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Copulas are not just inflection: Evidence from Tłı̨chǫ Yatıì[1]

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1. INTRODUCTION

In Tłı̨chǫ Yatìì (Dene/Athapaskan; aka Dogrib), patterns of copula use appear to undermine Moro's (1997: 248–261) claim that copulas' only function is to provide a site for the morphological realization of inflection. The aim of this note is to show that copulas in this language are obligatory with all nominal predicates, but occur with adjectival predicates only when either the subject has Φ-features requiring agreement or a marked tense/aspect/mode (TAM) interpretation is intended. This asymmetry suggests that their obligatory occurrence with all nominal predicates must be motivated by other factors.

Moro's contention that copulas are only markers of inflection is a very old claim, going back to Aristotle (Moro 1997: 249). Though the view that copulas are enablers of predication continues to be supported by many syntacticians today (e.g., among others, Bowers 1993, den Dikken 2006, Baker and Vinokurova 2012), Moro's book demonstrates that there is strong evidence for his claim in the Indo-European languages. The existence of languages like Mandarin, in which verbs do not show inflection, but copulas are required with nominal predicates (Zhan and Sun 2013: 762), suggests that this view may not be universally correct, but rather, the content of copulas may be parametrized. The present note shows that there exists at least one language where both views of copulas are supported, but by different lexical categories. This result implies that parametrization of the role of copulas must apply to individual non-verbal categories.

2. SOURCES OF DATA

Most of the data given here were collected using standard contextual elicitation techniques (Matthewson 2004) between 2007 and 2014 from one male and three female

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fluent speakers of Tłįchǫ Yatìi, ranging from 50 to 70 years old. Additional data in (1) are drawn from published sources.

3. BACKGROUND

Tłįchǫ Yatìi is a Dene language spoken by approximately 2 000 people in the region between Great Slave and Great Bear Lakes, Northwest Territories. Like all Dene languages, it has a rich inflectional system. Verbs agree with both subject and object for person and number, and show inflection for aspect and mode:[2,3]

(1) Verb inflection in Tłįchǫ Yatìi

  a. Seghanįwa
    se-   gha- nį-   wa
    1SG.OBJ to IPFV.2SG.SUB give.plural.objects\IPFV
    'Give them to me.'   (Ackroyd 1982: 62)

  b. Yatı yeghàįʔǫ.
    yatı   ye- ghà- į-   ʔǫ
    word   4.OBJ to PFV.3.SUB give.chunky.object\PFV
    'She gave him a word/warning.'   (Tłįchǫ Community Services Agency 2007)

  c. ghàts'ııʔà
    ghà- ts'ıı-   ʔà
    to OPT.1PL.SUB give.chunky.object\OPT
    'let us give (someone)'   (Tłįchǫ Community Services Agency 2007)

In Tłįchǫ Yatìi, copulas, or forms derived from them, occur in at least three contexts: the classic copular clause, where a nominal predicate is connected to its subject by a copula, adjectival predicates, where copulas are inserted to realize inflectional morphology, and tense/aspect/mode (TAM) marking, which may also be realized on an inserted copula.

4. COPULAR CLAUSES

The first of the contexts in which copulas appear in this language is the copular clause, where two NPs are followed by a copular form, as in (2).[4] Copulas are obligatory in such clauses: (2b) and (2d), which lack copulas, are ungrammatical.

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[2]Examples are glossed according to the Leipzig Glossing Rules (http://www.eva.mpg.de/lingua/resources/glossing-rules.php). Examples from my fieldwork are credited by the consultants' initials: AW = Archie Wedzin, LD = Lena Drygeese, MLBW = Marie-Louise Bouvier White, MS = Mary Siemens. Examples from Mandarin were provided by H.Y. Liu.

[3]The following abbreviations appear in glosses: 1SG, 1PL = first-person singular, plural etc., COP = copula, DEM = demonstrative, IPFV = imperfective, OBJ = object, OPT = optative, PFV = perfective, SUB = subject. Thematic affixes (THM-) are part of a verb's lexical entry but, like the particles of English phrasal verbs, are discontinuous with the stems of the verbs with which they appear.

[4]Tłįchǫ Yatìi has two copulas, whose distribution very roughly corresponds to the distinction between individual-level (Copula 1) and stage-level (Copula 2) predicates (Carlson 1977, Kratzer 1995). I analysed this distributional distinction (Welch 2012) as a difference in argument structure. Only Copula 2 appears with adjectival predicates.

(2) Copular clauses

    a. Eyı tı̨ch'aàdı̨ı ekwǫ̀ agı̨ı̨t'e.
       eyı   tı̨ch'aàdı̨ı ekwǫ̀   a-gı̨ı̨-t'e
       DEM animal   caribou   THM-IPFV.3PL.SUB-COP1\IPFV
       'Those animals are caribou.'   (MLBW 2012)

    b. *Eyı tı̨ch'aàdı̨ı ekwǫ̀.
       eyı   tı̨ch'aàdı̨ı   ekwǫ̀
       DEM animal   caribou
       (Intended: 'Those animals are caribou.')   (MLBW 2012)

    c. (Goxı̨) nàzèe-dǫǫ̀ ts'ı̨ı̨lı̨.
       goxı̨   nàzèe-dǫǫ̀   ts'ı̨ı̨-lı̨
       1PL   hunter   IPFV.1PL.SUB-COP2\IPFV
       'We are hunters.'   (LD 2011)

    d. *Goxı̨ nàzèe-dǫǫ̀.
       goxı̨   nàzèe-dǫǫ̀
       1PL   hunter
       (Intended: 'We are hunters.')   (LD 2011)

On the surface, these copular clauses appear to have little to distinguish them from those in Indo-European languages. As in the latter, copulas in Tłı̨chǫ Yatı̀ bear agreement and TAM inflection, while the nouns that are being predicated in these clauses do not. It would be tempting to conclude that copulas' only role in these sentences is to host inflection. Nevertheless, comparing Tłı̨chǫ Yatı̀ copular clauses to adjectival predication reveals asymmetries that point to a different role for copulas.

5. ADJECTIVAL PREDICATES AND AGREEMENT

The second context in which copulas appear is adjectival predicates, where Copula 1 must appear when adjectives (a class of inflectionless verb-like predicates)[5] are predicated of animate subjects (3). Adjectives predicated of inanimate subjects must appear without a copula (4):

(3) Adjectival predicates of animate subjects

    a. Madlę̀ edı elı̨.
       Madlę̀   edı   Ø-lı̨
       Madeleine   hot   IPFV.3.SUB-COP2\IPFV
       'Madeleine is feverish.'   (MLBW 2009)

    b. *Madlę̀ edı
       Madlę̀   edı
       Madeleine hot
       (Intended: 'Madeleine is feverish.')   (MLBW 2009)

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[5]This definition of adjectives is drawn from Rice's (1989) grammar of Slave, a closely related language.

c. Tłı̨ hazǫǫ̀ eya gı̨ı̨lı̨.
   tłı̨   hazǫǫ̀   eya   gı̨ı̨-lı̨
   dog   all   sick   IPFV.3PL.SUB-Cop2\IPFV
   'All the dogs are sick.'   (MLBW 2012)

d. *Tłı̨ hazǫǫ̀ eya.
   tłı̨   hazǫǫ̀   eya
   dog   all   sick
   (Intended: 'All the dogs are sick.')   (MLBW 2012)

(4) Adjectival predicates of inanimate subjects

a. *Dı̨ı dzę̀ę̀ edı elı̨.
   dı̨ı dzę̀ę̀   edı   Ø-lı̨
   today   hot   IPFV.3.SUB-Cop2\IPFV
   (Intended: 'Today is hot.')   (MLBW 2012)

b. Dı̨ı dzę̀ę̀ edı.
   dı̨ı dzę̀ę̀   edı
   today   hot
   'Today is hot.'   (MS 2007)

c. *Selakw'ǫǫ̀ hazǫǫ̀ eya gı̨ı̨lı̨.
   se-lakw'ǫǫ̀   hazǫǫ̀   eya   gı̨ı̨-lı̨
   1SG-finger   all   sick   IPFV.3PL.SUB-Cop1\IPFV
   (Intended: 'All my fingers are sore.')   (MLBW 2009)

d. Selakw'ǫǫ̀ hazǫǫ̀ eya.
   se-lakw'ǫǫ̀   hazǫǫ̀   eya
   1SG-finger   all   sick
   'All my fingers are sore.'   (MLBW 2009)

As I argue elsewhere (Welch 2016), adjectival predicates are a context where Moro's (1997) claim about copulas appears to be true of Tłı̨chǫ Yatıì. Copulas are inserted in order to realize morphology agreeing with features (Person and Number) on animate nouns. Inanimate nouns in this language lack Φ-features and do not trigger such agreement.

6. TENSE/ASPECT/MODE (TAM) INFLECTION

It is not only the need to realize Φ-features that can motivate the appearance of copulas with adjectival predicates, however. Copulas also appear if there is a need to show TAM inflectional features. Adjectives, unlike verbs, are not inflected for TAM features in this language, and if an explicitly non-present, non-imperfective or non-indicative reading of an adjectival predicate is desired, a copular form is inserted:[6]

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[6]*Ịlè* is a marker of anteriority; *welì* is a modal marker of potentiality/possibility. Both can also appear with verbal predicates. Further information on these particles appears in Welch (2015a, 2015b).

(5) Copulas as TAM realization

    a. Dzèè edı.
       dzèè edı
       day   hot
       'The day is/was hot.'   (MLBW 2012)

    b. Dzèè edı ılè.
       dzèè edı   ı-lè
       day   hot   PFV.3.SUB-COP1\PFV
       'The day was hot.'   (MLBW 2012)

    c. Dzèè edı welì.
       dzèè edı   we-lì
       day   hot   OPT.3.SUB-COP1\OPT
       'The day might be hot.'   (MLBW 2012)

Thus, copulas appear with adjectival predicates in two distinct contexts, in each of which the copula appears to be inserted solely to host inflectional features, whether agreement, as argued in section 5, or temporal/modal, as here.[7]

7. DISCUSSION

The critical contrast is between the patterns of copula distribution with nominal and adjectival predicates. As (4) and (5) demonstrate, bare adjectives may be predicates of inanimate arguments. As predicates of animate arguments (3), however, they require a copula in order to agree. This is not the case with nominal predicates, which are ungrammatical in the absence of a copula, whether or not the subject is inanimate (2). Further examples demonstrating this fact appear in (6). Either copula may introduce the predicate noun *nàzèe-dòò* 'hunter' (6a,b). Copula 2 may introduce the predicate *ts'ı* 'spruce' (6c).[8] Neither of these predicates may appear without a copula (6d,e).

(6) Nominal predicates and obligatory copulas.

    a. Mıshè eyıts'o Sızè nàzèe-dòò gıılı.
       Mıshè eyıts'o Sızè   nàzèe-dòò gıı-lı
       Michel and   Joseph hunter   IPFV.3PL.SUB-COP2\IPFV
       'Michel and Joseph are hunters.'   (AW 2012)

    b. Mıshè eyıts'o Sızè nàzèe-dòò agııt'e.
       Mıshè eyıts'o Sızè   nàzèe-dòò a-gıı-t'e
       Michel and   Joseph hunter   THM-IPFV.3PL.SUB-COP1\IPFV
       'Michel and Joseph are hunters.'   (AW 2012)

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[7]This situation recalls that of such better documented languages as Russian, where overt copulas occur only in non-present tenses.

[8]Both copulas are grammatical if the subject is animate; Copula 1 is infelicitous with an inanimate subject, as it results in a stage-level predicate reading where the tree is only temporarily a spruce, a phenomenon which is not germane to the current argument. Bare nominal predicates are always ungrammatical.

   c. Dıı detsı̨ ts'ı hǫt'e.
      dıı   detsı̨   ts'ı   ha-ı̨-t'e
      DEM tree   spruce THM-IPFV.3.SUB-COP1\IPFV
      'This tree is a spruce.'   (AW 2012)

   d. *Mıshè eyıts'ǫ Sızè nàzèe-dǫ̀.
      Mıshè   eyıts'ǫ Sızè   nàzèe-dǫ̀
      Michel   and   Joseph hunter
      (Intended: 'Michel and Joseph are hunters.')   (AW 2012)

   e. *Dıı detsı̨ ts'ı.
      dıı   detsı̨   ts'ı
      DEM tree   spruce
      (Intended: 'This tree is a spruce.')   (AW 2012)

The facts are summarized in Table 1; a check mark (✓) indicates that a copula is required, and ✗ indicates that it is barred:

	PREDICATE			
	NOMINAL		ADJECTIVAL	
SUBJECT	PRES.IPFV.INDIC	OTHER	PRES.IPFV.INDIC	OTHER
ANIMATE	✓	✓	✓	✓
INANIMATE	✓	✓	✗	✓

Table 1: Distribution of copulas

    These facts are explained if copulas are inserted to spell out either the predicative relation or inflectional features. Wilhelm (2014) argues that in Denësųłıné (aka Chipewyan), a close relative of Tłı̨chǫ Yatıì, nouns are inherently argumental; if true, this means that additional structure, a Pred head in the tradition of Bowers (1993), is required in order for them to be predicates.[9] I assume that this additional structure is a copula, spelling out Pred, taking a type *<e>* argument and returning a type *<e,t>* predicate.

    I suggest that copulas, which, as seen in (2)–(6), bear the same inflections as other verbs, are inserted to spell out either Pred or Φ- or TAM-features.

    Before copula insertion, then, nouns are purely argumental (*<e>*), adjectives are simple predicates (*<e,t>*), and verbs are more complex predicates (of various semantic types). Adjectives would require no further structure to realize a predicational relation with an inanimate subject (7a); however, an animate subject, bearing

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    [9]Wilhelm suggests that copulas in Dënesųłıné are semantic type-shifters that create predicates (type *<e,t>* from nouns, which she claims are argumental (type *<e>*) in this language. The facts herein suggest that her analysis also applies to Tłı̨chǫ Yatıì.

Φ-features, would result in a copula being inserted at Infl (7b), as would marked TAM features (7c).[10]

(7) Structures of adjectival predication
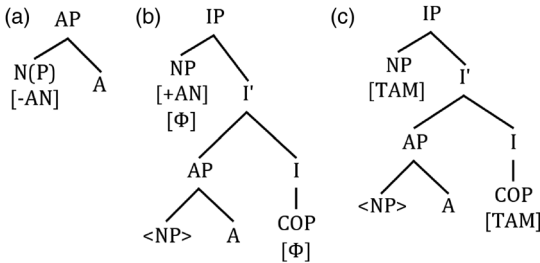
Nouns, being argumental, would always require a copula, whose insertion as Pred would incidentally also realize any agreement and TAM features (8a). Verbs, being both predicational and inflected, would require no copula insertion (8b).

(8) Nominal and verbal predication
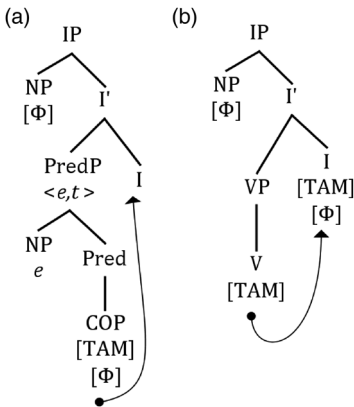
8. CONCLUSION

If the sole role of the copulas were to host agreement or other inflectional features, they would not be required with nominal predicates of inanimate subjects. This is apparent because copulas are not inserted with adjectival predicates except to host morphology: either agreement with the features of animate nominal subjects, or TAM categories, adjectives themselves lacking inflection entirely. I conclude that the role of copulas in nominal predicates in Tłįchǫ Yatìì is not simply to host inflection, but also to mark a predicational relation.

There are further implications to the claim that copulas may realize either predication or inflection within the same language. I have suggested that the type-shifting

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[10]There is independent evidence in this language for heads that introduce additional argument structure (*v* or Voice), and for Asp and Mod heads separate from T; however, as these heads are not critical to the thesis of this note, I abstract away from them here.

Pred head instantiated by copulas is required to form predicates from inherently non-predicational categories, which in Tłı̨chǫ Yatı̀ includes only nouns.[11] The same may be true of Mandarin, where many adjectives can be predicated directly (9a), while nouns always require a copula (9b, c).

(9) Mandarin non-verbal predication

    a. 我姐姐很聪明。
       wǒ jiějiě   hén   cōngmíng
       1SG older.sister very intelligent
       'My older sister is very intelligent.'

    b. 我妹妹是警察。
       wǒ jiějiě   shì   jǐngchá
       1SG older.sister COP police
       'My older sister is a police officer.'

    c. *我妹妹警察。
       wǒ jiějiě   jǐngchá
       1SG older.sister police
       (Intended: 'My older sister is a police officer.')   (H.Y. Liu, pc, 2014)

The appearance of copulas therefore appears to have at least two possible motivations: the overt realization of inflectional features, and the marking of predication. I have shown that Tłı̨chǫ Yatı̀ provides examples of both of these motivations within the same language. This finding suggests that the function of copulas may be more complex than has been supposed, and may vary from language to language, just as it apparently does between lexical categories within a single language.

The question of what is meant by lexical categories is directly affected by the question of copular function. Baker (2003) considers that only verbs are an inherently predicational category; Vinokurova (2005) claims that adjectives also are predicational. Since Chomsky's (1970) characterization of them as [+N, +V], adjectives have been recognized as an intermediate lexical category; it is also well known that in some languages they pattern more like verbs (as in the Tłı̨chǫ Yatı̀ and Mandarin examples we have seen here) and in others more like nouns (as is common in Indo-European languages).[12] In the typological literature on copulas, Pustet (2003) observes that verbs, followed by adjectives and finally nouns, are the category most likely to be acceptable as bare predicates across languages. If adjectives are always of type <e,t>, we would expect that in all languages, copulas should only appear with adjectival predicates in order to realize inflectional categories, and hence, languages without inflection for TAM categories or agreement should universally allow adjectival predicates without copulas. Whether this is borne out by cross-linguistic facts must await further investigation.

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[11]In fact, adpositions (in general) appear to be inherently non-predicational as well in Tłı̨chǫ Yatı̀ and Dëne Sųłıné (Wilhelm 2014).

[12]Within the Dene language family, Slave (Rice 1989), Dënesųłıné (Josh Holden, pc, 2014) and Navajo (Young, Morgan and Midgette 1992) appear to pattern with Tłı̨chǫ Yatı̀ with respect to adjectival predication.

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