

Why is omniargumentivity harder than omnipredicativity?

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Overview

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Introduction

Introduction

- ▷ A simple problem about the distribution of lexical categories in sentential functions turns out to be far more thorny than expected.
- ▷ In working on a summary of null conversion phenomena in Austronesian¹ it emerged clearly that there was a great asymmetry between word-class flexibility in the predicate position versus flexibility in argument positions.
- ▷ This has been noted but is left generally unexplored in the Austronesian/Papuan region despite a large literature on lexical category flexibility in Philippine, Indonesian and Polynesian languages.

¹Kaufman, Adamson, Chen, McDonnell and Waring, forthcoming

Aims

- ▷ Goal 1: to show that “omni-argumentivity” is indeed far rarer than omni-predicativity and that referential “scaffolding” is virtually required for event-denoting expressions in argument positions.
- ▷ Goal 2: to explain why this should be (quantifiability).
- ▷ Goal 3: a plea for considering a holistic picture of the syntax when theorizing about lexical category

Background

- ▷ Croft (2001): three universal propositional functions
 - Reference
 - Modification
 - Predication
- ▷ Three (non-universal) lexical categories:
 - Nouns
 - Adjectives
 - Verbs

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Background

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- ▷ Three (non-universal) lexical categories:
 - Nouns \approx Reference
 - Adjectives \approx Modification
 - Verbs \approx Predication
- ▷ In Croft's influential approach, markedness in different functions is the criteria to classification.
- ▷ E.g., if a word requires additional morphosyntactic effort to fulfill the predicate and modifier functions but not the argument function, this is evidence for classifying it as a noun.

Background

▷ Indo-European style copular predication:

- (1) a. The dog barks.
- b. The dog **is** big.
- c. The dog **is** a poodle.

Background

▷ Copular predication:

(2) GERMAN

a. *Der Hund bellt.*

DEF.MSC dog bark.3S.PRS.INDIC

‘The dog barks.’

b. *Der Hund **ist** groß.*

DEF.MSC dog COP.3S.PRS.INDIC big

‘The dog is big.’

c. *Der Hund **ist** ein Pudel.*

DEF.MSC dog COP.3S.PRS.INDIC INDEF.MSC poodle

‘The dog is a poodle.’

Background

▷ Copular predication:

(3) SPANISH

a. *El perro ladra.*

DEF.MSC dog bark.3S.PRS.INDIC

‘The dog barks.’

b. *El perro **es** grande.*

DEF.MSC dog COP.3S.PRS.INDIC big

‘The dog is big.’

c. *El perro **es** un caniche.*

DEF.MSC dog COP.3S.PRS.INDIC INDEF.MSC poodle

‘The dog is a poodle.’

Philippine-style predication

- ▷ This asymmetry contrasts with Philippine-type predication, which is unequivocally symmetrical.
- ▷ The predicates here belong to several different morphological classes.
- ▷ But we cannot (easily) say any one type is more of a natural predicate than the other.

(4) TAGALOG

- a. *T<um>a-tahol ang aso.*
 <AV.INIT>IMPRF-bark NOM dog
 ‘The dog barks.’
- b. *Ma-laki ang aso.*
 ADJ-big NOM dog
 ‘The dog is big.’
- c. *Poodle ang aso.*
 poodle NOM dog
 ‘The dog is a poodle.’
- d. *Akin ang aso.*
 1S.GEN NOM dog
 ‘The dog is mine.’
- e. *Nandito ang aso.*
 here NOM dog
 ‘The dog is here.’

Philippine-style predication

- ▷ An apparent flip side to this flexibility is found in referential expressions, which can also be headed by words of any category.
- ▷ While most analyses have viewed these two flexibilities as linked (including, perhaps, my own), I now argue that they are unrelated.

(5) TAGALOG

- a. *ang t<um>a-tahol*
NOM <AV.INIT>IMPRF-bark
'the barking one.'
- b. *ang ma-laki*
NOM ADJ-big
'the big one'
- c. *ang poodle*
NOM poodle
'the poodle.'
- d. *ang akin*
NOM 1S.GEN
'the one that's mine'
- e. *ang nandito*
NOM here
'the one that's here'

Grambank Feature GB117: Philippines

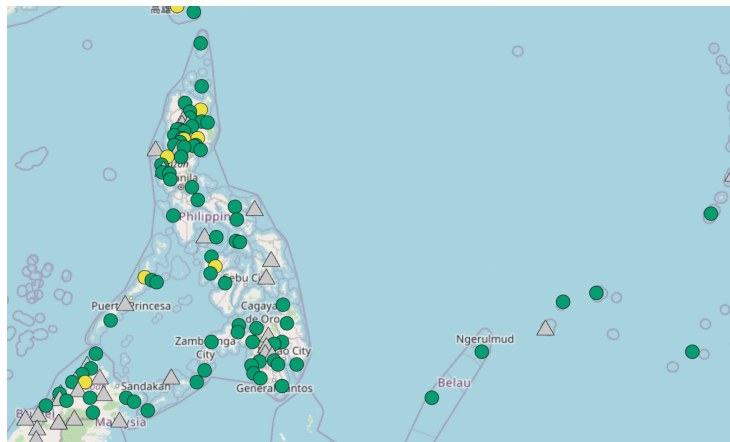


Figure: Nominal copula in Phil. languages

Grambank Feature GB117: W. Nusantara



Figure: Nominal copula in W. Nusantara

WALS “Zero copula for predicate nominals”

- ▷ While Stassen (2013) seems to describe the situation more or less accurately:

“Languages which are closely related areally or genetically may differ considerably in the extent to which they allow zero encoding. For instance, while Austronesian languages typically opt for zero encoding, a full copula is mandatory in a closely related group of three Austronesian languages from northern and central Vanuatu (Ambrym, Big Nambas, and Paamese).”
- ▷ ...his map is quite off the mark!
- ▷ In the following maps, red indicates “Zero copula is impossible” and green indicates “Zero copula is possible”.

WALS “Zero copula for predicate nominals”

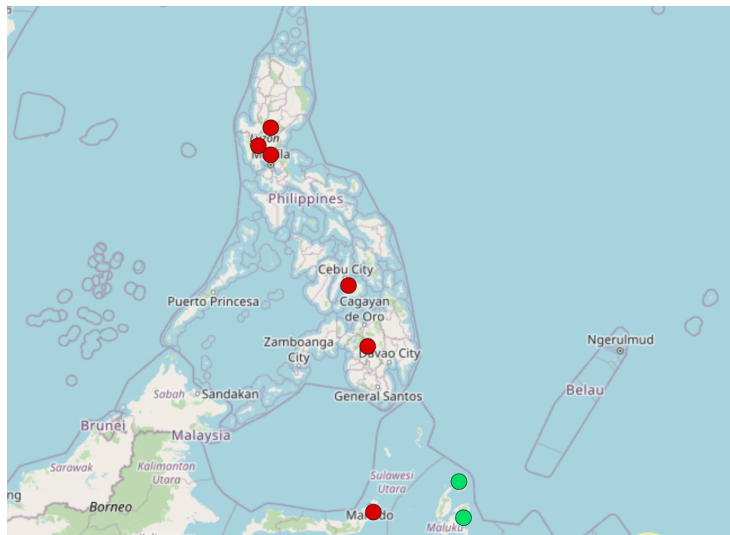


Figure: Nominal copula in the Philippines

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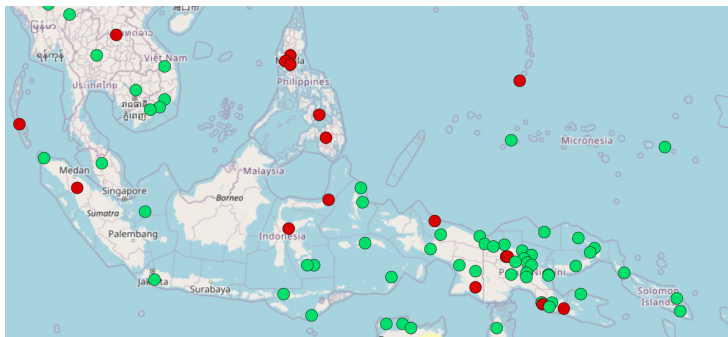
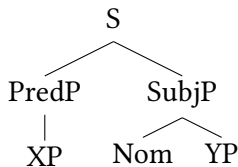
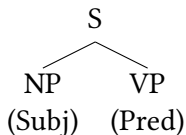


Figure: Nominal copula in Nusantara

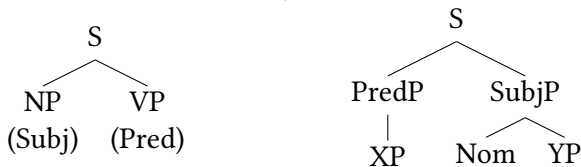
Schema

- ▷ Schematic comparison between Indo-European type and Philippine type sentence structure (Kaufman 2018:214), where XP and YP stand for phrases of any lexical category.



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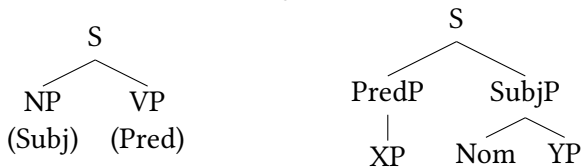
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Schema

- ▷ Schematic comparison between Indo-European type and Philippine type sentence structure (Kaufman 2018:214), where XP and YP stand for phrases of any lexical category.



- ▷ Whereas Indo-European languages typically have clausal and nominal spines that includes categorial selection from top to bottom, Philippine-type languages appear to lack such strict categorial selection.
- ▷ The predicate, a phrase that is indefinite or focused (in the actual pragmatic sense), occupies clause-initial position, while its definite counterpart with which it enters into something like an equational relation, occupies the following subject position.

Launey's Omnipredicativity

- ▷ This forms part of what Launey (1986, 1994, 2004) terms OMNIPREDICATIVITY with regard to Nahuatl:

(6) NAHUATL

a. *Ki-kwa in mičín*

3.OBJ-eat DET fish

'It eats the fish'

b. *Mičín in ki-kwa*

fish DET 3.OBJ-eat

'What it eats is fish'

- ▷ He sees this as a rare type of system:

“La dissociation entre fonctions et classes lexicales [...] fait du nahuatl une langue typologiquement extrémiste, et relativement isolée ce pôle des systèmes prédicatifs.”
 (Launey 1994)

Launey's Omnipredicativity

- ▷ Launey (1986) already treated the determiner *in* as the true head of the argument phrase, rather than the lexical head, anticipating Abney's (1987) DP hypothesis.
- ▷ Launey (2004) notes that nonverbal predicates without a copula are cross-linguistically common but:

Much less common, though, are argument phrases containing a verb and constructed just in the same way – with the same determiner – as noun phrases. We do not find in English, for instance,

- a. **The call(s) him is his friend*
- b. **The he eats is fish*

- ▷ So Launey also anticipates the point I am striving to make today.

Launey's Omnipredicativity

- ▷ At the same time, Launey sees a deep connection between categorially promiscuous predicates (omnipredicativity) and categorially promiscuous arguments (omniargumentivity):

“It appears thus that predicability is a condition for designation: you can refer to an entity as the fish if and only if it is previously admitted that it is a fish. In other words, the correct translation of a noun like mičin is not ‘fish’, but ‘be fish’, and a phrase like in mičin should be glossed like ‘the one who is fish’.”

Omniargumentivity implies omnipredicativity

- ▷ Hengeveld and van Lier (2010:137) takes the same approach:

“[...] we expect the function of predication to be privileged in relation to the function of reference since referring expressions can only be created by predicating properties of an entity. Thus, in a noun phrase like a yellow car, the properties ‘car’ and ‘yellow’ are predicated of the entity being referred to [...].”

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- ▷ Set intersection is both a property of *predication* and *modification*!
- ▷ Much more useful to us is Himmelmann’s (1986) definition of predication based on challengeability.

Omniargumentivity *versus* omnipredicativity

- ▷ In contrast to Launey, we will separate out these two phenomena, referring to one as omni-predicativity and the other as omni-argumentivity, following Foley (2023). (I thank Katharina Haude for making me emphasize this deviation from Launey.)
- ▷ Foley (2023:123) differentiates languages like Nahuatl from those like Tagalog. In the former type, on his view, roots are inherently predicative while in the latter, they are inherently argumentive.

Omniargumentivity *versus* omnipredicativity

- ▷ Note though that even Launey, allows for some non-predicative contexts for nominals:

*“If all lexical items are predicables, and if the third person subject is marked by a zero morpheme, then every occurrence of a «bare» noun, with no prefix, has to be considered as a predicate applied to a third person. In other words, **t̄isiλ** is always **∅-t̄isiλ**, either as sentence predicate (‘He is a doctor’) or in argument or modifier position (‘such that he is a doctor’). But if you call or hail someone, there is no predication : you say something, but not about anything or anybody, the noun has no predicative properties and no argument structure.”*

- ▷ We return to vocatives later, which turn out to have an important distinguishing role in Tagalog, as well.

Omniargumentivity *versus* omnipredicativity

- ▷ Beck (2013), while rejecting the ontological primacy of predication over reference, also notes that Lushootseed, a Salish language, shows omnipredicativity without displaying omniargumentivity.

	<i>Predicate</i>	<i>Argument</i>
<i>Noun</i>	unmarked	unmarked
<i>Verb</i>	unmarked	marked

FIGURE 7.8 Unidirectional flexibility between nouns and verbs

“This pattern of neutralization in predicate position, however, is not all that uncommon, and is found in a variety of languages (e.g. Buriat, Arabic, Nanay, Beja) where the noun–verb distinction is not in question (Beck 2002: 107–8). Although bare nominal predicates are allowed in such languages, the distinction between nouns and verbs is rarely in doubt once other types of evidence are taken into consideration. In Lushootseed, the crucial evidence is found by examining the syntax of argument phrases: of the open lexical classes, only words with substantive meanings are unmarked syntactic arguments”

Omniargumentivity *versus* omnipredicativity

“Absence of a copula is common – cf. Stassen (2005) in WALS. But absence of a relativizer does not seem to be common (though I do not know of any systematic cross-linguistic research).” (Haspelmath 2020)

Omniargumentivity *versus* omnipredicativity

- ▷ Van Lier (2016) shows that in her sample of Oceanic languages, omni-predicativity is far more common than omni-argumentivity (which she views as lexical flexibility in the reference function).

(7) HIERARCHY OF FLEXIBILITY IN OCEANIC (Van Lier 2016:225)
predication (92.1%) > reference (46.7%) > modification (27.5%)

Van Lier (2016:225):

“This hierarchy confirms generalizations based on worldwide typological research of lexical classification. Yet, it shows a comparatively very high degree of flexibility in Oceanic languages, regarding the function of predication; a phenomenon known as omnipredicativity.”

A descriptive lacuna

- ▷ The key constructions are difficult to assess in the descriptive literature:
 - because the ungrammatical data is not always explicit
 - the two areas of concern are typically treated as unrelated: (i) non-verbal predication (ii) headless relative clauses.
- ▷ Van Lier (2016) makes the same observation in her survey of lexical flexibility in Oceanic languages.²

²cf. Van Lier (2016:209): “Regarding reference, for many languages it proved difficult to obtain detailed and complete information about the distribution of such categories as determiners and number markers over the semantic subgroups distinguished in Table 2.”

Relative clauses

▷ First, a definition:

RELATIVE CLAUSE: “subordinate clause which delimits the reference of a NP by specifying the role of the referent of that NP in the situation described by the RC” (Andrews 2007:206).

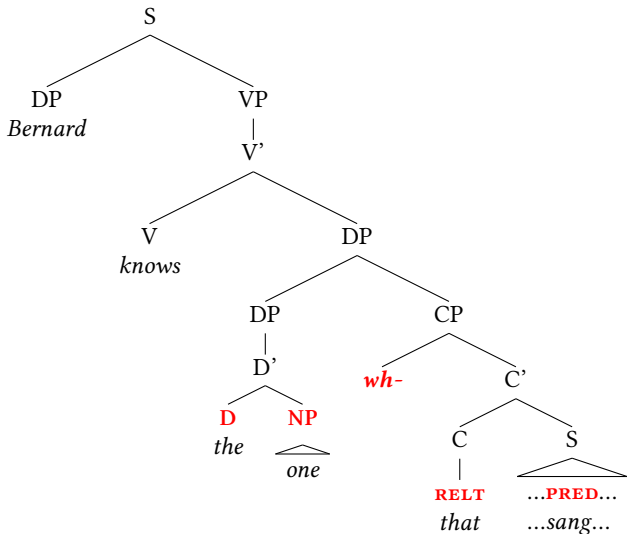
- Can it *only* be an NP whose reference is delimited?
- Must the relative clause pick out one out of several potential roles?

▷ Note that relativizers often allow clauses to function not only as modifiers but also as arguments.

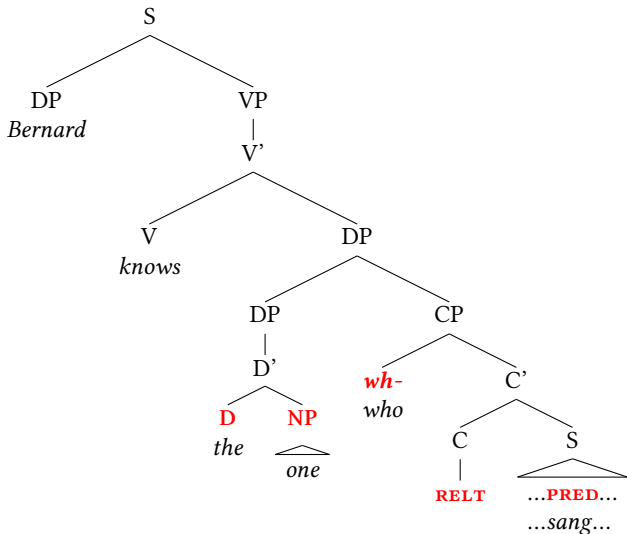
Headless relative clauses

- ▷ A headless relative is one in which the modified noun is missing (e.g. *the ~~horse~~ they rode in on*).
- ▷ To investigate omniargumentivity, I examine the nature of headless relative clauses in the Nusantara/Pacific region with the following questions:
 - Are headless relatives allowed?
 - If so, do they require a relativizer, relative pronoun or determiner?
 - Do they require a participle/nominalized form of the RC predicate?

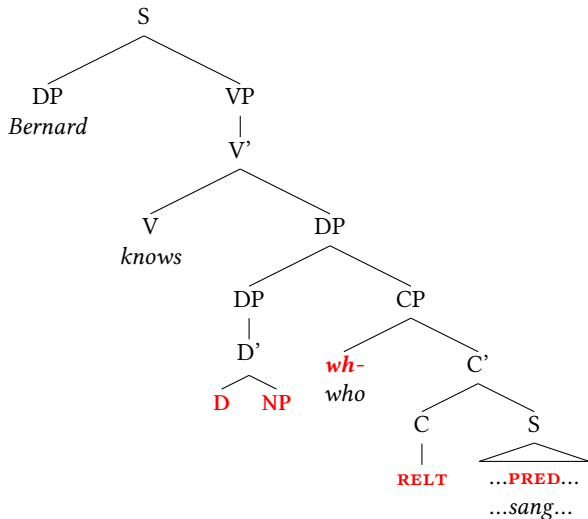
Headed RC with relativizer/complementizer



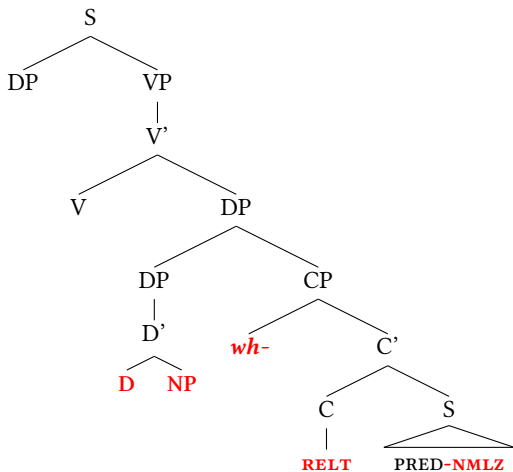
Headed RC with relative pronoun

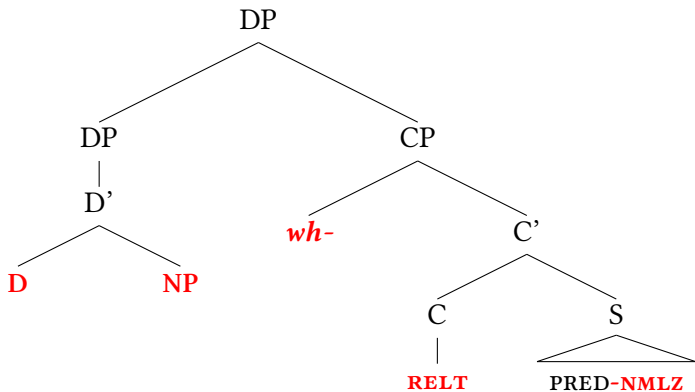


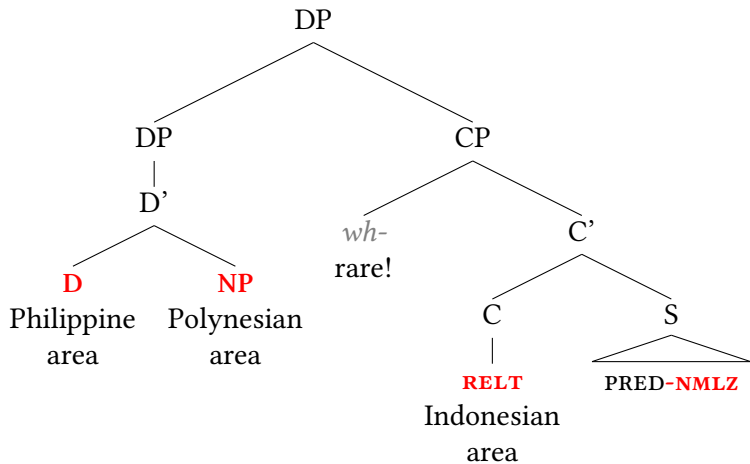
Headless RC with relative pronoun

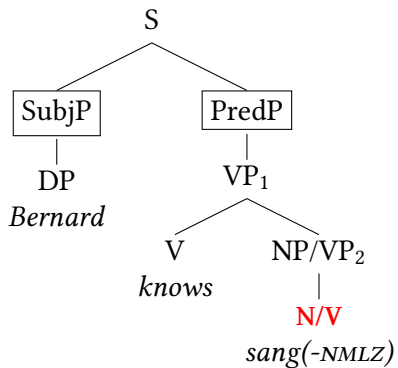


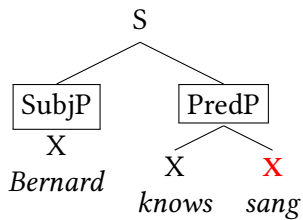
“Referential scaffolding”





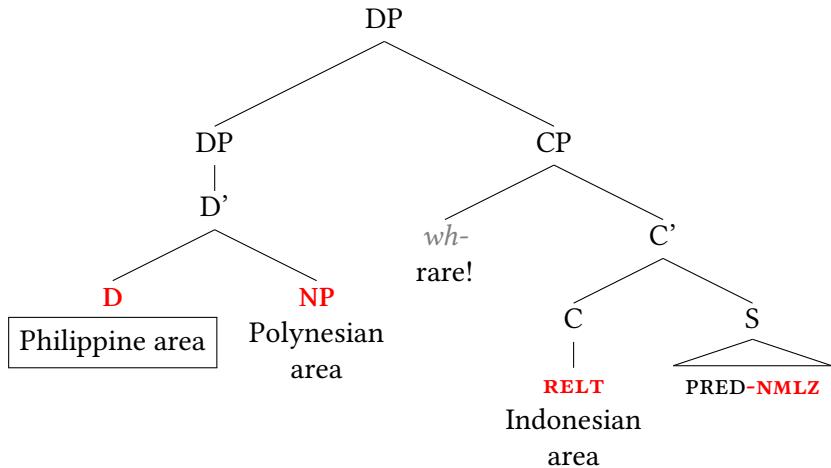






Survey

Case markers



Cebuano

▷ Omnipredicative:

(8) CEBUANO

- a. Ni-kaon ang akong higala
 AV.PRF-eat NOM 1S.GEN:LNK friend
 ‘My friend ate.’
- b. Maestra ang akong higala
 teacher NOM 1S.GEN:LNK friend
 ‘My friend is a teacher.’
- c. Tambok ang akong higala
 fat NOM 1S.GEN:LNK friend
 ‘My friend is fat.’

Cebuano

▷ Omniargumentive:

(9) CEBUANO

- a. *Siya ang ni-kaon sa doughnut*
 3S.NOM NOM AV.PRF-eat OBL doughnut
 ‘S/he is the one who ate the doughnut.’
- b. *I-hatag kini sa ni-kaon*
 CV-give this.NOM OBL AV.PRF-eat
 ‘Give this to the one who ate.’

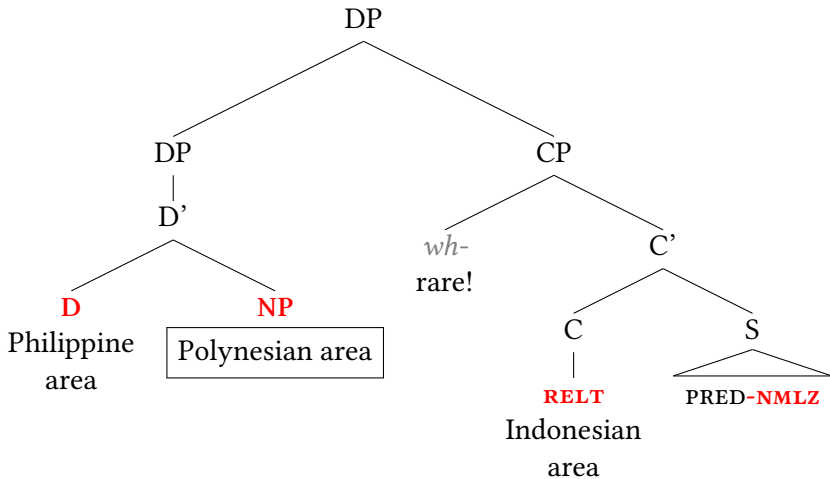
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Dummy nouns



Rapa Nui

- ▷ Despite having both articles and case markers, true headless relatives are claimed not to exist in Rapa Nui: “Instead a dummy head is used: *me’e* ‘thing or person’, *kona* ‘place’, *hora* ‘time’, *aña* ‘action’ or the 3rd person pronoun *ia* as a phoric.” (Du Feu 1996:47)

(10) RAPA NUI (Du Feu 1996:47,48)

- a. *Ko tikea ’a e au te me’e i ’avai ki a ia.*
 PFT see RES AG 1s +SPE thing PA give DAT PRS 3s
 ‘I saw what he was given.’
- b. *Ko ’ite ’a au he aha ta’ana me’e hana.*
 PFT know RES 1s ±SPE INT POS.3sa thing want
 ‘I know what he wants.’

- ▷ The Polynesian languages show that determiner elements can be *insufficient* support for headless relatives.

Fijian

- ▷ Similarly, Dixon (1988:252): ‘there is a complete absence of any formal mark of a relative clause.’
- ▷ No relativizer, relative pronoun or special verbal form found in relative clauses.
- ▷ A head noun is obligatory, as evinced by the use of dummy nouns in relatives such as (11):

(11) FIJIAN (Dixon 1988:252)

e sega ni daa 'aa [era 'au-ta]

3sg not THAT one+ART thing 3pl carry-TR

‘there was nothing that they carried (i.e. they carried nothing)’

Besemah

- ▷ Omnipredicational – McDonnell (2016:93): “Non-verbal predicates are simply the juxtaposition of an argument and an NP predicate as in [(12)] or an argument and a PP predicate as in [(13)]; there is no copula in Besemah.”

(12) BESEMAH (McDonnell 2016:93)

- a. *anak Sun tu lanang pule eh?*
 child S. DEM.DIST male also FP
 ‘Sun’s child is a boy, too right?’
- b. *peng-gawih-an di Serambi gale.*
 LOC.NMLZ-work-LOC.NMLZ LOC S. all
 ‘(their) work is all in (the village of) Serambi.’

Besemah

- ▷ Apparent RCs headed by ‘light nouns’ *ende/ne* and *endik/nik*. These are translated as ‘the one’, behave as nouns in other ways, but cannot appear independently (McDonnell 2016:175).

(13) BESEMAH (McDonnell 2016:173)

- a. *dide bedie ne* [\emptyset *ng-apik-i=nye,*]
 NEG not.exist N.LI AV-attract-LOC.APPL=3
 ‘there isn’t (any)one [who can attract them,]’
- b. *tuape ne* [\emptyset *kite cakagh tu*] *sukagh.*
 what N.LI 1PL.EXCL [PV]search DEM.DIST difficult
 ‘because the one (i.e., the snake) that we were looking for is difficult (to find).’

Besemah

- ▷ McDonnell treats these not as true relative clauses but rather as noun modifying clause constructions (without extraction or an obligatory coreferential gap).

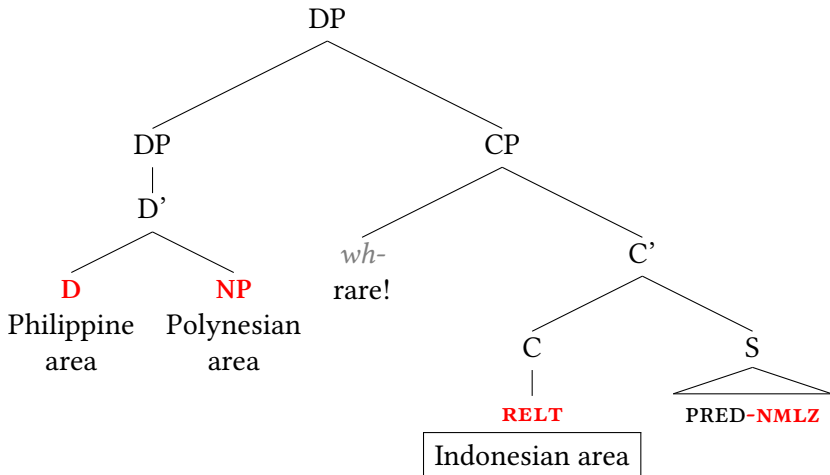
(14) BESEMAH (McDonnell 2016:174)

...*nik* [kite *n-(t)untun* ∅.]

N.LI 1PL.INCL AV-watch

‘the one (i.e., the motorcycle) that we watched.’

Complementizers



Balantak: a transitional language

- ▷ Light noun > Complementizer
- ▷ *men* COMP < **mian* ‘person’ (Himmelmann 2020cf.)
- ▷ *a* - postverbal subject marker (cf. Tagalog *ang*)

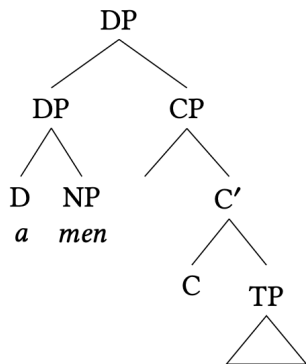
(15) BALANTAK (Van den Berg and Busenitz 2012)

- a. *Pi-pii takalan a (men) ala-on-muu?*
 RED-how.many liter ART RELT take-PV.I-2P
 ‘How many liters will you take?’
- b. **Pi-pii takalan (men) ala-on-muu?*
 RED-how.many liter RELT take-PV.I-2P
 ‘How many liters will you take?’

Balantak: a transitional language

- ▷ Balantak is uniquely caught in the act transitioning from a Philippine-type to an Indonesian-type relative structure (Kaufman 2018):

(16)



Hawu

- ▷ Pappas (2022:142) mentions a similar origin for Hawu relativizer:

*“Relative clauses use the relative clause marker **do**. Walker (1982) reports that this particle derives from **dèu** ‘person,’ which is a relatively common derivation for relative clause markers (Kähler 1974). The relative clause marker is homophonous with the bound reduction of the person-marker prefix **do-** as well as the stative marker **do**.”*

Walker (1982: 44) observes three primary qualities of relative clause phrases in Hawu that align with patterns in the current dataset. These include:

- (a) There is usually a head noun*
- (b) There is usually a relative clause marker **do***
- (c) There is a postposed relative clause in which the NP that is co-referential with the head NP has been deleted.”*

Hawu

(17) HAWU (Pappas 2022:142)

dèu do kako d'ai ru-j'ara.

person RELT go along CLF-road

'The person that walks along the road...'

(18) HAWU (Pappas 2022:143)

ane dèu do d'ue dèu he ane...

say person RELT two person PROX.PL.UKN say

Lit: 'Said the people, that were two people,...'

(19) HAWU (Pappas 2022:139)

pi'a d'o do hap'o hekola ina e.

EXIST.NEG NEG RELT fail school woman TAG

'None of my children have failed school'. (lit: 'There are none that have failed school'.)

Mesolectal Jakartan Malay

- ▷ All varieties of Malay/Indonesian are unequivocally omnipredicative:

(20) MESOLECTAL JAKARTA MALAY

- a. *dia marah*
3SG angry
'S/he is angry.'
- b. *dia guru*
3SG teacher
'S/he is angry.'
- c. *dia ngajar*
3SG AV:teach
'S/he teaches.'

Mesolectal Jakartan Malay

- ▷ Bare adjectives and verbs cannot function as arguments:

(21) MESOLECTAL JAKARTAN MALAY

- a. *dia minum yang merah*
 3SG drink RELT red
 ‘S/he drinks the red one.’ (with relativizer)
- b. *dia minum anggur (yang) merah*
 3SG drink grape/wine RELT red
 ‘S/he drinks red wine.’ (with head noun)
- c. **dia minum merah*
 3SG drink red
 (Intended: ‘S/he drinks (something) red.’)

Mesolectal Jakartan Malay

- ▷ Even when a word has a potential entity-denotation (e.g. *putih* ‘white’ in *putih telur* [white egg] ‘egg-white’) it cannot function as a bare argument.

(22) MESOLECTAL JAKARTAN MALAY

- a. *dia minum (telur/*putih)*
3SG drink egg/white
‘S/he drinks egg/*white.’
- b. *dia minum putih telur*
3SG drink white egg
‘S/he drinks egg white.’
- c. *dia minum putih-nya*
3SG drink white-GEN
‘S/he drinks the white part.’

Comparison with Philippine-type languages

- ▷ Note the contrast with Philippine languages, where words of any category appear to function as arguments:

(23) MESOLECTAL JAKARTAN MALAY

**dia minum merah*

3SG drink red

(Intended: ‘S/he drinks (something) red.’)

(24) TAGALOG

<um>*i-inom* *siya* *ng* *pula*

<AV.INIT>-IMPRFdrink 3S.NOM GEN red

‘S/he drinks (something) red.’

Comparison with Philippine-type languages

- ▷ Note the contrast with Philippine languages, where words of any category appear to function as arguments:

(25) MESOLECTAL JAKARTAN MALAY

**dia minum mələgak*

3SG drink AV:boil

(Intended: ‘S/he drinks (something) boiling.’)

(26) TAGALOG

<um>*i-inom* *siya* **ng** *k<um>u-kulô*

<AV.INIT>-IMPRFdrink 3S.NOM GEN <AV.INIT>-IMPRFdrink

‘S/he drinks (something) boiling.’

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- ▷ Note the contrast with Philippine languages, where words of any category appear to function as arguments:

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(26) TAGALOG

<um>*i-inom* *siya* **ng** *k<um>u-kulô*

<AV.INIT>-IMPRFdrink 3S.NOM GEN <AV.INIT>-IMPRFdrink

‘S/he drinks (something) boiling.’

- ▷ NB: This doesn’t jibe with descriptions of several Malay varieties as “Isolating-Monocategorical-Associational”, see Gil (2005, 2013) and references therein.

Ternate Malay

- ▷ For descriptions of other Malay varieties we often have to make inferences without explicit examples of ungrammaticalities.
- ▷ Litamahuputty (2012:51): “In some cases, a headless *yang*-construction may serve as an independent constituent in its own right.”

(27) TERNATE MALAY (Litamahuputty 2012:242,52)

- a. *sebenarnya dong mau bli yang sabla ka mari tu.*
 actually 3PL want buy REL side to here that
 ‘actually they wanted to buy the one over here.’
- b. *yang masi nona-nona sekitar spulu*
 REL still RED-unmarried.woman around ten
 ‘those who are unmarried number around ten’

Ternate

- ▷ Omnipredicative – Hayami-Allen (2001:155): “Ternatean does not have a copula. When a sentence has a NP predicate, the subject NP and the predicate NP are simply juxtaposed.”

(28) TERNATE (Hayami-Allen 2001:155)

- a. *Mancia gee guru.*
 person that teacher
 ‘That person is a teacher.’
- b. *Ngori rongga Ali.*
 1sg name Ali
 ‘My name is Ali.’
- c. *Ajir dai.*
 Ajir SEASD
 ‘Ajir is in the sea side location.’

Ternate

- ▷ The relativizer *ma* is not necessary for headed relative clauses:

(29) TERNATE (Hayami-Allen 2001)

a. *mancia ma tagi*

person REL go

‘the person who went’

b. *mancia tagi*

person go

‘the person went’ or ‘the person who went’

Ternate

▷ However, all examples of headless relative clause contain *ma*:

(30) TERNATE (Hayami-Allen 2001:140,197)

Capu ma su-sahu se ma alo-alo

mix REL REDP-hot and REL REDP-cold

‘Mix the hot ones and the cold ones.’ (elicited)

a. *Pane ma kuraci gee.*

get.on REL yellow that

‘Get on that yellow one [car].’

Taba

▷ Bowden (2001:392):

*“Taba relative clauses (except headless relatives, see §16.4.2) always immediately follow the nouns which they modify, whatever the role of that noun phrase is in either the relative clause or the main clause. Usually there is no overt marker of relativisation but sometimes the relativiser **yang**, borrowed from North Moluccan Malay occurs before the relative clause.”*

(31) TABA (Bowden 2001:393)

l=sayang mamatuo=si l=tagil l=ahates do
 3PL=love old.people=PL 3PL=walk 3PL=impossible REAL
 ‘They loved the old people who can’t walk any more.’

Taba

- ▷ “Headless relative clauses are sometimes explicitly marked as nominals by either having *yang* (a relativiser borrowed from North Moluccan Malay) preposed to them, as in (101), or by being followed by one of the deictic particles (§11.3), as in (102).”
- ▷ Bowden goes on to note that many headless relative clauses have lexicalized nominal meanings.

Taba

(32) TABA (Bowden 2001:396)

- a. *Malai yang l=sebak Taba l=alhod gunung li dumik*
 then REL 3PL-near Makian 3PL=run mountain LOC be.complete
 ‘Then, whoever was near Makian, all of them ran up the mountain.’
- b. *n=asodas ne*
 3SG=smoke PROX
 ‘This person smoking.’

(33) TABA (Bowden 2001:396)

ta-plod ni bohiya Jumat jam sabalas
 DETR-erupt(eruption) 3SG.POSS first.time Friday hour eleven
 ‘Its first eruption was on Friday at eleven o’clock.’

Secondary D-elements

Makassarese

- ▷ Omnipredicative - phrases of any category can stand in clause-initial position to serve as predicate.
- ▷ No copulas or case markers. Case is only indicated by clitics (Jukes 2006:325).

(34) MAKASSARESE (Jukes 2006:333-5)

a. *tinro=i i Ali*
 sleep=3 PERS Ali
 'Ali is sleeping'

b. *bambang=i allo=a*
 hot=3 day=DEF
 'The day is hot.'

c. *jarang=a'*
 horse=1
 'I am a horse.'

Makassarese

- ▷ No dedicated relativizer but RCs are almost always followed by the definite marker $\equiv a$, which Jukes glosses as a relativizer.

*“Relative clauses are clausal modifiers of nominal heads. Makassarese does not have a dedicated relative clause marker, unlike Indonesian **yang** and Selayarese and Konjo **tu** and **nu** [...], but instead the clausal modifier simply follows the head.”*

- ▷ Thanks to Erik Zobel (p.c. yesterday) I now know that $\equiv a$ comes from a grammaticalized 3s pronoun *ia*, as evidenced by certain Konjo dialects.

Makassarese

- ▷ Jukes (2006:242): “Headless relative clauses are relatively rare- instead *anu* ‘thing’, *tau* ‘person’, or a demonstrative will usually act as head.”
- ▷ But he identifies two instances in historical materials:

(35) MAKASSARESE (Jukes 2006:242)

a. *ma'gauka ri Marusu' nikana Patanna Langkana*

maC-gau'=a ri Marus=u' ni-kana pata=nna langkana
 MV-action=REL PREP Maros=EC PASS-word owner=3.POSS palace
 ‘(He) who ruled in Maros was called Patanna Langkana’

b. *tanaasseng lanajappaia*

ta=na=asseng la=na=jappa-i=a
 NEG=3=know FUT=3=walk-APPL=DEF
 ‘he doesn’t know (where) he’s going’

Klon

- ▷ Omnipredicative – Baird (2008:94): “Verbs, adjectives and NPs can all be used as predicates in Klon.”
- ▷ Clear differentiation between nouns and verbs on the morphological level, despite shared features when these function as predicate.

Klon

- ▷ Here is an apparent rarity:

*“...verbs are occasionally nominalised using zero-derivation by simply appearing as the head of a NP. For example, in (4.16), the verb **go-buuk** ‘guard him’ taking a Class II Undergoer prefix is possessed by a free pronoun and modified by the plural marker **onon**.”*

(36) KLON (Baird 2008:56)

Bo man leer ga ge go-buuk onon go-hoi
 SEQ mister ruler 3ACT 3POSSF 3UND2-guard PL 3UND2-order
Pransina ong g-puin go-agai penjara mi gtain.
 Pransina this 3UND1-hold 3UND2-go jail be.at release
 ‘So the ruler he ordered his guards (=his guard-hims) to catch
 Pransina take her and release her in jail.’

Klon

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 Pransina take her and release her in jail.’

- ▷ However, note that, even here, there is a lot of referential scaffolding!

Klon

- ▷ In (37), a verb is (i) nominalized, (ii) given a ‘dummy’ head (*nuk* ‘one’), (iii) introduced by an overt relativizer (*de*), and followed by a demonstrative (*ong*).

(37) KLON (Baird 2008:151)

[*Nuk de hi-hik ong*]...

one REL NMLZ-pick this

‘This one who is the picker...’

(38) KLON (Baird 2008:151)

Jadi waktu [de i agai u-skol ong],...

so when REL DUR go VI-school this 3NSG

‘So when (those) who began going to study,...’

Klon

▷ Baird (2008:151):

“It is interesting to note that most relative clauses, as can be seen from the above examples (with (11.2) a notable exception), are followed by a demonstrative. This raises the question of whether the demonstrative is modifying the head noun or whether relative clauses are actually nominalised by these demonstratives and used similarly to other attributive nominals. This issue awaits further research.”

Mauwake

- ▷ No articles, no copula in present tense, no case marking.
- ▷ “The demonstrative in effect makes the RC into a noun phrase.”

(39) MAUWAKE (Berghäll 2015:353)

*[Takira me arim-o-k **nain**]_{RC} uruf-a-m.*

boy not grow-PA-3s that1 see-PA-1s

‘I saw the boy that has not grown.’

(40) MAUWAKE (Berghäll 2015:355)

*[Siowa kasi keraw-a-k **nain**] um-o-k.*

dog cat bite-PA-3s that1 die-PA-3s

‘The dog that bit the cat died.’ Or: ‘The dog that the cat bit died.’

Ughele

▷ Frostad (2012:112)

“In cases where their referent(s) are retrievable from the context or from the discourse, heads may be ellipsed, resulting in a headless NP. Headless NPs may consist of quantifiers, nominal attributives derived from adjectival verbs, numerals, and demonstratives.”

(41) UGHELE (Frostad 2012:112)

(..) *meke mai va-via-i pa batu pire va-via*
 and come CAUS-clear-TR LOC head DEM:PL CAUS-clear
pai-ni [dodoru poje]_{NP} vae pu ko ukala meke (..)
 throw-TR all rotten be.like REL be over and
 ‘(..)and they would come and clean up these heads clearing
 out and throwing away all (that are) rotten like (those) that
 are superfluous.’

Ughele

(42) UGHELE (Frostad 2012:112)

- a. *Lea tako-ni-a ghoi [lavata-na]_{NP?}*
 PRF have-TR-OBJ:3SG PRO:2SG big-ATTR:3SG
 ‘Have you got a bigger one?’
- b. *Meke lao kaduvu tu pa zidara [na ka ru pire]_{NP.}*
 and go arrive EMPH LOC moon COMM.ART CARD two DEM:PL
 ‘And the two arrived on the moon.’

Vaeakau-Taumako

▷ Omnipredicational, e.g.

(43) VAEAKAU-TAUMAKO (Naess and Hovdhaugen 2011:325)

a t-a-ku tama na e ngata

PERS SG.SP-POSS-LSG.POSS child DEM.2 SG.NSP snake

‘My son is a snake.’

Vaeakau-Taumako

- ▷ Example of ‘headless’ RCs introduced by quantifiers: “The archaic form *nghai* of the quantifier *nghi* ‘some’ is somewhat more frequent as the head of a relative clause, while the form *thangai* is only attested in this function.”

(44) VAEAKAU-TAUMAKO (Naess and Hovdhaugen 2011:350,349)

- a. *ke-i leleina nghai e noho ia nghai e mate*
 HORT-3SG judge some GENR stay CONJ some GENR die
 ‘to judge both the living and the dead’
- b. *thai au ne ko t-ō thuohine.*
 one come DEM.1 TOP SG.SP-2SG.POSS sister
 ‘The one coming here is your sister.’

Focus marker

Toqabaqita

- ▷ Omnipredicational – Lichtenberk (2008:934) “With some exceptions, the Toqabaqita major verbless sentence types (minimally) consist of a subject and a verbless predicate.”

(45) TOQABAQITA (Lichtenberk 2008:935)

[Nau] [tha Reuel Riianoa].

1SG PERSMKR Reuel Riianoa

‘I am Reuel Riianoa.

Toqabaqita

- ▷ Relative clauses introduced by *na*, which also serves as a focus marker and, less commonly, to introduce complement clauses Lichtenberk (2008:1062).
- ▷ The relativizer can be dropped with headed relatives in which the RC is short, but not with headless relatives.

(46) TOQABAQITA (Lichtenberk 2008:1071)

b=e qe aqi kwasi rongo-a doo b=e
 1SG 3SG.NFUT NEG V 1SG.NEG hear-3.OBJ thing that=3SG.NFUT
sore-a
 say-3SG.OBJ
 'I didn't hear what (lit.: the thing) he said.'

Teiwa

- ▷ Omnipredicational – (Klamer 2010:221): “Like verbal clauses, Teiwa non-verbal clauses are head-final. A non-verbal predicate follows its argument, and is followed by a negation. Teiwa has no copula.”

(47) TEIWA (Klamer 2010:222)

na'an uy bin.

1s person orphan.without.mother

‘I am a motherless child.’

Teiwa

- ▷ Klamer (2010:28): “Teiwa lacks a dedicated relative clause construction. In order to modify a head noun, it is marked with the focus marker *la*.”

(48) TEIWA (Klamer 2010:410)

[...*dei waal la*] *na gaal-an pin ma...*
 bird that.mentioned FOC 1s shoot-REAL hold come
 ‘...that bird I just shot I bring ...’

(49) TEIWA (Klamer 2010:412)

[*Uy la*] *aria-n...*
 people FOC arrive-REAL
 ‘The people who arrived...’ (i.e. not those who were here
 already)

Bunaq

- ▷ Omnipredicative
- ▷ No case marking or determination required of NPs

(50) BUNAQ (Schapper 2022:84,132,92)

- a. *Hol topol*
stone fall
'The stone fell.'
- b. *Eme deu gene.*
mother house LOC
'Mother is at home.'
- c. *En bari en Islam.*
person PROX.AN person Islam
'This person is a Muslim person.'
- d. *En baqi matas los.*
person nprx.an old very
'That person (was) very old.'

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'This person is a Muslim person.'
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person nprx.an old very
'That person (was) very old.'

Bunaq

▷ No relativizer

(51) BUNAQ (Schapper 2022:91)

- a. *en matas bi*
 person old ART.AN
 ‘the old person’
- b. *en topol bi*
 person fall ART.AN
 ‘the fallen person’
- c. *en sok bi*
 person swear ART.AN
 ‘the swearing person’
- d. *en bai sego bi*
 person thing sell ART.AN
 ‘the selling person’

Bunaq

- ▷ Schapper (2022:205): “The head of a restrictive RC occurs at the front of the RC marked with the restrictive focus enclitic =na ‘FOC’ [...] Unlike non-restrictive RCs, restrictive RCs cannot be headless.”

(52) BUNAQ (Schapper 2022:205)

[En_{HEAD}=na [talu kororoq]_{RC}]_{NP} tara niq.
 person=FOC gamble cheer know NEG
 ‘People who gamble merrily don’t know’

Bunaq

- ▷ According to Schapper (2022), headless *non*-restrictive clauses should be able to appear without any nominal scaffolding.
- ▷ There are examples where *hosu* ‘other’ and numerals are the only material representing the argument but examples with verbs as the sole representative of an argument are lacking.
- ▷ These all contain a demonstrative element:

(53) BUNAQ (Schapper 2022:204)

- a. *[Mete* \emptyset_{HEAD} *[rie* *rale]*_{RC} *bi]*_{NP} *ola gene r-obon heser haqal.*
 now REFL.POSS speak ART.AN low LOC REFL-hang dead finished
 ‘The (one mentioned just) now talking of himself hanged himself dead down there.’
- b. *[\emptyset_{HEAD} [Ate gene]*_{RC} *roi]*_{NP}=*na* *toek ta-tara niq taq*
 far LOC SPEC.AN=FOC talk RECP-know NEG CONT
 ‘Those (people) at a distance don’t know each other’s language yet...’

Bunaq

- ▷ According to Schapper (2022), headless *non*-restrictive clauses should be able to appear without any nominal scaffolding.
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- a. [Mete \emptyset_{HEAD} [rie rale]_{RC} bi]_{NP} ola gene r-obon heser haqal.
 now REFL.POSS speak ART.AN low LOC REFL-hang dead finished
 ‘The (one mentioned just) now talking of himself hanged himself dead down there.’
- b. [\emptyset_{HEAD} [Ate gene]_{RC} roi]_{NP}=na toek ta-tara niq taq
 far LOC SPEC.AN=FOC talk RECP-know NEG CONT
 ‘Those (people) at a distance don’t know each other’s language yet...’

Bunaq

- ▷ It should be mentioned that Bunaq also shows an exotic *wh*- relative:

(54) BUNAQ (Schapper 2022:205)

[**Nego**_{HEAD}=*na* [*i* Gewal gene t-erel h-oqon]_{RC} ba]_{NP}
 what=FOC 1PL.INCL Gewal LOC RECP-INS 3INAN-do ART.INAN
hani r-oenik.
 PROH 3INAN-forget
 ‘Don’t forget what we did in Gewal.’

True omniargumentivity

Tobelo

- ▷ A clear difference between nouns and verbs on the word level, but perhaps not on the root level (Holton 2003:12):

“The major open-class Tobelo lexical categories of noun and verb are unambiguously determined via the type of morphology present on a word: verbs always occur with pronominal person-marking prefixes; nouns always occur with a noun marker. However, the categoriality of Tobelo root morphemes can be more difficult to determine. Many, if not most, Tobelo roots may occur with either verbal or nominal morphology.”

(55) TOBELO (Holton 2003:12)

- a. *o-ngotiri to-ija*
 NM-canoe 1-buy
 ‘I bought a canoe’
- b. *ma-ija i-lyamoko*
 RNM-price 3-large
 ‘the price is high’

Tobelo

- ▷ Omnipredicative – Holton (2003:54):

“Equational constructions are formed without an overt copula. Equational constructions may function to indicate membership in a particular class, as in the following example.”

- (56) TOBELO (Holton 2003:54)

una o-pendeta

3mPRO NM-priest

‘he is a priest’

Tobelo

▷ (Holton 2003:65) (emph. mine):

*“Tobelo exhibits postnominal paratactic relative clauses, and **the relative clause verb is not morphologically distinguished from the matrix clause verb**. The demonstrative *gena(nga)* ‘that’ may **optionally** function as a relative marker occurring clause-finally. The possible syntactic roles of the relativized NP are restricted to subject and object, or to possessor of the subject or object role. The role of the relativized NP is recoverable via the agreement marking on the relative clause verb. That is, the relativized NP controls pronominal cross-reference on the relative clause verb.”*

Tobelo

- ▷ This leads to the extremely rare pattern found in (57):

(57) TOBELO (Holton 2003:66)

- a. *o-nyawa [o-ngohaka wo-mi-tidingi] t-a-make*
 NM-person NM-child 3M-3F-punch 1-3-see
 ‘I saw the man who punched the girl’
- b. *ngohi t-a-make o-nyawa [yo-boa o-Tobeloho-ino]*
 1 1-3-see NM-person 3p-come NM-Tobelo-ABL
 ‘I saw a person who was coming from Tobelo’

Tobelo

- ▷ This leads to the extremely rare pattern found in (57):
- ▷ Note that such structures induce a garden-path effect:

(57) TOBELO (Holton 2003:66)

a. *o-nyawa* [*o-ngohaka wo-mi-tidingi*] *t-a-make*

NM-person NM-child 3M-3F-punch 1-3-see

‘I saw the man who punched the girl’

b. *ngohi t-a-make* *o-nyawa* [*yo-boa o-Tobeloho-ino*]

1 1-3-see NM-person 3p-come NM-Tobelo-ABL

‘I saw a person who was coming from Tobelo’

Sri Lanka Malay

- ▷ We find a similar rarity in Sri Lankan Malay, an SOV language:

(58) SRI LANKA MALAY (Nordhoff 2009:453)

a. [*Lorang anà-maasak ikkang*] *eenak*.

2PL PAST-cook fish tasty

‘The fish you cooked is tasty.’

b. [*Lorang anà-maasak* ∅] *eenak*.

2PL PAST-cook tasty

‘What you cooked is tasty.’

- ▷ A headless relative can play the role of an argument in (58-b) without any of the aforementioned strategies.

Sri Lanka Malay

- ▷ But SLM has case marking and plural marking that may often function as referential scaffolding in such cases:

(59) SRI LANKA MALAY (Nordhoff 2009:453)

- a. [Lorang=*ka aada*=∅]=*yang* kaasi.
 2PL=LOC exist=∅=ACC give
 ‘Give me whatever you have.’
- b. [Lorang=*ka aada*=∅] *pada*(=*yang*) kaasi.
 2PL=LOC exist PL=ACC give
 ‘Give me whatever you have.’

Intermediate summary

Summary

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Summary

- ▷ We've seen that both Austronesian and non-Austronesian languages of the region are extremely omnipredicative
- ▷ ...but extremely anti-omniargumentive.
- ▷ There are a wide variety of strategies for avoiding the use of verbs as arguments.
- ▷ This should now make us suspicious of Philippine-type omniargumentivity!

Back to the Philippines

(60) TAGALOG

- a. *ang t<um>a-tahol*
 NOM <AV.INIT>IMPRF-bark ▷ The following phenomenon has
 ‘the barking one.’ two sources:
- b. *ang ma-laki*
 NOM ADJ-big
 ‘the big one’
- c. *ang poodle*
 NOM poodle
 ‘the poodle.’
- d. *ang akin*
 NOM 1S.GEN
 ‘the one that’s mine’
- e. *ang nandito*
 NOM here
 ‘the one that’s here’

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▷ The following phenomenon has two sources:

- the indicative voice morphology which comes historically from participant nominalization and retains its nouniness (Starosta et al. 1982; Kaufman 2009a,b).

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▷ The following phenomenon has two sources:

- the indicative voice morphology which comes historically from participant nominalization and retains its nouniness (Starosta et al. 1982; Kaufman 2009a,b).
- the case markers ubiquitous to Philippine languages may be nouny themselves (Reid 2002) and/or determiner-like (Himmelman 1997)

Frege and type theory

Exchanging lexical categories for semantic types



- ▷ Frege's view of the predicate as inherently unsaturated: “not all parts of a thought can be complete; at least one must be unsaturated or predicative; otherwise they would not hold together” (Frege 1892/1997:193)

Exchanging lexical categories for semantic types



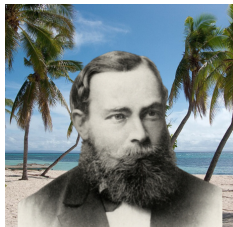
- ▷ Frege's view of the predicate as inherently unsaturated: “not all parts of a thought can be complete; at least one must be unsaturated or predicative; otherwise they would not hold together” (Frege 1892/1997:193)
- ▷ This has come down to us as standard type theory in which words of all major categories (N,A,V) are *born* predicates.

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Exchanging lexical categories for semantic types



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- ▷ This has come down to us as standard type theory in which words of all major categories (N,A,V) are *born* predicates.
- ▷ However, only names and demonstratives can be said to be *born* arguments.
- ▷ Frege would have loved the Philippines!

Philippine languages as Fregean

(61) TAGALOG (Kaufman 2009a:27)

{	Háyop	animal	}	
	Ma-bilis	STA-speed		
	Nasa=kalye	PREP=street		
	T<um>a~takbo	<AV:BEG>IMPRF~run		
				ang=lalaki=ng iyan NOM=man=LNK that

‘That man is an animal / fast / on the street / running.’

- ▷ The nominative case marker attaches to a category of any class to turn it into an individual.
- ▷ As an individual it can saturate the predicate to yield a truth value.
- ▷ What basic type theory *cannot* explain is why bare nouns should be able to function as arguments but not bare verbs.

Individuability and nouns

Nouns are still special

- ▷ The trick to seeing the contribution of the case markers is to compare referential potential of different word classes in *non-argument* contexts.
- ▷ Hsieh (2019) notes that Tagalog plain nouns can have a referential function in discourse without any determiners but that “voice phrases”, as nouny as they may be, cannot.

Fragments in discourse (Hsieh 2019)

Q: **Ano** ang kina~kain ni Kim?

what.NOM NOM IPFV~eat[PV] GEN Kim

‘The thing that Kim is eating is **what**?’ (i.e., ‘What is Kim eating?’)

«‘Kim’s eaten-thing is what?’»

a. A: **Luto ni Harvey** ang kina~kain ni Kim.

cook GEN Harvey NOM IPFV~eat[PV] GEN Kim

‘What Kim is eating is Harvey’s cooking.’ *Bare Nominal*

«‘Kim’s eaten-thing is Harvey’s cooking.’»

b. A: **Lutu-in ni Harvey** ang kina~kain ni Kim.

cook-PN GEN Harvey NOM IPFV~eat[PV] GEN Kim

‘What Kim is eating is Harvey’s cuisine.’ *Derived Nominal*

«‘Kim’s eaten-thing is Harvey’s cuisine.’»

c. # A: **Ni-luto ni Harvey** ang kina~kain ni Kim.

PFV-cook[PV] GEN Harvey NOM IPFV~eat[PV] GEN Kim

‘Harvey cooked what Kim is eating.’ *Voice Phrase*

«‘Kim’s eaten-thing is Harvey’s cooked-thing.’»

Fragments in discourse (Hsieh 2019)

Q: **Ano** ang kina~kain ni Kim?

what.NOM NOM IPFV~eat[PV] GEN Kim

‘What is Kim eating?’

«‘Kim’s eaten-thing is what?’»

a. A: {**Ang /Mga /Isa=ng**} luto **ni Harvey** ang kina~kain ni
NOM PL one=LK cook GEN Harvey NOM IPFV~eat[PV] GEN

Kim.

Kim.

‘What Kim is eating is Harvey’s cooking.’

cf. (46a)

«‘Kim’s eaten-thing is Harvey’s cooking.’»

b. A: {**Ang /Mga /Isa=ng**} lutu-in **ni Harvey** ang kina~kain
NOM PL one=LK cook-PN GEN Harvey NOM IPFV~eat[PV]

ni Kim.

GEN Kim.

‘What Kim is eating is Harvey’s cuisine.’

cf. (46b)

«‘Kim’s eaten-thing is Harvey’s cuisine.’»

c. A: {**Ang /Mga /Isa=ng**} ni-luto **ni Harvey** ang
NOM PL one=LK PFV-cook[PV] GEN Harvey NOM

kina~kain ni Kim.

IPFV~eat[PV] GEN Kim

Vocatives

- ▷ Vocatives provide a rare environment in Phil. languages where an undetermined phrase plays a referential function.
- ▷ The ungrammaticality of (62-a) is ameliorated by the plural marker *mga*, as in (62-b).

(62) TAGALOG VOCATIVES

- a. **S*<um>*á*~*sayaw*, *hali ka!*
 <AV.INIT>IMPRF~dance come 2S.NOM
 (For, ‘Dancer, come here!’)
- b. *mga s*<um>*á*~*sayaw*, *hali kayo!*
 PL <AV.INIT>IMPRF~dance come 2P.NOM
 ‘Dancers, come here!’

Problems of conversion

- ▷ Hsieh (2019): “a straightforward way to explain these facts is to assume that *ang*, *mga*, and *isa* are part of the nominal extended projection”

- (63) a. [*mga* [(V>N) [*ni-luto-∅* *ni* *Harvey*]]
 PL FUNC INIT-COOK-PV GEN Harvey
 ‘(things) cooked by Harvey’
- b. *[(V>N) [*ni-luto-∅* *ni* *Harvey*]]
 FUNC INIT-COOK-PV GEN Harvey

- ▷ This means that numerals, plural markers, quantifiers all have *derivational power!*

Towards a semantic explanation

- ▷ An alternative approach is semantic: standard type-theory is right about bare N/A/Vs as unsaturated predicates.
- ▷ Crucially, predicates have no special temporal, aspectual or quantificational requirements.
- ▷ But arguments are not that simple: they require some type of quantification, even if existential.
 - What the plural markers, numerals and determiners are doing to the Tagalog “verbs” is overtly individuating and *quantifying* it, thus making it eligible for reference.
 - Dynamic aspect itself, considered one of the core elements of verbhood, is a type of temporal quantification (Krifka 1989).
 - My humble beginning of an explanation is thus: quantifying over both time and space *simultaneously and covertly* blows a cognitive circuit.

Conclusions

- ▷ Classifying morphosyntactic flexibility as a pure function of word-type misses the point.
- ▷ There is a strong interplay between apparent flexibility on the word level and the use of functional scaffolding on the phrasal level.
- ▷ However, The disparate array of strategies for “grounding” headless relatives and other bare verbal arguments suggests that the connection may be more semantic than syntactic.
- ▷ Overtness counts! It is clear from the survey that “referential scaffolding” cannot simply be comprised of null determiners and type shifters (Chierchia 1998; Partee and Rooth 1983cf.).



References I

- Abney, Steven. 1987. The English noun phrase in its sentential aspect. Doctoral Dissertation, Massachusetts Institute of Technology.
- Andrews, Avery D. 2007. Relative clauses. In *Language typology and syntactic description*, ed. Timothy Shopen, volume 2, 206–235. Cambridge: Cambridge University Press.
- Baird, Louise. 2008. *A grammar of Klon: a non-Austronesian language of Alor, Indonesia*, volume 596 of *Pacific Linguistics*. Canberra: Pacific Linguistics Research School of Pacific and Asian Studies, ANU.
- Beck, David. 2013. Unidirectional flexibility and the noun–verb distinction in Lushootseed. In *Flexible Word Classes: typological studies of underspecified parts of speech*, ed. Jan Rijkhoff and Eva van Lier, 185–220. Oxford: Oxford University Press.
- Van den Berg, René, and Robert I. Busenitz. 2012. *A Grammar of Balantak: a language of Eastern Sulawesi*, volume 40 of *SIL eBook*. SIL International.
- Berghäll, Liisa. 2015. *A Grammar of Mauwake*, volume 4 of *Studies in Diversity Linguistics*. Berlin: Language Science Press.
- Bowden, John. 2001. *Taba: Description of a South Halmahera Language*, volume 521. Canberra: Pacific Linguistics, Research School of Pacific Asian Studies, ANU.

References II

- Chierchia, Gennaro. 1998. Reference to kinds across languages. *Natural Language Semantics* 6:339–405.
- Croft, William. 2001. *Radical construction grammar: Syntactic theory in typological perspective*. Oxford: Oxford University Press.
- Dixon, R. M. 1988. *A Grammar of Boumaa Fijian*. Chicago: University of Chicago Press.
- Du Feu, Veronica. 1996. *A Grammar of Rapanui*. Descriptive Grammars. Abingdon and New York: Routledge.
- Foley, Willam A. 2023. Wprd-class systems and other grammatical properties. In *The Oxford handbook of word classes*, ed. Eva van Lier, 109–135. Oxford: Oxford University Press.
- Frege, Gottlob. 1892/1997. On concept and object. In *The Frege Reader*, ed. Michael Beaney, 181–193. Oxford: Blackwell.
- Frostad, Benedicte Haraldstad. 2012. A grammar of Ughele: An Oceanic language of Solomon Islands. Doctoral Dissertation, Radboud University, Nijmegen.
- Gil, David. 2005. Isolating-monocategorial-associational language. In *Categorization in Cognitive Science*, ed. Henri Cohen and Claire Lefebvre, 347–379. Oxford: Elsevier.

References III

- Gil, David. 2013. Riau Indonesian: A language without nouns and verbs. In *Flexible Word Classes: typological studies of underspecified parts of speech*, ed. Jan Rijkhoff and Eva van Lier, 89–130. Oxford: Oxford University Press.
- Haspelmath, Martin. 2020. The polycategoriality parameter: Noun-verb similarities in some languages of the Americas. Talk presented at SSILA conference, New Orleans, January 5 2020.
- Hayami-Allen, Rika. 2001. A descriptive study of the language of Ternate, the northern Moluccas, Indonesia. Doctoral Dissertation, University of Pittsburgh.
- Hengeveld, Kees, and Eva van Lier. 2010. An implicational map of parts of speech. *Linguistic Discovery* 8:129–156.
- Himmelmann, Nikolaus P. 1986. *Morphosyntactic predication: A functional-operational approach*. Number 62 in AKUP - Arbeiten des Kölner Universalien Projekts. Institut für Sprachwissenschaft.
- Himmelmann, Nikolaus P. 1997. *Deiktikon, Artikel, Nominalphrase: Zur Emergenz syntaktischer Struktur*. Number 362 in Linguistische Arbeiten. Tübingen: Niemeyer.

References IV

- Himmelman, Nikolaus P. 2020. 25. grammaticisation processes and reanalyses in Sulawesi languages. In *Grammaticalization Scenarios from Africa, the Americas, and the Pacific*, ed. Walter Bisang and Andrej Malchukov, 1043–1076. Berlin, Boston: De Gruyter Mouton.
- Holton, Gary. 2003. *Tobelo*, volume 328 of *Languages of the World/Materials*. Muenchen: Lincom Europa.
- Hsieh, Henrison. 2019. Distinguishing nouns and verbs: A Tagalog case study. *Natural Language & Linguistic Theory* 37:523–569.
- Jelinek, Eloise, and Richard A. Demers. 1994. Predicates and pronominal arguments in Straits Salish. *Language* 70:697–736.
- Jukes, Anthony. 2006. Makassarese (basa Mangkasara’): a description of a language of South Sulawesi. Doctoral Dissertation, University of Melbourne, Melbourne.
- Kaufman, Daniel. 2009a. Austronesian nominalism and its consequences: A Tagalog case study. *Theoretical Linguistics* 35:1–49.
- Kaufman, Daniel. 2009b. Austronesian typology and the nominalist hypothesis. In *Austronesian historical linguistics and culture history: A festschrift for Robert Blust*, ed. Alexander Adelaar and Andrew Pawley, Pacific Linguistics. Canberra: ANU Press.

References V

- Kaufman, Daniel. 2018. Austronesian predication and the emergence of biclausal clefts in Indonesian languages. In *Perspectives on information structure in Austronesian languages*, ed. Sonja Riesberg, Asako Shiohara, and Atsuko Utsumi, Studies in Diversity Linguistics, 207–245. Berlin: Language Science Press.
- Kinkade, M.D. 1983. Salish evidence against the universality of “noun” and “verb”. *Lingua* 60:25–40.
- Klamer, Marian. 2010. *A grammar of Teiwa*. Berlin: De Gruyter Mouton.
- Krifka, Manfred. 1989. Nominal reference, temporal constitution and quantification in event semantics. In *Semantics and Contextual Expression*, ed. R. Bartsch, J. van Benthem, and P. van Emde Boas, 75–116. Berlin, Boston: De Gruyter Mouton.
- Launey, Michel. 1986. Catégories et opérations dans la grammaire nahuatl. Doctoral Dissertation, Université de la Sorbonne (Paris IV), Paris.
- Launey, Michel. 1994. *Une grammaire omnipredicative: Essai sur la morphosyntaxe du nahuatl classique*. Paris: CNRS Editions.
- Launey, Michel. 2004. The features of omnipredicativity in Classical Nahuatl. *STUF - Language Typology and Universals* 57:49–69.
- Lichtenberk, Frantisek. 2008. *A grammar of Toqabaqita*. Berlin: De Gruyter Mouton.

References VI

- Litamahuputty, Betty. 2012. Ternate malay: Grammar and texts. Doctoral Dissertation, Leiden University.
- McDonnell, Bradley. 2016. Symmetrical voice constructions in Besemah: A usage-based approach. Doctoral Dissertation, University of California, Santa Barbara.
- Naess, Åshild, and Even Hovdhaugen. 2011. *A Grammar of Vaeakau-Taumako*, volume 52 of *Mouton Grammar Library*. Berlin: De Gruyter Mouton.
- Nordhoff, Sebastian. 2009. A grammar of upcountry Sri Lanka Malay. Doctoral Dissertation, University of Amsterdam, Utrecht.
- Pappas, Leah. 2022. A multi-modal study of spatial language in Hawu in typological perspective. Doctoral Dissertation, University of Hawai'i at Mānoa.
- Partee, Barbara Hall, and Mats Rooth. 1983. Generalized conjunction and type ambiguity. In *Meaning, Use and Interpretation of Language*, ed. R. Bäuerle, C. Schwarze, and Arnim von Stechow, 362–383. de Gruyter.
- Reid, Lawrence Andrew. 2002. Determiners, nouns, or what? problems in the analysis of some commonly occurring forms in philippine languages. *Oceanic Linguistics* 41:295–309.

References VII

- Schapper, Antoinette. 2022. *A grammar of Bunaq*, volume 86 of *Mouton Grammar Library*. Berlin: Walter de Gruyter.
- Starosta, Stanley, Andrew K. Pawley, and Lawrence Reid. 1982. The evolution of focus in Austronesian. In *Papers from the Third International Conference on Austronesian Linguistics, Vol.2. Tracking the travellers*, ed. Stephen A. Wurm and Lois Carrington, 145–170. Canberra: Pacific Linguistics.
- Stassen, Leon. 2013. Zero copula for predicate nominals (v2020.4). In *The World Atlas of Language Structures Online*, ed. Matthew S. Dryer and Martin Haspelmath. Zenodo. URL <https://doi.org/10.5281/zenodo.13950591>.
- Van Lier, Eva. 2016. Lexical flexibility in Oceanic languages. *Linguistic Typology* 20:197–232.