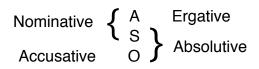
Absolutive Case: Syntax plus Morphology¹

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Introduction

(1) a. Transitive Subject (A) = Ergative (ERG)
Ngajulu-rlu -rna-ngku nyuntu nya-ngu
I-ERG -1sg.SUBJ-2SG.OBJ you.ABS see-NPAST
"I saw you"
b. Intransitive Subject (S) = Absolutive (ABS)
Ngaju -rna parnka-ja
I.ABS -1sgSUBJ run-PAST
"I ran"
c. Transitive Object (O) = Absolutive (ABS)
Nyuntulu -rlu-npa-ju ngaju nya-ngu
you-ERG -2sgNOM-1sgOBJ I.ABS see-NPAST

Problem from the extensive literature on ergativity: how do we assign the same case, ABS, to S and O?



"You saw me"

Types of Approaches:

- ABS = ACC (e.g. Bobaljik 1993, Chomsky 1993, see also Laka 1993)
 - AgrOP is obligatory in ergative languages
 - transitive clauses: AgrO assigns ACC to O; AgrS assigns NOM to A
 - intransitive clauses: AgrO assigns ACC to S

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- ABS = NOM (e.g. Murasugi 1992, Ura 2001, inter alia)
 - case checking is allowed in θ -positions in ergative languages
 - transitive clauses: T assigns NOM to O; v assigns ACC to A in situ
 - intransitive clauses: T assigns NOM to S
- ABS = Lack of Case (Bittner & Hale 1996a,b)
 - verb does not license ACC (KP) in absolutive languages (no D merged with V to serve as a case-competitor for object)
 - transitive clauses: O lacks case (KP), must be licensed by C under government; I licenses ERG (KP) for A (O serves as case-competitor)
 - intransitive clauses: S lacks case (KP), must be licensed by C under government

Proposal:

- ABS = NOM & ACC^2
 - S and O are NOT assigned the same case, in a typologically-diverse range of ergative-absolutive languages
 - transitive clauses: v assigns ACC to O; v assigns inherent ERG to A (Woolford 1997)
 - intransitive clauses: S is assigned NOM from T

Why do NOM on S and ACC on O look the same? Becuase these languages lack a morphological realization for NOM and ACC. Thus, NOM and ACC are realized by the morphological default for case = "ABS".

Post-syntactically, abstract case features are realized morphologically based on the Elsewhere Condition (Anderson 1969, Kiparsky 1973, Halle & Marantz 1993, Halle 1997, inter alia).

Outline:

- 1. ABS = NOM & ACC
- 2. Differential Case Marking
- 3. Directions

1 ABS = NOM & ACC

Four ERG-ABS languages that are really ERG-NOM-ACC languages:

- (2) a. Warlpiri (Ngumpin-Yapa (McConvell & Laughren 2004))
 - b. Niuean (Polynesian; Massam 2006, Seiter 1980)
 - c. Enga (East New Guinea Highlands; Lang 1973, Li & Lang 1979, van Valin 1981)
 - d. **Hindi** (Indo-Aryan; Mohanan 1994, Mahajan 1990)

²Independent support for a distinction between ABS on S and ABS on O comes from Aldridge (2004), who proposes that ABS on S is assigned by T, whereas ABS on O is assigned by v in certain Austronesian languages. Thank you to John Whitman for pointing out the relevance of Aldridge's work.

1.1 Case Morphemes

Lack of NOM and ACC morphology distinct from ABS.

- (3) Warlpiri (based on Hale et al 1995)
 - a. $[Ergative] \leftrightarrow -rlu$ (-ngku on stems of two morae)
 - b. $[Dative] \leftrightarrow -ku$
 - c. [Allative] \leftrightarrow -kurra
 - d. [Ablative] \leftrightarrow -ngurlu
 - e. $[Locative] \leftrightarrow -rla$ (-ngka on stems of two morae)
 - f. [Translative] \leftrightarrow -karda
 - g. $[Case] \leftrightarrow -\emptyset(="absolutive")$
- (4) Niuean (based on Seiter 1980:28-37)³
 - a. [Ergative] \leftrightarrow e / proper names, pronouns
 - b. $[Ergative] \leftrightarrow he / (common nouns)$
 - c. [Locative] \leftrightarrow i / proper names, pronouns
 - d. [Locative] \leftrightarrow he / (common nouns)
 - e. [Possessive] \leftrightarrow ha/a / proper names
 - f. [Possessive] \leftrightarrow ha / pronouns
 - g. $[Possessive] \leftrightarrow he / (common nouns)$
 - h. [Case] \leftrightarrow a / proper names, pronouns (="absolutive")
 - i. $[Case] \leftrightarrow e / (common nouns) (= "absolutive")$
- (5)~ Enga (based on Lang 1973: xxiv-xxvi, Li & Lang 1979:312)
 - a. $[Ergative] \leftrightarrow -me/-mi^4$
 - b. $[Dative] \leftrightarrow -nya$
 - c. [Vocative] \leftrightarrow -oo
 - d. [Comitative] \leftrightarrow -pa (dual)/-pipa (dual/plural)
 - e. [Locative] \leftrightarrow -nya/-sa/-ka
 - f. $[Temporal] \leftrightarrow -sa/-nya/-pa$
 - g. [Case] $\leftrightarrow \emptyset$ (="absolutive")
- (6) Hindi (based on Mohanan 1994:60)
 - a. $[Ergative] \leftrightarrow -ne$
 - b. $[Dative] \leftrightarrow -ko$
 - c. $[Instrumental] \leftrightarrow -se$
 - d. [Genitive] \leftrightarrow -kaa
 - e. $[Locative_1] \leftrightarrow -m\tilde{e}$
 - f. $[Locative_2] \leftrightarrow -par$
 - g. [Case] $\leftrightarrow \emptyset$ (="absolutive/nominative")

³The ergative e on proper names and the "absolutive" e on common nouns are historically distinct and are standardly considered synchronically distinct as well. The ergative he, locative he and possessive he on common nouns should be analysed as a single lexical entry. This is not relevant for the present discussion, but see section 2 below.

⁴The ergative is also used for the instrumental. See discussion in section 2 below.

1.2 Caseless DPs

For DPs without abstract case, DP realized in morphological default case = ABS (Schütze 2001 "Elsewhere Insertion")

Left dislocated topics in Warlpiri bear ABS (see Legate 2002):⁵

(7) **Ngarnkamarda**, **kakalyalya**, *ngula-ngku-ju* ka nga-rni watiya-warnu – **pink.cockatoo.ABS pink.cockatoo.ABS** *that-ERG-Top* PresImpf eat-Npast tree-from watiya-ngarnarra – miyi-ji. tree-dweller fruit-Top

Left dislocated topics in Niuean bear ABS (see Seiter 1980:116-118):

(8) Ko e fifine ia, to fakaata: mai e ia ke uta e au e motoka: haana Pred ABS woman that to let Dir1 ERG she Sbjn take ERG I ABS car her 'That woman, she'll let me take her car.' (Seiter 1980:117)

'The Pink Cockatoo eats those Acacia seeds.' (Warlpiri Dictionary Project 1993)

In Enga, we have one example of a left dislocated topic; it bears ABS:

(9) Pe-ly-á-mo dóko óngo akáli-aka go-Pres-3sg-Aug Det.ABS Det.ABS man-Emp
 'That is definitely a man, the one who is going.' (Lang 1973:xxvii)

Left dislocated topics in Hindi bear ABS (Dwivedi 1994)⁶

(10) **Voh aurat**, john *us-se* dilo jaanse pyaar kartaa he **that woman.ABS** John *her-INSTR* whole-heartedly love do be "John is madly in love with that woman" (Chandra 2004)

1.3 Nonfinite Contexts

If not all cases are available in nonfinite contexts, predicted split in behaviours between ABS on S and ABS on O:

- (11) a. ABS on S is abstract NOM licensed by finite T, thus it is unavailable in nonfinite contexts.
 - b. ABS on O is abstract ACC licensed by v, thus it is available in nonfinite contexts.

Prediction is borne out in Warlpiri:

Nonfinite context in Warlpiri: nominalized verb phrase expressing contemporaneity (Nash 1986, Simpson & Bresnan 1983, Simpson 1991, inter alia)

S cannot bear ABS.⁷ Instead, S bears dative (DAT):

(12) Kurdu ngaju-nyangu-lu paka-rnu, [**ngaju-ku** jarda-nguna-nja-rlarni.] child 1sg-POSS-3pl.SUBJ hit-PAST [**I-DAT** sleep-lie-NONFIN-OBVC] "They hit my child, while I was asleep."

⁵Hanging topics may also agree in case with the related clause-internal DP.

⁶As illustrated in Mohanan 1994, hanging topics may also agree in case with the related clause-internal DP.

⁷Simpson (1991:107) reports that rare examples are found in discourse, but that such examples are judged ungrammatical.

DAT is characteristic of the nominal environment:

(13) [Jakamarra-ku jaja-nyanu-rlu] ka-ju paka-rni [Jakamarra-DAT maternal.grandmother-Anaph-ERG] PresImpf-1sgObj hit-NPAST 'Jakamarra's grandmother hits me' (Laughren 2002)

O uniformly bears ABS, and may not bear DAT:

(14) Ngarrka-patu-rlu ka-lu-jana puluku turnu-ma-ni,
man-PAUC-ERG PRESIMPF-3pl.SUBJ-3pl.OBJ bullock muster-NPAST
[karnta-patu-ku/karnta-patu-rlu miyi/*miyi-ku purra-nja-puru.]
[woman-PAUC-DAT/woman-PAUC-ERG food.ABS/*food-DAT cook-NONFIN-TEMPC]
"The men are mustering cattle while the women are cooking the food."

A may bear either ERG or DAT:8

- (15) a. Kurdu-lpa manyu-karri-ja, [ngati-nyanu-rlu karla-nja-rlarni.] child-PASTIMPF play-stand-PAST [mother-POSS-ERG dig-NONFIN-OBVC] "The child was playing, while his mother was digging (for something)." (Laughren 1989:[44a])
 - b. Nyalali-rli ka warlu yarrpi-rni, [karnta-ku kurdu-ku miyi girl-ERG PRESIMPF fire.ABS kindle-PAST [woman-DAT child-DAT food.ABS yi-nja-rlarni.] give-NONFIN-OBVC]

"The girl is building a fire, while the woman is giving food to the baby." (Hale 1982:[139b])

Prediction is borne out for Enga:

ABS is available for O:

- (16) a. baa-mé [**yólé** nyá-la-nya] kalái pi-ly-a-mó he-ERG [**wages.ABS** get-INF-DESID] work.ABS do-PRES-3sg.SUBJ-SP "He works to get wages" (L&L 317)
 - b. akáli dokó-mé [dokosáa dokó kánj-a-nya] más-í-á. man DET-ERG [doctor DET.ABS see-INF-DESID] think-PAST-3sg.SUBJ "The man wanted to see the doctor" (L&L 319)

ABS is not available for S. To express an overt S, a finite complement clause must be used in place of the infinitival:

(17) namba-mé [**émba** Wápaka pú-p-í lá-o] mási-ly-o I-Erg [**you.ABS** Wabag go-Past-2sg utter-complementizer] think-Pres-1sg "I want you to go to Wabag" (L&L 317) [I want that you go to Wabag]

Prediction can't be tested in Niuean.

All cases are available in nonfinite ("subjunctive") clauses:

 $^{^{8}}$ Mary Laughren (personal communication) notes that some speakers only allow the dative. For those speakers, nominalization must occur immediately above v, rather than above vP.

(18) a. Kua kamata [ke hala **he tama** e akau]
PERF begin [SBJV cut **ERG child** ABS tree]
"The child has begun to cut down the tree" (M [21])

b. Maeke [ke nofo a **Pita** i Tuapa] possible [SBJV stay **ABS Pita** at Tuapa] "Pita can stay at Tuapa" (M [19])

Prediction is borne out for Hindi.

ABS on S is unavailable; instead, S bears GEN (Mohanan 1994:78):

(19) [raam-ke baiT^hne-par] mãã-ne usko k^haanaa diyaa Ram-GEN sit.NonFin-LOC mother-ERG him.DAT food.ABS give.Perf "When Ram sat down, mother gave him food" (78)

GEN characteristic of nominal environment:

(20) **anuu-kii** puraanii kitaab **Anu-GEN** old book.ABS "Anu's old book" (13)

O bears ABS, not GEN:

(21) [bacce-kii **avast**^h**aa**] dek^h kar child-GEN **condition.ABS** see.NonFin do.NonFin "seeing the child's condition..." (176)

A also bears GEN, since ERG in Hindi is dependent on perfective aspect.

(22) **ilaa-ke** anuu-ko ciD^haane-par ... **Ila-GEN** Anu-DAT tease.NonFin-LOC

"On Ila's teasing Anu, ..." (When Ila teased Anu ...) (75)

Aside: compare behaviour of an ERG-NOM language like Georgian (South Caucasian; Harris 1981, Hewitt 1987).

Both S and O bear NOM licensed by finite T; thus both are lost in nonfinite environments.

e.g. The nominalized verb ("masdar") does not allow ABS (NOM), either on S or O. Instead, S and O are marked GEN:

- (23) a. [datv-is mok'vla am t'qeši] ak'rdzalulia [bear-GEN killing.NOM this woods.in] forbidden.it.is.I.2 "Killing bears in this woods is forbidden"
 - b. [tamad-is damtknareba supraze] uzrdelobaa [tamada-GEN yawning.NOM table.on] rudeness.it.is.I.2

"It is rude for the tamada to yawn at the table" (Harris 1981:157-158)

Nominalization must occur at the verb for the object to receive case. A appears as the complement of a postposition *mier* "by":

(24) [monadir-is mier (datv-is) mok'vla] ak'rdzalulia [hunter-GEN by (bear-GEN) killing.NOM] forbidden.it.is.I.2 "The killing (of bears) by hunters is forbidden" (Harris 1981:157-158)

1.4 Other Absolutives

ABS is a morphological default rather than an abstract case with a single source.

Prediction: ABS is not limited to S and O; ABS is not limited to a single occurrence per clause.

Prediction borne out for Enga.

Objects of postpositions bear ABS:

(25) akáli dokó-mé [**énda** kandaó] pií le-ly-á-mo man DET-ERG [**woman.ABS** toward] word.ABS say-PRES-3sg.SUBJ-SP "The man is telling something to the woman" (L&L 318)

Both objects in a double object construction bear ABS:

(26) namba-mé **énda dóko** mená dóko maí-y-ó I-ERG **woman DET.ABS** pig DET.ABS give-PAST-1sg.SUBJ "I gave the pig to the woman" (L&L 312)

Prediction borne out for Niuean.

The object of (benefactive, comitative, instrumental) prepositions bears ABS:

- a. Ne tohitohi a Sione [aki e pene]
 PST writing ABS Sione [with ABS pen]
 "Sione is writing with a pen" (M [8])
 b. Gahua a au [ma e tagata kō]
 work ABS I [for ABS man that]
 - "I work for that man there" (S 36)

Applicative objects bear ABS:

(28) Ne ahu aki e ia **e akau** e tau toa PST slay with ERG he **ABS club** ABS PL hero "He slayed the heroes with a club" (M [14])

Prediction borne out in Warlpiri.

Warlpiri lacks independent postpositions; applicative objects receive DAT. If "semantic case" morphemes are suffixal postpositions, their objects bear absolutive.

- (29) a. ngurra-kurra camp.ABS-to "to camp"
 - b. ngarna-ngurlu plant.ABS-from "from a root"

Ergative-split based on nominal-type: ngaju "I", nyuntu "you (sg)" as A optionally appear without ERG morphology:

(30) **Ngaju** ka-rna yankirri nya-nyi. **I.ABS** PresImpf-1sgSubj emu.ABS see-Npast "I see an emu."

Prediction borne out for Hindi.

(31) **ravii** kelaa k^haa rahaa t^haa **Ravi.ABS** banana.ABS eat Prog be.Past "Ravi was eating a banana" (Mohanan 1994:63)

Aside: compare Georgian; ABS=NOM, so only a single ABS per clause-S or O.

Objects of postpositions appear in DAT, GEN, instrumental (INSTR), or adverbial (ADVL); the second object in a double object construction bears DAT.

Tense/aspect Series I, A bears NOM, so O cannot.

(32) a. Series II

glex-ma datesa simind-i peasant-ERG he.sowed.it.II.1 corn-NOM/ABS

"The peasant sowed corn"

b. Series I

glex-i tesavs simind-s peasant-NOM/ABS he.sows.it.I.1 corn-DAT

"The peasant is sowing corn"

1.5 Agreement

Consider interaction between case and agreement.

Point of variation: inherent ERG case-marked DPs can/cannot value the agreement features of T.

ERG can value $T \longrightarrow A$ and S trigger subject agreement.

This A/S subject agreement pattern is found in Warlpiri; O triggers distinct object agreement.

- (33) a. Ngajulu-rlu-**rna**-ngku nyuntu nya-ngu I-ERG-1sg.SUBJ-2SG.OBJ you.ABS see-NPAST
 - "I saw you"
 - b. Ngaju-**rna** parnka-ja I.ABS-**1sgSUBJ** run-PAST

"I ran"

c. Nyuntulu-rlu-npa- \mathbf{ju} ngaju nya-ngu you-ERG-2sgNOM- $\mathbf{1sgOBJ}$ I.ABS see-NPAST

"You saw me"

This A/S agreement pattern is also found in Enga; O does not trigger agreement.

(34) Enga

- a. nambá p-e-**ó** I.ABS go-PAST-**1sg.SUBJ**
 - "I went" (L&L 317)
- b. namba-mé énda dóko mená dóko maí-y-ó
 I-ERG woman DET.ABS pig DET.ABS give-PAST-1sg.SUBJ
 "I gave the pig to the woman" (L&L 312)
- c. akáli dokó-mé mená dóko namba-nyá sambe-k-e-**á** man DET-ERG pig DET.ABS I-BEN buy-BEN.INCL-PAST-**3sg.SUBJ** "The man bought the pig for me." (L&L 312)

ERG cannot value T \longrightarrow S triggers subject agreement.

This S agreement pattern is found in Niuean:9

(35) S agreement

- a. Nofo agaia nakai e matua fifine haau i Mutalau? live still Q ABS parent female your in Mutalau "Does your mother still live in Mutalau (village)?"
- b. No-nofo agaia nakai e tau ma-matua haau i Mutalau?
 PL-live still Q ABS PL PL-parent your in Mutalau
 "Do your parents still live in Mutalau (village)?" (S 62)
- c. Mate tuai a ia.
 die PERF ABS she
 "She's dead"
- d. Ma-mate tuai a laua
 PL-die PERF ABS they.DUAL
 "They are dead" (S 62)

(36) Lack of A/O agreement

- a. **Moua** oti e maua mo Sione e tau mata afi **get** all ERG we.DUAL.EXCL with Sione ABS PL piece fire "Sione and I have already won all the matches" (S 67)
- b. Kua $t\bar{a}$ he tama e tau fakatino PERF **draw** ERG child ABS PL picture "The child has been drawing pictures" (S 70)
- c. Volu nakai he tau fānau e fua niu? grate Q ERG PL children ABS fruit coconut "Are the children grating (the fruit of the) coconut?" (S 70)

Hindi agreement with highest ABS:

(37) a. S.ABS

raam giraa Ram.M.ABS fall.Perf.M.sg "Ram fell hard" (Mohanan 1994:71)

⁹The agreement facts in Niuean are complicated by the existence of lexical exceptions; Seiter (1980) reports two verbs that allow agreement with A, and a small class of verbs that allow agreement with O (he provides two). See that work for details.

b. A.ABS

ravii roTii k^h aaegaa Ravi.M.ABS bread.F.ABS eat.FUT.M.sg

"Ravi will eat bread" (Mohanan 1994:104)

c. O.ABS

ravii-ne roTii k^h aayii Ravi.M-ERG bread.F.ABS eat.PERF.F.sg

"Ravi ate bread" (Mohanan 1994:103)

Hindi = Niuean, with a twist:

ERG cannot value $T \longrightarrow in$ intransitive clauses, S triggers subject agreement. In transitive clauses, T continues to probe and is valued by the ACC object.

Evidence for "determined" agreement:

- 1. Even (pseudo)-incorporated nominals trigger agreement (e.g. Mohanan 1994:106-117, Dayal 2003):
 - (38) a. raam-ne lakDii kaaTii Ram.Masc-ERG wood.Fem cut.Perf.Fem

"Ram did wood-cutting" (Mohanan 1994:107)

- b. puure din maiN-ne (apne kamre meN) kitaab paRhii whole day I-ERG self's room in book.Fem read.Fem.sg
 " The whole day I read books in my room." (Dayal 2003:[23])
- 2. Agreement into infinitivals (e.g. Mahajan 1989, Butt 1995)
 - (39) Ram-ne [**roTii** khaa-nii] **chaah-ii** Ram-ERG **bread.F.ABS** eat-Infin.F **want-Perf.F**

"Ram wanted to eat bread" (Mahajan 1989)

Evidence that agreement isn't determined by case morphology from related Indo-Aryan languages (pace e.g. Bobaljik's (to appear) general claim)

e.g. Punjabi (e.g. Bhatia 1993, Butt 2005): split ergativity based on tense/aspect; agreement with highest ABS; also split ergativity based on nominal type: case morphology for first/second person pronouns is ABS rather than ERG.

ABS pronouns in A position, with perfective aspect do not trigger agreement:

(40) a. o-ne kampuTar bec h -ia he/she-ERG computer.M.sg.ABS sell-Past.M.sg

"He/She sold the computer"

b. tũ lakRi va D-i you.F/M.ABS wood.F.sg.ABS cut-Past.F.sg

"You (male or female) cut the wood"

- c. tũ kampuTar bec h -ia you.F/M.ABS computer.M.sg.ABS sell-Past.M.sg
 - "You (male or female) sold the computer" (Butt 2005:187)

e.g. Marathi (Pandharipande 1997)

- (41) a. mulii-ne gaaNii mhaTlii girl-ERG song.3pl.N.ABS sing.Past.3pl.N "The girl sang songs" (130)
 - b. tyaa-ne gaaNii mhaTlii he-ERG song.3pl.N.ABS sing.Past.3pl.N "he sang songs" (131)
 - c. tuu gaaNii mhaTlii you.ABS song.3pl.N.ABS sing.Past.3pl.N "You sang songs" (131)

2 Differential Case

Differential case based on nominal type.

e.g. Gumbaynggir (Gumbaynggiric; Eades 1979):

- (42) a. ERG-ABS: pronouns (3), nouns
 - b. NOM-ACC: pronouns (1du incl, 1du excl, 2sg)
 - c. ERG-NOM-ACC: pronouns (1sg, 1pl incl, 1pl excl, 2dual, 2pl), kinship terms, section names

Silverstein (1976): reflection of a nominal hierarchy

The noun phrases at the top of the hierarchy manifest nominative-accusative marking, while those at the bottom manifest ergative-absolutive case marking. Sometimes there is a middle ground which is a three-way system of O-A-S case-markings. (113)

Defined in terms of \pm feature values (122): plus value = more likely to have ergative marking, minus value = more likely to have accusative marking

(43) Person Number $\begin{array}{ccc}
\pm 1 \text{ ("ego")} & \pm \text{ plural} \\
\pm 2 \text{ ("tu")} & \pm \text{ restricted} \\
\pm \text{ proper} \\
\pm \text{ human} \\
\pm \text{ animate}
\end{array}$

"This hierarchy expresses the semantic naturalness for a lexically-specified noun phrase to function as agent of a true transitive verb, and inversely the naturalness of functioning as patient of such." (113)

Approaches:

(44) a. Functional: e.g. Dixon (1994) (also Moravcsik 1978, Comrie 1989, inter alia)

1st	2nd	>	3rd	>	proper	>	human	>	animate	>	inanimate
ACC	\rightarrow										$\leftarrow \mathrm{ERG}$

"Those participants at the left-hand end of the hierarchy are most likely to be agents, to be in A function, and those at the right-hand end are most likely to be patients, to be in O function. It is plainly most natural and economical to 'mark' a participant when it is in an unaccustomed role." $(85)^{10}$

- b. Diachronic: Garrett (1990) (also Givón 1994, Lightfoot 1999 inter alia); ergatives arise from reanalysis of instrumentals = inanimate
- c. Grammatical:
 - Aissen (2003); imports hierarchies into grammar using harmonic alignment in Optimality Theory (Prince & Smolensky 1993), combined with a constraint favouring morphological expression (*ø) and a constraint punishing morphological expression (*STRUC).
 - Kiparsky (2004); reinterprets hierarchies based on structure of DP: pronouns, determiners, proper names head DP; claims ergative case is assigned to NPs not DPs.
 - Carnie (2005b) (building on e.g. Diesing 1992, Jelinek 1993, Diesing & Jelinek 1995, Jelinek & Carnie 2003); reinterprets hierarchies based on position of DPs in clause structure; ergative = non-specific/asserted/... = within VP, accusative = definite/presupposed/... = outside VP.
 - Alexiadou & Anagnostopoulou (2006); encodes hierarchies into v: v-ERG checks case on A
 without person features in presence of O; v-ACC checks case on O with person features in
 presence of A.

Crucial observation:

- When a nominal in O position fails to bear ACC, there is no ACC form of that nominal in the language.
- When a nominal in A position fails to bear ERG, there is no ergative form of that nominal in the language.

Proposal: This is differential morphology.

The syntax assigns ERG-NOM-ACC to all nominal types; differential marking results when the language lacks the morphological resources to realize these features on a subset of nominal types.

2.1 Differential Morphology: Pama-Nyungan

Reconstructed for Proto-Pama-Nyungan (e.g. Dixon 1980, Blake 1987):

- *-lu Ergative
- *-øNominative/Absolutive
- *-nya Accusative (pronouns, proper names?, other nominals?)

Abstract ERG-NOM-ACC plus imperfect morphological realization

(45) Properties

- when a nominal fails to bear a marked case, there is no marked case form for that nominal in the language
- differential case marking may be based on properties of lexical items that do not project to the DP as a whole (e.g. demonstrative vs noun)
- DP-internal case mismatches possible

¹⁰This cannot be taken as a statistical fact, e.g. Wierzbicka (1981), cited in Jelinek (1993)

Case mismatches – the morphology can realize the case features on a subset of the nominals related to a single DP, but must resort to default NOM/ABS on remainder¹¹

e.g. Kugu Nganhcara (Middle Paman, Smith & Johnson 2000)

- (46) a. ERG-ABS: nouns, adjectives, demonstratives
 - b. NOM-ACC: pronouns

Case is marked on the final element of a DP and on pronouns.

Optional placement of a pronoun initially in the DP results in case mismatches.

- (47) a. *nhi-la pama-ng* **nhi-ngu pukpe-wu** ku'a waa-ngu 3sg-NOM man-ERG **3sg-DAT** child-DAT dog.ABS give-3sgDAT
 - 'The man gave a dog to the child' (Smith & Johnson 2000:401)
 - b. nhi-la pukpe-ng nhu-nha kuyu yuku muka-ng-nha peka 3sg-NOM child-ERG 3sg-ACC woman.ABS thing stone-INSTR-3sgACC throw.at 'The child threw a stone at the woman' (Smith & Johnson 2000:390)

Consider the realization of *nhunha kuyu* '3sg.ACC woman.ABS' "the woman" (ACC)

- syntactic case assignment of ACC to DP
- case concord = 3sg-ACC woman-ACC
- vocabulary insertion
- (48) 3sg pronoun/determiner
 - a. [Accusative] \leftrightarrow nhunha
 - b. $[Dative] \leftrightarrow nhingu$
 - c. $[Ablative] \leftrightarrow nhingurumu$
 - d. [Comitative] \leftrightarrow nhilara
 - e. $[Privative] \leftrightarrow nhilayi$
 - f. $[Locative] \leftrightarrow nhilang(a)$, nhilan
 - g. (elsewhere) \leftrightarrow nhila (397)
- (49) Nominal case suffixes
 - a. $[Ergative] \leftrightarrow -ng(u)$
 - b. [Dative] \leftrightarrow -na / kinship, proper
 - c. $[Dative] \leftrightarrow -wu$
 - d. [Ablative] \leftrightarrow -nam, m ¹²
 - e. [Comitative] \leftrightarrow -ra
 - f. $[Privative] \leftrightarrow -yi$
 - g. [Locative] \leftrightarrow -ng(a), -n ¹³
 - h. [Vocative] \leftrightarrow -n
 - i. (elsewhere) \leftrightarrow - $\emptyset(389)$

¹¹See Calabrese for similar data from Latin in which a noun that shows syncretism between genitive and dative combines with an adjective that maintains distinct forms for genitive and dative.

Consider the realization of *nhila pukpeng* '3sg.NOM child.ERG' "the child" (ERG)

- syntactic case assignment of ERG to DP
- \bullet case concord = 3sg-ERG child-ERG
- vocabulary insertion
- (50) child \leftrightarrow pukpe

inalienable possession

(51) a. nhila **nganyi ma'a** pigo 3sg.NOM **1sg.ACC hand.ABS** hit.Past

"He hit my hand. / He hit me on the hand" (416)

b. ngaya kempa thaa-thayan-wi-ng
 1sg.NOM flesh.ABS tired-Incho.Pres-1sg
 "I'm getting tired. / My flesh is getting tired." (416)

e.g. Djapu (Yuulngu; Morphy 1983)

- (52) Summary of Case Patterns in Djapu
 - a. Ergative-Absolutive: wh-words (except yol "who"), determiners/demonstratives, lower animate, inanimate
 - b. Ergative-Nominative-Accusative: human, higher animate
 - c. Nominative-Accusative: pronouns

All elements in a DP (intact or split) must be case-marked, and must match for case.

(53) Case Concord

nganapurru-nggalangu-w djamarrkurli-w' yumurrku-w dhiya-ku Djapu-w 1pl.Excl-OblS-**DAT** children-**DAT** small.pl-**DAT** this-**DAT** Djapu-**DAT**

"for these our small Djapu children" (123)

The combination of a demonstrative (ERG-ABS), and a human noun (ERG-NOM-ACC) or pronoun (NOM-ACC) results in case mismatches:

- (54) Case Mismatches
 - a. wungay' marrtji-nya **ngunhi-ny-dhi yolngu-n**honey.ABS go-Past.NonIndic **that.ABS-Pro-Anaph person-ACC**wapirti-warrtju-na-puyngu-nha-ny weka-nha
 stingray-spear.pl-Nmlsr-Inhab-ACC-Pro give-Past.NonIndic
 "We would go and give honey to those people who were spearing stingrays (lit 'to those stingray-
 - b. dhuwa nhe yurru lili dha:parng rongiyi-rr this.ABS you.NOM Fut Hither unsuccessful return-Unm

"YOU will return empty handed [but not I]" (84)

spearing people')" (110)

¹³There is some variation in the use of allomorphs of the ablative, -nam more likely with kinship and proper names (392). The dative appears as the stem for the ablative of kinship and proper names.

¹³These locative forms are in free variation (395).

Consider the realization of ngunhi(nydhi) yolngun 'that.ABS person.ACC' "that person (ACC)"

- (55) "that-ACC" (58)
 - a. $[Ergative] \leftrightarrow nguringi$
 - b. $[Dative] \leftrightarrow nguriki$
 - c. [Originator] \leftrightarrow nguriking
 - d. $[Oblique] \leftrightarrow ngurikal$
 - e. $[Ablative] \leftrightarrow ngurikalangungur$
 - f. [Associative] \leftrightarrow ngurikalanguwuy
 - g. (elsewhere) \leftrightarrow ngunhi
- (56) "person-ACC"
 - a. $person \leftrightarrow yolngu$
 - b. ACC^{14}
 - i. $[ACC] \leftrightarrow -nha / human noun$
 - ii. [Ablative] \leftrightarrow -galngur / human noun
 - iii. [Oblique] \leftrightarrow -gal /human noun
 - iv. $[Originator] \leftrightarrow -gungu / human noun$
 - v. $[Ergative] \leftrightarrow -dhu / noun$
 - vi. $[Dative] \leftrightarrow -gu / noun$
 - vii. (elsewhere) \leftrightarrow - \emptyset / noun
- e.g. Margany (Maric, Breen 1981).
- (57) a. ERG-ABS: nouns/adjectives, demonstratives
 - b. NOM-ACC: pronouns

Combination of pronoun and adjective/secondary predicate leads to case mismatches:

- (58) Case Mismatches
 - a. matya **ngaya** balga-nnganda-la yurdi, **nhanga-nggu** before **1sg.NOM** hit-Hab-Past meat/animal.ABS **young-ERG**
 - 'I used to kill a lot of kangaroos when I was young' (307, 336)
 - b. **gurruny-dyu ngaya** dhumba-:nhi **alone-ERG 1sg.NOM** build-RECPAST
 - 'I built it on my own' (342)
 - c. nhula waba:nhi gurrunyu 3sg.NOM go-RecPast alone.ABS
 - "He would go on his own" (349)
- (59) "1sg pronoun ERG" (303)
 - a. [Accusative] \leftrightarrow ngaha
 - b. $[Genitive] \leftrightarrow ngatyu$
 - c. [Dative] \leftrightarrow ngatyungu
 - d. $[Instrumental] \leftrightarrow ngatyundu$
 - e. [Locative] \leftrightarrow ngatyunda

¹⁴These are the underlying forms posited by Morphy; phonological considerations result in the surface pronunciations.

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f. [Locative-Proximate] \leftrightarrow ngatyunbitya
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- g. [Allative] \leftrightarrow ngatyundhadi
- h. [Ablative] \leftrightarrow ngatyunmundu
- i. (elsewhere) \leftrightarrow ngaya
- (60) "young-ERG"
 - a. young $\leftrightarrow nhanga$
 - b. Lexical entries for Case features¹⁵ (306-311)
 - i. $[Ergative] \leftrightarrow -nggu$
 - ii. $[Dative] \leftrightarrow -gu$
 - iii. [Allative] \leftrightarrow -dhadi
 - iv. [Ablative] \leftrightarrow -mundu
 - v. [Privative] \leftrightarrow -yi
 - vi. [Locative-Proximate] \leftrightarrow -bitya
 - vii. [Locative-Perlative] \leftrightarrow -marnrdi
 - viii. [Locative] \leftrightarrow -ngga
 - ix. (elsewhere) \leftrightarrow - \emptyset

Also Guugu Yimidhirr (Cape York Peninsula, North Queensland; Haviland 1979), Yidiny (Yidinic; Dixon 1976), Uradhi (Northern Pama; Crowley 1983), ...

Conclusion: Differential case marking is **morphological**. ABS = NOM & ACC further supported.

2.2 Differential Syntax

- (61) Differential Syntax
 - when a nominal fails to bear a marked case, there is typically a form of the marked case for that nominal in the language
 - differential case marking can only be based on properties that project to the DP as a whole
 - differential case marking can be based on properties of the clause (e.g. verb type)
 - DP-internal case mismatches not possible

e.g. Hindi DAT objects

Case marking dependent on animacy, specificity = a property of the DP as a whole.

(62) a. ravii **gaay** k^hariidnaa caahtaa hai Ravi.ABS **cow.ABS** buy.NonFinite wish.Imperf be.Pres

"Ravi wishes to buy a cow (with no particular cow in mind)" (Mohanan 1994:80)

b. ravii **gaay-ko** k^hariidnaa caahtaa hai Ravi.ABS **cow-DAT** buy.NonFinite wish.Imperf be.Pres

"Ravi wishes to buy a particular cow" (Mohanan 1994:81)

Notice: morphological marking of DAT -ko indeed available for unmarked DP.

¹⁵A few phonologically-conditioned allomorphs have been ignored for simplicity.

Case on DP determined not only by properties of DP, but also by the verb.

"The choice between ACC [here DAT] and NOM [here ABS] is available only to the objects of those verbs that are neutral to the animacy of their objects." (Mohanan 1994:81)

e.g. lik^h "write" does not allow DAT objects, even when definite

(63) a. ilaa-ne \mathbf{yah} $\mathbf{k}^h\mathbf{at}$ li \mathbf{k}^h aa Ila-ERG $\mathbf{this.ABS}$ letter. \mathbf{ABS} write-Perf

"Ila wrote this letter"

b. *ilaa-ne is k^hat-ko lik^haa Ila-ERG this.NABS letter-DAT write-Perf "Ila wrote this letter" (Mohanan 1994:81)

In addition, syntactic agreement sensitive to the distinction.

e.g. Dative experiencer subjects: case marking dependent on thematic role = property of the DP as a whole.

(64) a. tushar-ko caand dik^h aa tushar-DAT moon.ABS become.visible-PERF "Tushar saw the moon" (Mohanan 1994:141)

b. siitaa-ko larke pasand the
Sita-DAT boys.ABS like be.PAST
"Sita likes the boys" (Mahajan 1991:7)

Conclusion: unified analysis of nominal-based differential case marking inappropriate.

Must distinguish between differential abstract case assignment, and differential morphological realization

3 Morphological Issues

Absolute syncretism: no morphological realization of case distinction Contextual syncretism: partial realization of case distinction

Calabrese (2006) argues that while contextual syncretism can be accounted for using the Subset Principle and Impoverishment, absolute syncretism requires restrictions on case feature combinations which are resolved through changing feature values.

Halle & Vaux (1998)

- (65) a. -oblique = arguments of verb; +oblique = not arguments of verb
 - b. -structural = non-structural, semantic; +structural = on basis of syntactic structure
 - c. -superior = governed positions; +superior = non-governed positions
 - d. -free = consistent argument structure role; +free = role in arg structure varies

	ERG	NOM	ACC	GEN	DAT	LOC	ABL	INST
Oblique	-	-	-	+	+	+	+	+
Structural	-	+	+	+	+	-	-	-
Superior	+	+	-	-	+	-	+	+
Free	-	+	-	-	+	-	+	-

Warlpiri Absolute Syncretism

- (66) a. [Ergative] = [Instrumental]
 - b. [Dative] = [Genitive]
 - c. [Locative]
 - d. "Absolutive" = [Nominative], [Accusative]
 - e. ([Allative])
 - f. ([Ablative])
 - g. ([Translative])

Subset Principle

- (67) a. [-Structural, +Superior, -Free] \leftrightarrow -rlu (-ngku) (Ergative, Instrumental)
 - b. $[+Oblique, +Structural] \leftrightarrow -ku$ (Dative, Genitive)
 - c. $[+Oblique] \leftrightarrow -rla (-ngka)$
 - d. [Case] \leftrightarrow - \emptyset (="absolutive")
- (68) [-Oblique, +Structural, +Superior, +Free] (nominative) realized by [Case] [-Oblique, +Structural, -Superior, -Free] (accusative) realized by [Case]

Contextual Syncretism: 1/2 pronoun optionally appears with default -ø

(69) ngajulu-rlu vs ngaju; nyuntulu-rlu vs nyuntu I.ERG-ERG I.ABS you.ERG-ERG you.ABS

Subset Principle insufficient; need to block ergative suffix. = Impoverishment

Assume (following e.g. Halle 1997):¹⁶

- (70) a. 1st = [+Author, +Participant]
 - b. 2nd = [-Author, +Participant]
 - c. 3rd = [-Author, -Participant]

Assume (following e.g. Noyer 1997, Harbour 2003)

- (71) a. singular = [+singular, -augmented]
 - b. dual = [-singular, -augmented]
 - c. plural = [-singular, +augmented]

Impoverishment rule:

(72) delete [-Structural] / [-Oblique, +Participant, +Singular]

Kugu Nganhcara (Middle Paman, Smith & Johnson 2000)

- (73) 3sg
 - a. $[Accusative] \leftrightarrow nhunha$
 - b. $[Dative] \leftrightarrow nhingu$
 - c. [Locative] \leftrightarrow nhila-ng(a), nhila-n
 - d. (elsewhere) \leftrightarrow nhila

¹⁶ Halle discusses the Warlpiri agreement clitics; however, note that the 1 incl and 1 excl vocabulary items are inverted in his data

- e. ([Ablative] \leftrightarrow nhingu-rumu)
- f. ([Comitative] \leftrightarrow nhila-ra)
- g. ([Privative] \leftrightarrow nhila-yi) (397)
- (74) a. [-Participant, +Singular, -Plural, -Oblique, +Structural, -Superior] ↔ nhunha (3sg Accusative)
 - b. [-Participant, +Singular, -Plural, +Oblique, +Structural] \leftrightarrow nhingu (3sg Dative)
 - c. [-Participant, +Singular, -Plural] ↔ nhila (3sg Absolutive)
 - d. $[-Structural] \leftrightarrow -ng(a), -n$
- (75) a. [-Structural, +Superior, -Free] \leftrightarrow -ng(u) (Ergative)
 - b. $[+Oblique, +Structural] \leftrightarrow -na / kinship, proper, -wu (Dative)$
 - c. $[-Structural] \leftrightarrow -ng(a)$, -n ¹⁷(Locative)
 - d. (elsewhere) \leftrightarrow - \emptyset
 - e. ([Ablative] \leftrightarrow -na-m, m ¹⁸)
 - f. ([Comitative] \leftrightarrow -ra)
 - g. ([Privative] \leftrightarrow -yi)
 - h. ([Vocative] \leftrightarrow -n) (389)

Again, need to prevent the ergative suffix -nq(u) from appearing on the pronoun.

(76) Impoverishment rule: delete [-Structural] / [-Oblique, +Pronominal]

Niuean

	ERG	NOM	ACC	GEN	DAT	LOC	ABL	INST
Oblique	-	-	-	+	+	+	+	+
Structural	-	+	+	+	+	-	-	-
Superior	+	+	-	-	+	-	+	+
Free	_	+	_	_	+	_	+	_

- (77) Niuean, proper names, pronouns
 - a. [Ergative]
 - b. [Locative]
 - c. [Genitive]
 - d. "absolutive" = [Nominative], [Accusative], [Dative]
- (78) Niuean, proper names, pronouns
 - a. $[-Structural, +Superior, -Free] \leftrightarrow e (Ergative)$
 - b. $[+Oblique, -Structural] \leftrightarrow i$ (Locative)
 - c. [+Oblique, -Superior] \leftrightarrow ha (Genitive) ¹⁹
 - d. [Case] \leftrightarrow a / proper names, pronouns (="absolutive", Dative)
- (79) [-Oblique, +Structural, +Superior, +Free] (nominative) realized by [Case] [-Oblique, +Structural, -Superior, -Free] (accusative) realized by [Case] [+Oblique, +Structural, +Superior, +Free] (dative) realized by [Case]

 $^{^{19}}$ Genitive on proper names is alternatively realized as a. This is optional contextual syncretism, for which I assume an impoverishment rule deleting the oblique feature.

- (80) Niuean, common nouns
 - a. [Locative] = [Ergative] = [Genitive]
 - b. "absolutive" = [Nominative], [Accusative], [Dative]

Problem: [Locative], [Ergative], [Genitive] only share [-Free], which is also found on [Accusative]

Aside: [Nominative], [Accusative], [Dative] only share [+Structural], which is also found on [Genitive]

Calabrese-style feature adjustment:

- (81) a. *Ergative: *[-oblique, -structural]
 - b. Repair: $[-oblique] \rightarrow [+oblique]$
- (82) Niuean, common nouns
 - a. $[+Oblique, -Free] \leftrightarrow he$ (Ergative, Genitive, Locative)
 - b. $[Case] \leftrightarrow e$

Alternative:

- (83) Niuean, common nouns
 - a. $[-Structural, +Superior, -Free] \leftrightarrow he$ (Ergative)
 - b. $[+Oblique, -Superior] \leftrightarrow he$ (Genitive, Locative)
 - c. $[Case] \leftrightarrow e \text{ ("absolutive")}$

4 Today and Tomorrow

Today:

- surface case forms determined through syntactic abstract case assignment and post-syntactic morphological realization according to the Subset Principle
- behaviours of a typologically diverse range of ERG-ABS languages explained by positing ERG-NOM-ACC abstract case assignment, and identifying absolutive as the default morphological realization of case
- complex paterns of differential case marking explained morphologically; distinguished from syntactic differential case marking
- \bullet morphological differential case marking provides further evidence for Impoverishment, and feature repair

Tomorrow:

- syntactic ergativity e.g. Dyirbal is a ERG-NOM-ACC language
 - (84) a. ERG-ABS: nouns, adjectives,
 - b. NOM-ACC: pronouns
 - (85) a. ngadya wuygi bani-nyu I.NOM old.ABS come-Past "I, old [=no good], came"

- b. ngadya wuygi-ngu balan dyugumbil balga-n I.NOM old-ERG CLASS woman.ABS hit-Past
 - "I, old, hit the woman"
- c. ngayguna wuygi balag-n
 - I.ACC old.ABS hit-Past
 - "I, old, was-hit" [Someone hit old me] (Mel'čuk 1979:54)

Famous for syntactic properties that treat "absolutive" as a natural class; e.g. relativization (Dixon 1972:99-105)

(86) a. S.ABS

ngadya balan dyugumbil [nyina-ngu] buryan I.NOM CLASS.ABS woman.ABS sit-Rel watch.NFut

"I am watching the woman who is sitting down" (100)

b. O.ABS

balan dyugumbil [ngadya burya-ngu] nyina-ngu CLASS.ABS woman.ABS I.NOM watch-Rel sit-NFut

"The woman who I am watching is sitting down" (100)

Generalization is not based on ABS case:

(87) a. S.NOM

ngadya [bani-ngu bangumbalbulu] nyina-ny I.NOM come-Rel a long way downriver sit-NFut

"I, who have come a long way downriver, will sit down" (100)

b. O.ACC

ngayguna [banggul yarya-nggu balga-ngu] banggun dyugumbiryu burya-n me.ACC [CLASS.ERG man-ERG hit-REL] CLASS.ERG woman.ERG see-NFut

"The woman saw me being hit by the man" (100) [not passive]

- further expansion of typology e.g. Wishram (Chinookan)
- the case filter
- Pama-Nyungan case syncretisms and morphological case features
- additional nominal hierarchy effects e.g. inverse, passive, person-case constraint

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