas prononominals have all singular, dual and plural forms.

We can consider some of the motivating factors behind DOM. Aissen (2003) illustrates DOM in Spanish with these examples showing the low prominence object unmarked and high prominence one marked.

(28) Veo la casa
    See.1SG.PRES DET house
    ‘I see the house.’

(29) Veo a la mujer
    See.1SG.PRES IO DET woman
    ‘I see the woman.’

Malchukov et al (2010) discuss this as differential aligning, with the direct personal getting the same marking as the recipient in a ditransitive, secundative alignment. Kittilä (2006) discusses differential object marking in Hindi, with animate direct objects appearing in the accusative/dative case while indefinite and inanimate direct objects bear zero marking. This can then be extended to ditransitive clauses with the animate recipient appearing in the accusative/dative case, while the inanimate theme usually bears zero marking. In PYN the most animate, pronouns, get accusative marking while non-name nouns bear zero marking.

Revisiting the Silverstein hierarchy we summarise the object in figure 5. PYN has accusative case marking up to 3rd person pronouns, and the other subclasses in the hierarchy have ergative marking. Personal and proper names have non zero marking in the absolutive case.

<table>
<thead>
<tr>
<th>Type of Noun</th>
<th>Case Marking</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st and 2nd person pronouns</td>
<td>Accusative</td>
</tr>
<tr>
<td>3rd person pronouns</td>
<td>Accusative</td>
</tr>
<tr>
<td>Personal names, kin terms</td>
<td>marked absolutive</td>
</tr>
<tr>
<td>Human</td>
<td>unmarked absolutive</td>
</tr>
<tr>
<td>Animate</td>
<td>unmarked absolutive</td>
</tr>
<tr>
<td>Inanimate</td>
<td>unmarked absolutive</td>
</tr>
</tbody>
</table>

Figure 5: Summary of realisation of objects
11 References
Kittili, Seppo. 2006. The anomaly of the verb ‘give’ explained by its high (formal and semantic) transitivity. Linguistics, 44 (3), 569-612.

12 Abbreviations

<table>
<thead>
<tr>
<th>1, 2, 3 person</th>
<th>DS Different Subject</th>
<th>LOC Locative</th>
<th>PRES Present</th>
<th>TURN Turning point</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABL Ablative</td>
<td>DU Dual</td>
<td>NEG Negative</td>
<td>PST Past</td>
<td></td>
</tr>
<tr>
<td>ABS Absolutive</td>
<td>ERG Ergative</td>
<td>NOM Nominative</td>
<td>PURP Purposive</td>
<td></td>
</tr>
<tr>
<td>ACC Accusative</td>
<td>INCH Inchoative</td>
<td>PL Plural</td>
<td>SG Singular</td>
<td></td>
</tr>
<tr>
<td>CONT Continuous</td>
<td>IO Indirect Object</td>
<td>POS Possessive</td>
<td>SS Same Subject</td>
<td></td>
</tr>
</tbody>
</table>

(30) Wanyu-na nyangatja ulupu-nganyi
Let’s just-1sgNOM DEM.ABS grind.to.powder-PRES
‘I’ll just make this into flour’

make-into-flour’(1sg, DEM)