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RESEARCH

Propping up predicates: Adjectival predication in Tłı̨chǫ Yatıì*

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In Tłı̨chǫ Yatıì (Dene, aka Athapaskan), copulas appear obligatorily with adjectives predicated of animate subjects, but are barred from appearing with adjectives predicated of inanimates. I propose that this asymmetry arises from a requirement to realize grammatical agreement for person, and that animate nouns alone bear a person feature. Unlike verbs, adjectives in this language cannot inflect; hence copulas are inserted in adjectival predicates as a rescue strategy to avoid ungrammaticality.

Keywords: Tłı̨chǫ; Dogrib; copula; adjective; agreement

1 Introduction

This article examines an asymmetry in the behaviour of predicative adjectives in Tłı̨chǫ Yatıì (also known as Dogrib), a Dene (Athapaskan) language of the Northwest Territories, Canada. Although, as in other Dene languages, the majority of property predicates are expressed with stative verbs, there is a small class of adjectives that have distinct properties. Only a subset of these adjectives can occur as predicates, and when they do they sometimes occur with a copula. Although the occurrence of copulas with predicative adjectives may appear to be optional, I argue that this is not the case. Copulas are obligatory with adjectives predicated of animate subjects and barred with those predicated of inanimate subjects:[1]

(1) Copulas and adjectives

a. Chekoa edı elı̨.
chekoa [edı warm/feverish Ø-lı̨] IPFV.3.SBJ-COP.IPFV
'The child is feverish.' (MLBW 2009)

b. *Chekoa edı.
chekoa edı
child warm/feverish
(Intended: 'The child is feverish.') (MLBW 2009)

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[1] The examples of Tłı̨chǫ Yatıì in this paper are presented in the practical orthography, which is roughly phonemic. With the exception of the following symbols, all letters have their IPA values, save that those that represent voiceless and voiced stops and affricates in English represent aspirated and unaspirated voiceless stops, respectively, in Tłı̨chǫ Yatıì. An apostrophe represents glottalization, an ogonek (ą) nasalization, and a grave accent (à) low tone. ch = [ʧʰ]; dz = [ʦ]; gw = [kʷ]; kw = [kʷʰ]; sh = [ʃ]; ts = [ʦʰ]; y = [j]; dl = [ʧ̬]; gh = [ɣ]; j = [ʤ]; ł = [ɬ]; tł = [t͡ɬʰ]; wh = [ʍ]; zh = [ʒ].

c. Įxę̀ę̀ edı.
įxę̀ę̀ edı
yesterday warm/feverish
'Yesterday was warm.'[2] (MLBW 2009)

d. *Įxę̀ę̀ edı elį.
įxę̀ę̀ [edı Ø-lį]
yesterday warm/feverish IPFV.3.SBJ-COP.IPFV
(Intended: 'Yesterday was warm.') (MLBW 2009)[3]

I argue that animate subjects bear a formal person feature that inanimates lack, and that the copula that appears with adjectival predicates realizes these features inflectionally, a requirement of the grammatical system that I formalize as a constraint. This realization is otherwise impossible to fulfill due to adjectives' lack of inflection.[4]

1.1 Assumptions

The article's arguments are couched in the framework of Minimalism (Chomsky, 1995; 1998), assuming that morphological agreement is an operation motivated by a requirement to check formal features: functional heads bear uninterpretable features that are checked against, and valued by, the interpretable features of their agreement targets.

I supplement this view of agreement with a constraint requiring all Φ-features, whether interpretable or uninterpretable, to be checked. That is, an unmatched feature, even if interpretable, will cause the derivation to crash.

2 Tłı̨chǫ Yatıì and its morphosyntax

Tłı̨chǫ Yatìì (formerly known as Dogrib) is a Dene language spoken in the communities of the Tłı̨chǫ Government and in nearby Yellowknife, Ndilǫ and T'èʔehdaà (Dettah), Northwest Territories.

In common with other Dene languages, Tłı̨chǫ Yatìì has SOV constituent order and a highly synthetic verbal morphology showing both subject and object agreement. The verb consists of a monosyllabic stem to which are prefixed numerous inflectional and derivational morphemes, in general also monosyllabic.[5] The Dene verb is typologically unusual in a number of ways. First, the lexical material is discontinuous: the minimal verb, referred to in the literature as the *theme*, consists of the stem at the right edge, plus, in most cases, one or more lexical and derivational prefixes, referred to as *thematic*. Second, these thematic elements occur outside (leftward of) the inflectional prefixes for agreement

[2] Whether the subject of this sentence is 'yesterday', or an expletive (with 'yesterday' as an adverbial), the subject is in any case inanimate.

[3] Most examples in this paper are drawn from fieldwork with native speakers of Tłı̨chǫ Yatìì in the Northwest Territories, cited by consultants' initials (AW = Archie Wedzin, MLBW = Marie-Louise Bouvier White, MS = Mary Siemens), or by ANON for anonymous consultants. Other data comes from the *Tłı̨chǫ YatììMultimedia Dictionary* (Tłı̨chǫ Community Services Agency 2007), Lynda Ackroyd's *Dogrib Grammar* (1982) and the *Dogrib New Testament* (Dogrib Translation Committee 2003).

[4] In Tłı̨chǫ Yatìì (and languages of the Dene family generally), there are in fact two copulas, which differ distributionally in a manner akin to the SER/ESTAR distinction in Spanish and Portuguese. Adjective support in Tłı̨chǫ Yatìì employs only one of the copulas (*elį* in the third-person singular imperfective), though in the closely related Slave dialect complex (Rice 1989: 389), the other copula also appears (*ǫt'e*, cognate with Tłı̨chǫ *hǫt'e*). In previous work (Welch 2012) I analyze the distributional difference between the copulas, but it is not germane to the topic of this paper.

[5] In many Dene languages, the stem consists of a monosyllabic root and suffixes marking TAM distinctions. In Tłı̨chǫ Yatìì, diachronic fusional processes have rendered stems morphologically opaque (Ackroyd 1982: 76; Jaker 2012: 36). The majority of Tłı̨chǫ stems are of the form CV, though CVh and CV: stems also exist (Leslie Saxon, pc, 2012).

and aspect, which immediately precede the stem. Thirdly, object agreement occurs outside of subject agreement.[6]

An example of a representative Tłı̨chǫ verb appears in (2).

(2) Verb morphology in Tłı̨chǫ Yatıì
Naxısınıyats'eehtı.

naxı-	sınì-	ya-	ts'e-	e-	Ø-	h-	tı
2PL.OBJ-	THM-	THM-	1PL.SBJ-	CJ-	IPFV-	CLF-	speak.IPFV

'We judge you.' (MLBW 2012)

This verb is inflected for subject and object agreement and aspect and has two lexical portions: the thematic prefixes *sınì-* and *ya-*, which together etymologically mean something like 'prepared words', and the stem *tı* (etymologically 'speak'), which together with the classifier morpheme (*h-* in this case) comprise the verb theme *sınìya-h-tı* 'judge'.[7]

As can be seen by comparing the morpheme-by-morpheme gloss with the word, Tłı̨chǫ verbal morphology is highly fusional.[8] In particular, the conjugation marker, aspect/mode, subject agreement and classifier are typically pronounced as one syllable.[9] Henceforth, therefore, I will gloss examples as in (3), abstracting away from the conjugation marker and classifier:

(3) Simplified glossing for verbal morphology
Naxısınìyats'eehtı.

naxı-	sınìya-	ts'eeh-	tı
2PL.OBJ-	THM-	IPFV1PL.SBJ-	judge.IPFV

'We are judging you.' (MLBW 2012)

Rich systems of verbal agreement morphology are pervasive within the Dene language family. However, in contrast, there exists a class of predicates in Tłı̨chǫ Yatıì that is uninflecting, hosting no aspect or agreement morphology. The class of predicative adjectives in Tłı̨chǫ Yatıì reveals facts about agreement and predication that provide a window into the realization of Φ-features.

3 Adjectives in Tłı̨chǫ Yatıì

Adjectives in Tłı̨chǫ Yatıì are a small lexical class.[10] They lack inflectional morphology, unlike nouns, which inflect for possession, or verbs, which inflect for aspect/mode and subject and object agreement.

3.1 Identifying adjectives

There are reliable diagnostics for distinguishing adjectives from stative verbs (which also denote properties) and from adverbs (which also are uninflected).

3.1.1 Adjectives versus stative verbs

Most concepts expressed in English by adjectives are expressed in Tłı̨chǫ Yatıì by stative verbs. Nevertheless, adjectives do exist as a class, and can act either as predicates or as

[6] The latter two characteristics are directly contrary to Baker's Mirror Principle (Baker, 1985), since the order of syntax is SOV while the order of morphology is OSV.

[7] The classifier is a morpheme immediately left of the verb stem; it plays a productive, though not entirely predictable, role in valency (Willie, 1991).

[8] Tłı̨chǫ Yatıì is "the most phonologically innovative of the Northeast Athabaskan languages… [and] the most phonologically opaque" (Jaker, 2012:2).

[9] Aspect/mode is marked by two means: by affixation and by stem variation, as can be seen by the morpheme glosses in (2).

[10] Though nevertheless not a closed class; *sòò* 'cool/hip' has apparently recently been added to the lexicon (Leslie Saxon, pc, 2011).

modifiers of nouns. They can be distinguished readily from stative verbs by their lack of inflectional morphology.

In (4) we can see that the adjectives *eya* 'sick/painful' and *edı* 'warm/feverish' have no inflectional morphology: rather, this morphology occurs instead on the copula, marked for first-person subject agreement (4a) and perfective aspect (4b). Further, adjectives often occur as bare predicates, without even a copula, such as *edza* 'cold' and *ehkw'ı* 'correct' (4c–d). By contrast, the stative verbs *etedeht'ı* 'be poor/pitiful' and *ełèak' à* 'be wrinkled' bear first-person subject agreement (4e) and perfective aspect (4f) on the verb word itself, and no copula appears:[11]

(4) Adjectives contrasted with stative verbs[12]

a. Eya ehłı t'à, edı ehłı.
[eya h-lı] t'à,
sick/painful IPFV.1SG.SBJ-COP.IPFV because
[edı **h-lı**]
warm/feverish IPFV.1SG.SBJ-COP.IPFV
'Because I'm sick, I'm feverish.' (MLBW 2009)

b. Įxę̀ę eya įlè.
įxę̀ę [eya **į-lè**]
yesterday sick/painful **PFV.3.SBJ-COP.PFV**
'Yesterday he was sick.' (MLBW 2009)

c. Edza dìì!
edza dìì
cold really
'[The weather] is really cold!' (MS 2007)

d. Neyatìì ehkw'ı ha hǫt'e.
ne-yatı-ì ehkw'ı ha hǫt'e
2SG-word-PNS correct FUT FOC
'Your words must be correct.' (MLBW 2012)[13]

e. Etedeht'ı.
etede-**h**-t'ı
THM-**IPFV.1SG.SBJ**-be.poor/pitiful.IPFV
'I am poor. (MLBW 2009)

f. Tł'à?eh ełèak'à.
tł'à?eh ełè-a-**e**-k'à
pants RECP-THM-**PFV**-wrinkle.**PFV**
'The pants are wrinkled.' (TCSA 2007)

It is lack of inflection both for agreement and for aspect that sets adjectives apart from verbs.

[11] In Tłı̨chǫ Yatìì, explicit marking on verbs for the number of their third-person subjects is limited to the plural. Third-person verbs without plural subject marking are usually interpreted as singular, but under certain conditions may be interpreted as plural. For this reason I do not use "singular" in my glosses of third-person verb forms, such as the verb of (4b), but rather a plain "3".

[12] The vowel *e* that appears in the copula in (4a) has been analyzed variously: as epenthetic (McDonough 1999; Rice 2005), or as a TAM marker (Hargus & Tuttle 1997). I assume it to be epenthetic. It appears when the phonological form of a verb would otherwise be monosyllabic; this only occurs in the absence of thematic prefixes and object agreement when subject agreement is sub-syllabic, as in first-person singular *h-*, here, or as in third-person singular, which is zero-marked.

[13] *Ha hǫt'e* 'must' is a lexicalization of the clausal/verum focus marker *hǫt'e* taking a future clause in its scope.

3.2 Adjectives versus adverbs and nouns

Adjectives are distinguished from the class of adverbs by occurring as complements only of copulas and the psych verb *nı̨wǫ ‘think/believe/consider’,* or as modifiers, and by taking complements of their own; they are distinguished from attributive nouns by appearing after the nouns they modify rather than before.[14] The adjective *ahxe* ‘rich’ appears with the copula *elı̨* (5a), while in (5b), *edza* ‘cold’ is the complement of the psych verb *ts’ı̨hwhǫ* ‘we think’. Adjectives are barred as complements of *wegaat’ı̨* ‘s/he appears, is seen as’ in (5c), which takes clausal complements (5d). In (5e) we see the adjective *ezhı̨* ‘crazy’ appearing with the copula, and in (5f), *ezhı̨* taking *computer ghǫ* ‘about computers’ as a complement. In (5g, h) the adjectives *deèdlı̨̨* ‘original/authentic’ and *edza* ‘cold’ appear attributively, following the nouns they modify, in contrast to the noun *nı̨htł’e* ‘paper/book’ (5i), which (in compound nouns) precedes the noun it modifies.

(5) Properties of adjectives

a. Eyı ts’èko sìı ahxe elı̨.
eyı ts’èko sìı **ahxe** Ø-**lı̨**
DEM woman FOC **rich** IPFV.3.SBJ-**COP.**IPFV
‘That woman is rich.’ (MLBW 2009)

b. Edza ts’ı̨hwhǫ.
edza **ts’ı̨̨h-wǫ**
cold IPFV.1PL.SBJ-**think**.IPFV
‘We think it’s cold.’ (MLBW 2009)

c. *Į̀̀zhaı wegaat’ı̨.
Į̀̀zha we-gaa-Ø-t’ı̨
shy 3.OBJ-THM-IPFV.3.SBJ-see.IPFV
(Intended: ‘She looks shy.’) (MLBW 2009)

d. Gıgha hoı̨zı̨ laànì gıgaat’ı̨.
gı-gha ho-ı̨-zı̨ laànì gı-gaa-Ø-t’ı̨
3PL-for THM-IPFV.3.SBJ-be.good.IPFV like 3PL-THM-IPFV.3.SBJ-See.IPFV
‘They look like they enjoy it.’ (Tı̨chǫ Community Services Agency 2007)

e. Ezhı̨ ehlı̨.
ezhı̨ **h-lı̨**
crazy IPFV.1SG.SBJ-**COP**.IPFV
‘I’m crazy.’ (MLBW 2009)

f. Computerghǫezhı̨ laàht’e.
computer **ghǫ** ezhı̨ laà-h-t’e
computer **about** crazy like-IPFV.1SG.SBJ-COP.IPFV
‘I’m crazy about computers.’ (MLBW 2009)

g. Dıı sìı godı deèdlı̨̨ hǫt’e.
dıı sìı **godı** **deèdlı̨̨** hǫ-t’e
DEM FOC **story** **real/worthy** IPFV.3.SBJ-IPFV-COP.IPFV
‘This is a real story.’ (MLBW 2009)

[14] The relationship between adjectives and copulas is not complementation in the selectional sense. Rather, as I claim in Section 5, copulas appear to realize φ-features borne by the subjects of adjectival predicates, features that cannot be marked on the adjectives themselves because of the lack of inflectional morphology discussed above.

h. Dzęedzaanìhòkw'ı ha.
dzę **edza-µ** nì-hò-kw'ı ha
day **cold-REL** THM-AR.IPFV-arrive.IPFV FUT
'Cold days will come.' (MLBW 2009)[15]

i. Eyı nıhtł'èkǫ̀ hǫt'e.
eyı nıhtł'èkǫ̀ ha-ı-t'e
DEM **school** THM-IPFV-COP.IPFV
'That is the school.' (MLBW 2009)

The morphological and selectional criteria outlined above allow us to identify the following (almost certainly not exhaustive) list of adjectives.

Note that morphosyntactic criteria alone can identify these adjectives. Semantic relatedness is not characteristic of them as a class: they do not correspond to any of the semantic classes that have often been considered canonical, and "typically associated with both large and small adjective classes": DIMENSION, AGE, VALUE, COLOUR (Baker, 2003; Dixon, 2004). In addition, many of the adjectives in Table 1 have semantic relatives (such as antonyms) that are stative verbs. In (6) we can see that *ahxe* 'rich/capable' and *ı̨̀ı̨zha* 'shy/ashamed' are adjectives (a, b), but *etedeht'ı̨* 'I am poor/pitiful' and *xàhohdı̨* 'I am proud' are fully inflected verbs (c, d).

(6) Adjectives versus stative verbs

a. Ahxe ehłı̨.
ahxè h-lı̨
rich IPFV.1SG.SBJ-COP.IPFV
'I am rich.' (MLBW 2009)

b. Į̀ı̨zhaı ehłı̨.
ı̨̀ı̨zha h-lı̨
shy IPFV.1SG.SBJ-COP.IPFV
'I am shy.' (MLBW 2009)

c. Etedeht'ı̨.
etede-h-t'ı̨
THM-IPFV.1SG.SBJ-be.poor/pitiful.IPFV
'I am poor.' (MLBW 2009)

d. Sezha gıghǫ xàhohdì.
se-zha gı-ghǫ xàho-h-dıì
1SG-child 3PL-about THM-IPFV.1SG.SBJ-be.proud.IPFV
'I'm proud of my children.' (MLBW 2009)

3.3 Predicative adjectives

Only a subset of the adjectives in Table 1 can be used predicatively. Others, which include at least *ı̨lıa* 'tightly packed', *mąą* 'smelly', *nǫǫdea* 'youngest', *nǫ̀ǫht'ò* 'sharp/wedge-shaped' and *sǫǫ̀hı̨ı̨* 'original/canonical' cannot be predicates.

[15] The suffix glossed REL in (5h) is discussed in section 4.2.

ahxe	rich/capable	*ɻkw'ǫą*	skinny and long
edı	warm/feverish	*ɻlıa*	tightly packed
edza	cold (weather)	*mąą*	smelly
ehkw'ı	correct	*nǫǫdea*	youngest
eładɻɻ	different/foreign	*nǫ̀ǫht'ò*	sharp/wedge-shaped
eya	sick/painful	*sıdıì*	funny/strange
ezhɻ/ezhɻne	crazy	*sòò*	cool/hip
ɻht'e	raw	*sǫǫ̀łɻɻ*	original/canonical
ɻht'edę	naked	*deedlɻɻ*	real/worthy
ǰǰzha	shy/ashamed	*weelɻǰ*	fresh

Table 1: Adjectives in Tłı̨cho Yatıì.

(7) Attributive-only adjectives[16]

a. łèwò ɻlıa
[łè-wò ɻlıa]
flour-skin tightly.packed
'a tightly packed flour sack'
*'The flour sack is tightly packed.' (MS 2009)

b. t'asìıts'ıì mąą
[t'asìıts'ıì mąą]
garbage smelly
'smelly garbage'
*'(The) garbage is smelly.' (MS 2009)

c. tłą nǫǫdea
[tłı̨-a nǫǫdea]
dog-DIM youngest
'the youngest puppy'
*'The puppy is the youngest.' (MLBW 2009)

d. *Tłą nǫǫdea elı̨.
tłı̨-a [nǫǫdea Ø-lı̨].
dog-DIM youngest IPFV.3.SBJ-COP.IPFV
(Intended: 'The puppy is the youngest.') (MLBW 2009)

e. datı nǫ̀ǫht'ò
[datı nǫ̀ǫht'ò]
needle sharp/wedge-shaped
'a sharp-sided needle' (e.g., a leather needle)
*'The needle is sharp-sided.' (MS 2009)

f. dıı bò sǫǫ̀łɻɻ
[dıı bǫ̀ sǫǫ̀łɻɻ]
DEM meat authentic/original
'this authentic meat'
*'This meat is authentic.' (MS 2009)

The rest, to varying degrees, are acceptable as predicates; however, only the P(redicative)-adjectives in Table 2 commonly occur as predicates.

[16] I do not investigate these M(odifying)-adjectives in this paper, confining my analysis to predication.

ahxe	rich	eya	sick/painful
edı	warm/feverish	ezhı̨(ne)	crazy
edza	cold	ı̨̀ı̨zha	shy/ashamed
ehkw'ı	correct		

Table 2: Common P-adjectives.

In the next section, we will look at the occurrence of copulas with P-adjectives, demonstrating that a copula appears with such an adjective if and only if the subject is animate.

4 Asymmetries in copula behaviour

While adjectives are a small class, and P-adjectives smaller still, they are disproportionately illuminating for our picture of agreement and predication in Tłı̨chǫ Yatıì. There is an asymmetry in the behaviour of adjectival predicates; this asymmetry occurs when P-adjectives occur either as predicates or as modifiers, and gives us a window into the agreement mechanisms of the language, and subject-predicate relations in general.

4.1. Asymmetries in predicates

Recall from section 3 that while adjectives bear no inflectional morphology, such morphology does occur on copulas that appear with adjectival predicates:

(8) Inflection on copulas with adjectival predicates

a. Eya ehłı̨ t'à, edı **ehłı̨.**
[eya h-lı̨] t'à,
sick/painful IPFV.1SG.SBJ-COP.IPFV because
[edı **h-lı̨**]
warm/feverish IPFV.1SG.SBJ-COP.IPFV
'Because I'm sick, I'm feverish.' (repeated from (4a))

b. Į̨xę̀ę̀ eya**ı̨lè.**
ı̨xę̀e [eya **ı̨-lè**]
yesterday sick/painful PFV.3.SBJ-COP.PFV
'Yesterday he was sick.' (repeated from (4b))

A question that naturally arises is why the copula appears in some cases, such as those in (8a, b), but not in others (9a, b).

(9) Bare adjectival predicates

a. Selakw'ǫǫ̀hazǫǫ̀ eya (*elı̨/ *gı̨ı̨lı̨).
[se-lakw'ǫǫ̀ hazǫǫ̀] eya
1SG-finger all sick/painful
'My fingers are all sore.' (MLBW 2009)

b. Dıı dzę̀ę̀ edza (*elı̨).
[dıı dzę̀ę̀] edza
DEM day cold
'Today is cold.' (MLBW 2009)

The clauses in (9) clearly demonstrate that uninflected P-adjectives are capable of being predicates without the support of a copula. What forces the appearance of a copula in (9a, b)?

As mentioned at the beginning of this paper, copulas appear with P-adjectival predicates if and only if the subject of the clause is animate.[17] We saw examples of this pattern in (1); in (10) we see a further example. *Ɂɨ̨zha* 'shy/ashamed' may be predicated of *chekoa* 'children' only if the predicate includes the copula *elı̨* (a); without the copula (b), the sentence is ungrammatical. The same is true of *eya* 'sick' and its subject *tłı̨* '(the) dog' in (10c, d).

(10) Copulas and animate subjects

a. Chekoa ɨ̨ɨzha **gɨ̨ɨlı̨** dìì.
chekoa [ɨ̨ɨzha **gɨ̨ɨ-lı̨**] dìì
child shy IPFV.3PL.SBJ-COP.IPFV really
'The children are really shy.' (MS 2007)

b. *Chekoa ɨ̨ɨzha dìì.
chekoa [ɨ̨ɨzha] dìì
child shy really
(Intended: 'The children are really shy.') (MS 2007)

c. Tłı̨ eya elı̨.
tłı̨ [eya Ø-lı̨]
dog sick IPFV.3.SBJ-COP.IPFV
'The dog is sick.' (MLBW 2009)

d. *Tłı̨ eya.
tłı̨ eya
dog sick
(Intended: 'The dog is sick.') (MLBW 2009)

In (11) and (12) the presence or absence of the copula determines the interpretation. The inclusion of the copula forces an animate interpretation, as in (11a) and (12a), whereas the bare adjectives in (11b) and (12b) are interpreted as predicated of inanimate subjects (a body part or the weather, respectively).

(11) Copulas and subject animacy

a. Eyaelı̨.
eya Ø-lı̨
sick IPFV.3.SBJ-COP.IPFV
'S/he is sick.' (MLBW 2009)

b. Sı̨là eya.
se-là eya
1SG-hand sick/painful
'My hand hurts.' (MLBW 2009)

(12) Copulas and subject animacy (continued)

a. Edı elı̨.
edı Ø-lı̨
warm/feverish IPFV.3.SBJ-COP.IPFV
'S/he has a fever.' (MS 2007)

[17] I am grateful to Leslie Saxon for this observation (pc, 2006). Note that grammatical animacy is a category that varies from language to language and even from speaker to speaker. In the Northern Dene languages, nouns with human referents always trigger animacy effects; animals associated with humans, particularly dogs, generally do so as well. Nouns denoting other vertebrates trigger animacy effects for many speakers, including most of the consultants I have worked with; nouns denoting invertebrates and plants never do.

b. Edı.
edı
warm/feverish
'The weather is warm.' (MS 2007)

Conversely, if the subject is inanimate, the inclusion of a copula is ungrammatical, as in (13). Bare adjectival predicates (a) are the only option when the subject is inanimate, and P-adjectival modifiers of inanimate nouns must likewise be bare (c). Adding a copula makes the sentence ungrammatical (b, d).

(13) Adjectives and copula support

a. Godı deèdlı̨.
[godı deèdlı̨] / [godı] [deèdlı̨]
story real story real
'a real story' 'The story is real.' (MLBW 2009)

b. *Godı deèdlı̨ **elı̨.**
godı [deèdlı̨ **Ø-lı̨**]
story real IPFV-COP.IPFV
(Intended: 'The story is real.') (MLBW 2009)

c. Dıı bò weelı̨.
dıı [bò weelı̨] / [dıı bò] [weelı̨]
DEM [meat fresh/pure] [DEM meat] [fresh/pure]
'this fresh meat' 'This meat is fresh.' (MLBW 2009)

d. *Dıı bò weelı̨ **elı̨.**
dıı bò weelı̨ **Ø-lı̨**
DEM meat fresh/pure IPFV-COP.IPFV
(Intended: 'This meat is fresh.') (MLBW 2009)

Copulas, then, are necessary for P-adjectival predication of animate subjects, and barred for inanimate subjects. The next section demonstrates that this fact is also true when P-adjectives are relativized and used to modify nouns.

4.2 Asymmetries in modifiers

All verbs and predicative adjectives in Northern Dene languages can be turned into modifiers by the addition of a derivational suffix, which in Tłı̨chǫ Yatìì takes the form of an extra mora on the final vowel:[18]

(14) Modification derived from predication

a. behchı̨̀ k'èdìı dǫǫ̀
behchı̨̀ k'è-∅-dì-µ dǫ-µ̀
vehicle around-IPFV.3.SBJ-drive.IPFV-REL person-PNS
'driver' (Tłı̨chǫ Community Services Agency 2007)

b. Dzę edzaa nìı̨ʔǫ ha.
dzę edza-µ nìı̨-ǫ ha
day cold-REL THM-arrive.IPFV FUT
'Cold days will come.' (MLBW 2009)

[18] This suffix has the effect of relativizing predicates; see Saxon (2000) for discussion and analysis.

Just as in predication, a P-adjective modifying an animate noun requires the appearance of a copula, in which case the extra mora appears on the copula instead of on the adjective itself.

Thus (15a, c), where copulas appear with adjectives modifying the animate nouns *chekoa* 'child' and *dǫ* 'person', are grammatical, while (15b, d), which lack copulas, are not:[19]

(15) Ungrammaticality of bare AP predicates of animate subjects

a. Eyı chekoa ìį̀zha**elı̨̀ı̨** gode ha nı̨wǫ-le.
[eyı chekoa ìį̀zha **Ø-lı̨-µ**] go-Ø-de
DEM child shy IPFV-COP.IPFV-REL THM-IPFV-speak.IPFV
ha ne-ne-wǫ-le
FUT THM-IPFV-want.IPFV-NEG
'That shy child doesn't want to speak.' (MLBW 2009)

b. *Eyı chekoa ìį̀zhaa gode ha nıwǫ-le.
[eyı chekoa ìį̀zha-µ] go-Ø-de
DEM child shy-REL THM-IPFV-speak.IPFV
ha ne-ne-wǫ-le
FUT THM-IPFV-want.IPFV-NEG
(Intended: 'That shy child doesn't want to speak.') (MLBW 2009)

c. Dǫ ezhı̨ **elı̨̀ı̨** eyı kǫ̀ nàdè.
[dǫ ezhı̨ **Ø-lı̨-µ**] eyı kǫ̀ nà-Ø-de
person crazy IPFV.3.SBJ-COP.IPFV-REL DEM house THM-IPFV-live.IPFV
'The crazy person lives in that house.' (MLBW 2009)

d. *Dǫ ezhı̨̀ı̨ eyı kǫ̀ nàdè.
[dǫ ezhı̨-µ] eyı kǫ̀ nà-Ø-dè
person crazy-REL DEM house THM-IPFV-live.IPFV
(Intended: 'The crazy person lives in that house.') (MLBW 2009)

In (16), we see that the converse is also true: copulas are ungrammatical with P-adjectives modifying the inanimate nouns *bò* 'meat' and *dzę̀ę̀* 'day(s)'. The clauses in (16b, d), which are versions of (16a, c) with an added copula, are ungrammatical.

(16) Ungrammaticality of copulas with AP predicates of inanimate subjects

a. Bò ı̨ht'ee ladà ka whe?ǫ.
[bò ı̨ht'e-µ] ladà ka whe-?ǫ
meat raw-REL table on PFV-be.located.(chunky object).PFV
'The raw meat is lying on the table.' (MLBW 2009)

b. *Bò ı̨ht'e **elı̨̀ı̨** ladà ka whe?ǫ.
[bò ı̨ht'e **Ø-lı̨-µ**] ladà ka whe-?ǫ
meat raw IPFV-COP.IPFV-REL table on PFV-be.located.(chunky object).PFV
(Intended: 'The raw meat is lying on the table.') (MLBW 2009)

c. Dzę̀ę̀ edzaa nìhòkw'ı ha.
[dzę̀ę̀ edza-µ] nìhò-Ø-kw'ı ha
day cold-REL THM-IPFV-come FUT
'Cold days will come.' (MLBW 2009)

[19] *Ezhı̨* 'crazy', which appears in (15c) is a variant form of *ezhı̨ne*.

d. *Dzęę edza **elɻɻ** nìhòkw'ı ha.

[dzęę	edza	**Ø-lɻ-μ**]	nìhò-Ø-kw'ı	ha
day	cold	IPFV-COP.IPFV-REL	THM-IPFV-come	FUT

(Intended: 'Cold days will come.') (MLBW 2009)

Since modification by P-adjectives or relative clauses is derived from predication, it is unsurprising that the asymmetry in modificational P-adjectives should parallel that in predicational ones.

The role of the copula with P-adjectives is the same whether the adjective is used as a predicate or a modifier: the copula rescues the clause from ungrammaticality by providing inflectional realization of features for an uninflecting adjective. The next section proposes that this asymmetry has its origin in two conditions of the language: a requirement to realize the Person features of subjects in agreement morphology, and the presence of such features only on animate nouns.

5 Animacy and agreement

The rich morphological system of verbs in Tłı̨chǫ Yatìì, like those of other Dene languages, marks agreement with the person and number of subjects and objects. I propose, however, that agreement is not manifested with inanimate nouns, and that this fact is explained by a lack of Person on such nouns.

5.1 Verbal subject agreement

Agreement with a verb's subject is marked in the affixal region immediately to the left of the verb stem, as in (17). However, as mentioned in section 3.1.1, this marker is a zero morpheme for third-person singular subjects, as in (17b).

(17) Verbal subject agreement

a. Bògǫǫ̀ ghǫ shèhtı̨.

bò-gǫǫ̀	ghǫ	shè-**h**-tı̨
meat-dry	of	THM-IPFV.**1SG.SBJ**-eat.IPFV

'I'm eating drymeat.' (MS 2009)

b. Sechı bògǫǫ̀ ghǫ shètı̨.

se-chı	bò-gǫǫ̀	ghǫ	shè-**Ø**-tı̨
1SG-younger.brother	meat-dry	of	THM-IPFV-eat.IPFV

'My younger brother is eating drymeat.' (MS 2009)

Zero-marking of third person singular subjects occurs whether the subject is animate, as in (18a), or inanimate, as in (18b).

(18) Third-person animate and inanimate subjects

a. Nıgolà tedaàwò.

nıgolà	te-da-è-wò
Nicholas	water-up-PFV.3.SBJ-fall.PFV

'Nicholas fell into the water.' (ANON 2013)

b. Kwe tedaàwò.

kwe	te-da-è-wò
rock	water-up-PFV-fall.PFV

'The rock fell into the water.' (ANON 2013)

The immediate impression that one receives from this is that agreement with all third-person subjects is null, regardless of animacy. This is incorrect, however: there are discernable differences between the facts of agreement with inanimates and with animates.

Third-person animate plural subjects trigger overt agreement (19a, c), while inanimates do not (19b, d):

(19) Agreement with plural subjects

a. Eyı dǫ sı̨làı tegeètł'ı.
[eyı dǫ sı̨làı] te-**geè**-tł'ı
DEM person five water-**PFV.3PL.SBJ**-fall.plural.PFV
'Those five men fell into the water.' (ANON 2013)

b. Eyı kwe sı̨làı teètł'ı.
[eyı kwe sı̨làı] te-**è**-tł'ı
DEM rock five water-**PFV**-fall.plural.PFV
'Those five rocks fell into the water.' (ANON 2013)

c. Eyı dǫ sı̨làı Tı̨chǫ-dǫǫ̀ agı̨ı̨t'e.
[eyı dǫ sı̨làı] tı̨chǫ-dǫ-ı̀ a-**gı̨ı̨**-t'e
DEM person five Tı̨chǫ-person-PNS THM-**IPFV.3PL.SBJ**-COP.IPFV
'Those five people are Tı̨chǫ people.' (ANON 2013)

d. Eyı tsı sı̨làı edzǫ hǫt'e.
[eyı tsı sı̨làı] edzǫ ha-**ı̨**-t'e
DEM tree five black.spruce THM-**IPFV**-COP.IPFV
'Those five trees are black spruces.' (ANON 2013)

This fact continues to hold, as we would expect, when verbal predicates are relativized to serve as modifiers. In (20) we see that relativized verbs have plural subject agreement when modifying an animate noun (20a), but not when modifying an inanimate noun (20b).

(20) Plural agreement in relativized verbal predicates

a. dǫ nàke dèè k'e eghàlageedaa sìı
[dǫ nàke] dèè k'e eghàla-**gee**-da-µ sìı
person two land LOC THM-**IPFV.3PL.SBJ**-work.IPFV-REL FOC
'two men working in the field' (Dogrib Translation Committee 2003: Matthew 24:40)

b. Dechı̨ gedı̨ı̨ sekǫ̀ ga nàèyaa sìı
[dechı̨ k'edı̨ı̨] se-kǫ̀ ga nà-**è**-ya-µ sìı
tree eight 1SG-house beside THM-**PFV**-stand.PFV FOC
'eight trees that stood next to my house' (AW 2012)

It appears then that plural agreement can only be realized inflectionally with the animate subject of a verb, whether that verb is used predicationally or modificationally.

This is also true of the subjects of adjectival predicates, save that the obligatory plural agreement appears on an inserted copula rather than on the adjective:

(21) Adjectival predicates and plural agreement

a. Selakw'ǫǫ̀hazǫǫ̀ eya (*elı̨/ *gı̨ı̨lı̨).
[se-lakw'ǫǫ̀hazǫǫ̀] eya Ø-**lı̨** **gı̨ı̨lı̨**
1SG-finger all sick/painful IPFV.3.SBJ-COP.IPFV IPFV.**3PL.**SBJ-COP.IPFV
'My fingers are all sore.' (MLBW 2009)

b. Chekoa hazǫǫ̀ eya (*elı̨) gı̨ı̨lı̨.
[chekoa hazǫǫ̀] eya Ø-**lı̨** **gı̨ı̨lı̨**
child all sick/painful IPFV.3.SBJ-COP.IPFV IPFV.**3PL.**SBJ-COP.IPFV
'The children are all sick.' (MLBW 2009)

We have a further parallel, then, between verbal and adjectival modification, just as between verbal and adjectival predication, the distribution of the copula mirroring the distribution of plural number agreement:

		Predicate type	
		VP	AP
Subject animacy	Animate	plural agreement-V	A + plural agreement-copula
	Inanimate	V	A

		Modifier type	
		Relativized clause	Adjective
Subject animacy	Animate	plural agreement-V	A + plural agreement-copula-μ
	Inanimate	V	A-μ

Table 3: Verbal and adjectival predication and modification.

5.1.1 Person agreement and apostrophizing inanimates

We have seen that inanimates do not trigger plural subject agreement. In fact, it is arguable that the majority of inanimates cannot trigger person agreement at all. It goes without saying that in ordinary discourse, inanimate nouns cannot be first or second person. However, when an artificial context is created in which inanimate nouns are apostrophized as the personifications of natural forces, treating them as animate and agentive entities, second-person agreement may become acceptable, but with only a small subset of inanimates.[20] The sentences in (22) were judged acceptable "in the context of a kids' book, or maybe a legend" (MLBW 2012):[21]

(22) Apostrophizing inanimates: verbal subject agreement

a. Sade, dıı dzęę k'e nàɨtso!
sade dıı dzeę k'e nà-**ɨ**-tso
sun DEM day LOC THM-IPFV.**2**SG.SBJ-be.strong.IPFV
'Sun, you are bright (lit. 'strong') today!' (MLBW 2012)

b. Whǫ, danıghǫ nàahtso?
whǫ danıghǫ nà-**ah**-tso
star why THM-IPFV.**2PL.SBJ**-be.strong.IPFV
'Stars, why are you bright (lit. 'strong')?' (MLBW 2012)

In the same artificially coerced context, copulas, marked for second-person subject agreement, appear with adjectival predicates:

(23) Apostrophizing inanimates: adjectival predicates and copulas

a. Dzę eyıts'ǫ tòò, danıghǫ eładıį aaht'e?
dze eyıts'ǫ tòò, danıghǫ eładıį **aah-t'e**
day and night why different **IPFV.2PL.SBJ-COP.IPFV**
'Day and night, why are you different?' (MLBW 2012)

[20] These "honorary animates" show other unusual syntactic behaviour as well; see Rice & Saxon (2005: 714–716) and Willie (2000: 365) for discussion.

[21] Other inanimates behave differently when apostrophized in this way. Most inanimate nouns trigger no subject agreement even in these contexts: a sentence like "Meat, why aren't you cooked yet?" was judged ungrammatical by my consultants when the verb was inflected for second-person agreement. Both consultants whom I asked rephrased the sentence without agreement. Similarly, adjectival predicates of most inanimates did not trigger copula insertion, even in apostrophizing contexts.

b. Xok'è, dùanìghǫ edza nelı̨?
xok'è dàanìghǫ edza **ne-lı̨**
winter why cold IPFV.2SG.SBJ-COP.IPFV
'Winter, why are you so cold?' (MLBW 2012)

c. Zah, dùanǫ edza nelı̨?
zah dàanǫ edza **ne-lı̨**
snow why cold **IPFV.2SG.SBJ-COP.IPFV**
'Snow, how come you're cold?' (AW 2012)

It is apparently the case that inanimate nouns never trigger subject agreement in normal contexts; even in artificially coerced contexts where second person is assigned to an inanimate subject, only a subset of inanimates trigger verbal subject agreement. Inanimates appear to differ qualitatively from animates with respect to subject agreement. Similar facts obtain for object agreement, as we will see in the next section.

5.2 Verbal object agreement

The marking of agreement with direct objects shows similar patterns to those of subject agreement, with animacy playing a crucial role.

Direct object agreement occurs leftward of aspect marking and subject agreement, as in (24).

(24) Direct object agreement

a. Tsù ehʔı̨ nı̨dè, wehk'è-a.
tsà h-ʔı̨ nı̨dè **we**-h-k'è ha
beaver IPFV.1SG.SBJ-shoot.IPFV if **3.OBJ**-IPFV.1SG.SBJ-shoot.IPFV FUT
'If I see a beaver, I will shoot it.' (AW 2012)

b. Nezı̨̀ xaàsenı̨̀tǫ.
ne-Ø-zı̨-̀ù xaà-**se**-nı̨̀-tǫ
THM-IPFV-be.good.IPFV-ADV THM-**1SG.OBJ**-PFV.2SG.SBJ-teach.PFV
'You taught me well.' (AW 2012)

There are several markers of third-person direct object agreement. *We-* marks third-person singular pronominal objects when the subject is non-third-person (25a), provided that the object is animate.[22] Inanimate direct objects do not trigger *we-* (25b, c).

(25) Object marking by *we-*

a. Tsù wehʔı̨ nè, wehk'è-a.
tsà weh-ʔı̨ nè **we**-h-k'è-ha
beaver OPT.1SG.SBJ-see.OPT if **3.OBJ-**IPFV.1SG.SBJ-shoot.IPFV-FUT
'If I see a beaver, I will shoot it.'

b. Jıèk'o naèdì, ıhʔà.
jıèk'o na-èh-dì ıh-ʔà
orange THM-PFV.1SG.SBJ-buy.PFV PFV.1SG.SBJ-eat.PFV
'I bought an orange and ate it.' (AW 2012)

[22] Overt nominal objects do not generally trigger direct object agreement in this language. "In the northern languages by and large, third-person object inflection is in complementary distribution with an overt noun phrase object" (Rice & Saxon 2005:720). See Saxon (1986) for discussion.

c. *Jıèk'o naèdì, wıhʔà.
jıèk'o na-èh-dì we-ıh-ʔà
orange THM-PFV.1SG.SBJ-buy.PFV 3.OBJ-PFV.1SG.SBJ-eat.PFV
(Intended: 'I bought an orange and ate it.')[23] (AW 2012)

Third-person plural animate objects are marked by *gi-*, which is also ungrammatical with inanimate objects:

(26) Object marking by *gı-*

a. Gısınìyaahtì nıdè, ededı sìı naxesınìyagetı ha.
gı-sınìya-ah-tı nıdè
3PL.OBJ-THM-IPFV.2PL.SBJ-judge.IPFV if
ededı sìı naxe-sınìya-ge-tı ha
3 FOC 2PL.OBJ-THM-IPFV.3PL.SBJ-judge.IPFV FUT
'If you judge them, they will judge you.' (MLBW 2011)

b. Segha ełexèyıhtà ha.
se-gha ełe-xè-**ye**-eh-tà ha
1SG-for RECP-with-**4.OBJ**-IPFV.3.SBJ-add.IPFV FUT
'She is going to add them together for me.'
(Tłı̨chǫ Community Services Agency 2007)

c. *Segha ełexègıhtà ha.
se-gha ełe-xè-**gı**-eh-tà ha
1SG-for RECP-with-**3PL.OBJ**-IPFV.3.SBJ-add.IPFV FUT
'She is going to add them together for me.' (MLBW 2011)

The only direct object agreement markers that may refer to inanimate objects are the class of anaphors, of which there are several in Tłı̨chǫ Yatıì: the reflexive, reciprocal, and disjoint. The first needs no explanation here. The second indicates a plural object coindexed with a plural subject where the verb has an interpretation of mutuality (27). The third indicates an object that is *not* coindexed with the subject (28).[24] None of the anaphors is specified for number, except that semantically, of course, the reciprocal is only compatible with subjects referring to two or more entities.

(27) Anaphoric object marking: reciprocal

a. Dałets'eeke.
da-ełe-ts'ee-ke
THM-RECIP-PFV.1PL.SBJ-ask.PFV
'We asked each other.' (Tłı̨chǫ Community Services Agency 2007)

b. Behchı̨̀ ełenìdǫǫ̀ łeetła.
behchı̨̀ ełe-nìdǫǫ̀ łe-e-tła
vehicle RECP-facing RECP-PFV-meet.PFV
'The vehicles met each other head-on.'
(Tłı̨chǫ Community Services Agency 2007)

[23] (25c) could only mean "I bought an orange$_i$ and ate him$_j$" (Archie Wedzin, pc, 2012).
[24] See Saxon (1986) for extensive treatment of the disjoint anaphor, and Rice & Saxon (2005) for a discussion of its place in clause structure.

(28) Anaphoric object marking: disjoint

a. Wek'èèt'ıı̨ ełàyıhwhı sǫ̀ǫ̀!
wek'èèt'ıı̨ ełà-**ye**-ıh-whı sǫ̀ǫ̀
laziness THM-**4.OBJ**-OPT.3.SBJ-kill.OPT PROH
'May she/he not be lazy!' (Lit., laziness had better not kill him/her!)
(Rice & Saxon 2005:738, citing P. Rabesca, pc, 2001)

b. Madlę̀ gozì nıìchì, Mıshè ts'ǫ̀ yeèk'a.
Madlę̀ gozì nı-ì-chì
Madeleine ball THM-PFV.3.SBJ-take.chunky.object.PFV
Mıshè ts'ǫ̀ **ye**-è-k'a
Michel to **4.OBJ-**PFV.3.SBJ-throw.chunky.object.PFV
'Madeleine took the ball and threw it to Michel.' (AW 2012)

c. Madlę̀ gozì nàke nıìle, Mıshè ts'ǫ̀ yeèdè.
Madlę̀ gozì nàke nı-ì-le
Madeleine ball two THM-PFV.3.SBJ-take.plural.objects.PFV
Mıshè ts'ǫ̀ **ye**-è-dè
Michel to **4.OBJ-PFV.3.SBJ**-throw.plural.objects.**PFV**
'Madeleine took two balls and threw them to Michel.' (AW 2012)

Notice that the anaphors in these examples are compatible with both animate (27a, 28a) and inanimate (27b, 28b, c) objects. Therefore we can say that whereas the other object agreement markers impose an animacy restriction on the objects to which they refer, the only restrictions affecting anaphors are those of coindexing. The properties of the object agreement markers are summarized in Table 4.

Object marker		Restrictions	
we-	3rd person; non-3rd person subject	animate object	
gı-	3rd person; non-3rd person subject	animate object	plural
ede-		coindexed with subject	
ełe-		coindexed with subject	mutuality
ye-	3rd person; 3rd person subject	*not* coindexed with subject	

Table 4: Restrictions on object markers.

Inanimate nouns may not be referred to with the direct object markers *we-* or *gı-* and may not be specified for plural.[25] When the subject of a transitive verb is non-third-person, an animate object may be referred to with *we-,* or *gı-* if it is plural; however, an inanimate object may only be marked by by zero, or by the disjoint anaphor if the verb's subject is third person. In other words, inanimate nouns occupy the least privileged spot with respect to direct object marking.

5.3 Postpositional agreement

In Tłı̨chǫ Yatıì, as in other Dene languages, postpositions may show inflection for the person and number of their arguments. This fact is demonstrated in (29), where a first-person singular pronominal argument of *gha* 'for' (a) contrasts with a third-person plural argument (b).

[25] There is another object marker *gı-* which is etymologically a coalescence of *ye-* 'disjoint anaphoric object' and *ge-* 'animate plural subject'. It refers to a third-person object, whether animate or not, acted on by an animate plural subject (Saxon 1986: 105), and is not relevant to the argument of this paper.

(29) Postpositional object marking

a. Dıı kw'à segha daɻka.
dıı kw'à **se-gha** da-ɻ-ka
DEM plate **1SG-for** up-IPFV.2SG.SBJ-hold.IPFV
'Hold us this plate for me.' (Tłı̨chǫ Community Services Agency 2007)

b. Gıgha gokwɻ nanek'à.
gı-gha gokwɻ na-ne-k'à
3PL-for axe THM-IPFV.2SG.SBJ-file.IPFV
'File the axe for them.' (Tłı̨chǫ Community Services Agency 2007)

The arguments of the postpositions in (29) are animate. Inanimates do not trigger the number marking that we see in (29b), and in fact third-person plural marking is ungrammatical when referring to inanimate arguments:

(30) Ungrammaticality of plural PP object agreement with inanimates

a. Naxɻ tsekoa gıgà naahza nì dè, tsekoa gıʔı̨ɻ naahza nì dè?
naxɻ [tsekoa gı-gà] na-aah-za nì dè
2PL child 3PL-beside THM-IPFV.2PL.SBJ-stand.IPFV QN or
[tsekoa gıʔı̨ɻ] na-aah-za nì dè
child 3PL-behind THM-IPFV.2PL.SBJ-stand.IPFV QN or
'Are you all beside the children or behind them?' (AW 2012)

b. Naxɻ dechɻ wegà naahza nì dè, dechɻ gıʔı̨ɻ naahza nì dè?
naxɻ [dechɻ we-gà] na-aah-za nì dè
2PL tree 3-beside THM-IPFV.2PL.SBJ-stand.IPFV QN or
dechɻ gıʔı̨ɻ na-aah-za nì dè
[tree 3PL-behind] THM-IPFV.2PL.SBJ-stand.IPFV QN or
'Are you all beside the trees or behind them?' (AW 2012)

c. * Naxɻ dechɻ gıgà naahza nì dè, dechɻ gıʔı̨ɻ naahza nì dè?
naxɻ [dechɻ gı-gà] na-aah-za nì dè
2PL tree 3PL-beside THM-IPFV.2PL.SBJ-stand.IPFV QN or
[dechɻ gıʔı̨ɻ] na-aah-za nì dè
tree 3PL-behind THM-IPFV.2PL.SBJ-stand.IPFV QN or
(Intended: 'Are you all beside the trees or behind them?') (AW 2012)

We see, therefore, that not only are inanimate nouns uniquely underprivileged in the subject and object agreement systems, but as objects of postpositions as well.

6 Analysis

The data in the previous section have shown that inanimate nouns pattern in a way radically different from animates. Animates, but not inanimates, may trigger plural agreement for subject and object on the verb and for objects of postpositions. A small subclass of inanimates referring to natural forces may trigger second person agreement on verbs when apostrophized in artificially coerced contexts, but the great majority of inanimates do not.

6.1 Personless inanimates

Since Benveniste (1974), it has been recognized that nouns may behave as though they lack Person. In his original formulation, nouns in general had this characteristic: in other words, third person was in fact the manifestation of Personlessness. This analysis is appealing because it allows us to reduce the complexity of person inflection: Anderson (1992:

92), for example, treats it as the interaction of features [me] and [you], where third person is {[-me], [-you]}.[26]

In recent years it has been recognized that this picture requires finer-grained distinctions. Béjar (2003), in analyzing the agreement systems of Georgian and Nishnaabemwin, finds a necessity to distinguish between different kinds of third person. I suggest that the agreement system of Tłı̨chǫ Yatìì displays such a distinction as well, and that it is animacy that distinguishes the two kinds, inanimate nouns being truly personless while animates bear a [PERSON] feature but no further specification.

Animate nouns can be speakers, listeners or referents, while inanimates are ordinarily restricted to being referents. This fact hints at a basic semantic difference between the two. In Tłı̨chǫ Yatìì, this semantic difference is reflected in morphological and syntactic structure: animates can trigger various morphological inflections for person and number that inanimates cannot.

I posit the system in Figure 1, where [PERSON] primarily distinguishes animates from inanimates: those nouns that trigger inflectional agreement from those that do not. Nouns that bear [PERSON] are licensed to bear [PARTICIPANT], which separates discourse participants from all other referents; [SPEAKER] then separates first from second person.

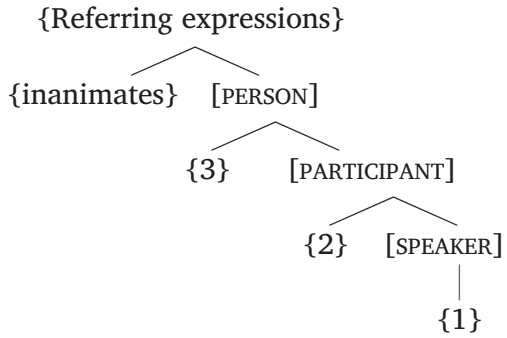

Figure 1: Feature geometry.

This geometry expands upon that of Harley & Ritter (2002: 486), on which it is partly based, by adding the feature [PERSON] to separate animates from inanimates.

The facts presented in this paper might lead one to suppose that inanimate nouns also lack Number. While this is a tempting analysis, I believe that it is incorrect. The Dene system of classificatory verbs, by which sets of contrasting suppletive verb roots are distinguished according to the properties of their subjects or objects, is sensitive to the number of subjects and objects, even when these are inanimate nouns. I therefore conclude that the absence of *inflectional* Number realization with inanimate subjects is a consequence of their lack of Person, since Number and Person inflection are fused in this language.

6.2 Effects in the morphosyntax

The system in Figure 1 plays out in the morphosyntax of Tłı̨chǫ Yatìì in the following manner.

Inflectional number marking is directly dependent upon the [PERSON] feature. Without [PERSON], inflectional number is unlicensed, resulting in the observed fact that inanimate nouns fail to trigger number agreement in three different domains: verbal subject agreement, object agreement and postpositional agreement.[27] Without [PERSON], person inflection is impossible on verbs with subects drawn from the majority of inanimate nouns

[26] See Harley & Ritter (2002) for discussion of the evolution of this idea.

[27] We may tentatively add a fourth domain diachronically: in an earlier stage of the language, and in other Northeastern Dene languages, plural animate nouns bore a suffix *–ke* (Leslie Saxon, pc, 2007; Petitot, 1876:lii). Morphological plural marking on nouns is not a productive process in the modern language.

(roughly, those to which agency cannot be attributed). Finally, it is the need to agree with a [PERSON] feature that leads to the insertion of copulas with adjectival predicates of animate subjects.[28]

6.3 Copula insertion

The presence of copulas in adjectival predicates of animate subjects and their absence from such predicates of inanimate subjects can be explained by a lack of Person features on inanimates, as discussed in the previous section. The current section explores the reasons for the insertion of copulas (rather than another verb) and the probable locus of insertion.

The Personlessness of inanimate nouns would have no consequences for predicates unless there were a requirement for Person, if present, to be realized in agreement. I formulate this requirement as in (31):

(31) Morphological Realization:
Φ-features must be realized in agreement morphology at spellout.

If (31) is a correct description of the principles at work, we expect that the semantic contribution of any element inserted to satisfy Morphological Realization must be minimal or zero; otherwise, the compositional semantics of predicates of animate and inanimate subjects would differ, which does not appear to be the case. That being so, the semantically minimal element that is capable of hosting Φ-agreement must be a copula, as any other verb has more complex semantics.

A question that arises is where in the clause structure this insertion occurs. Word-order data can resolve this question. It is clear that the copula, when it is present, is inserted inside TP, because it occurs before future and modal marking in linear order:[29]

(32) Copula insertion inside TP

a. Chekoa ɮɮzhaelį ha.

chekoa	ɮɮzha	Ø-lį	ha
child	shy/ashamed	IPFV.3.SBJ-COP.IPFV	FUT

'The child will be shy/ashamed.' (MLBW 2009)

b. Eyaelį welè!

eya	Ø-lį	welè
sick/painful	IPFV.3.SBJ-COP.IPFV	JUSS

'Let him be sick!' (AW 2012)

The next question is whether the copula is merged with the adjective at A (amounting to incorporation), or in some intervening projection. The first cannot be correct. Copulas in this language are fully verbal, with inflection for aspect and Φ-agreement. This suggests a merger at v or higher, if v is a category-forming head that forms verbs (Halle & Marantz 1993). Furthermore, adjectives' very lack of inflection would

[28] As indicated in footnote 17, section 4.1, the set of nouns that trigger the animacy effects detailed in this paper varies from language to language within the Dene family, and even intralinguistically from speaker to speaker. An anonymous reviewer wonders whether the three main phenomena described and analyzed here (verbal subject agreement, object agreement, and copula insertion with adjectival predicates) might be sensitive to different categories for some languages or speakers: for example, copula insertion might be triggered by nouns referring only to humans, and subject agreement by those referring to humans and animals. This may be so: in Dëne Sułıné, a close relative of Tłı̨chǫ Yatìı, it is apparently possible to say *łı̨ ʔeya* 'the dog is sick', without a copula (Cook, 2004: 295). Whether the phenomena investigated herein are unified across Dene languages as a Person distinction, and what set of nouns bears Person in a given language, is a topic for further research.

[29] I argue in a separate paper (Welch 2015) that future is realized at T (or INFL) in Tłı̨chǫ Yatìı, and that past marking is not (and in fact is optional and adjunctive).

seem to preclude an inflected item of category A, which is what would result from the copula merging into A.

On the other hand, merging them at v or Asp yields the result that their aspect and agreement inflection occurs outside of A, in accordance with the facts.

The locus of morphological agreement seems to be Asp rather than T in this language. As we have remarked already (sections 2 and 6.1), aspectual marking is typically fused with subject agreement marking; tense marking is not. Since copulas with AP predicates realize agreement morphology, and since word-order evidence points to their insertion inside TP and outside AP, I conclude that they are merged in Asp, as in Figure 2.

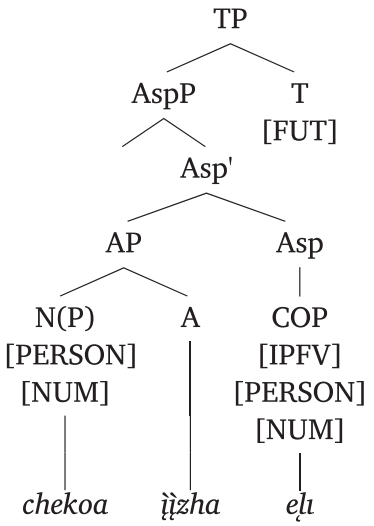

Figure 2: Locus of copula insertion

7 Conclusion

Adjectives pose a unique problem to the computational system of Tłı̨chǫ Yatıì in being unable to agree with the Person feature that is proper to animate subjects. Copulas are therefore inserted at Asp in order to realize agreement morphologically. The failure of inanimate subjects to trigger inflectional person and number agreement on verbal predicates is paralleled by their failure to trigger the insertion of a copula (which, like other verbs, is marked for person and number agreement) with adjectival predicates.

Much recent work has assumed without comment that inanimacy is realized syntactically by a lack of formal Person (e.g., Adger & Harbour 2007; Alexiadou & Anagnostopoulou 2006; Bartošová & Kučerová 2015; Demonte, Fernández-Alcalde, & Pérez-Jiménez 2011; Ghomeshi & Massam 2015; Piriyawiboon 2007; Piriyawiboon 2013; Richards 2008; Rooryck 2000). The patterns of adjectival and verbal agreement in Tłı̨chǫ Yatıì are evidence that these assumptions are in fact correct for some languages. The Tłı̨chǫ data are part of a broader pattern of instantiation in the Dene language family as a whole (Lochbihler, Oxford & Welch 2015), so personlessness as the syntactic realization of inanimacy may well be a family-wide phenomenon.

8 Abbreviations

The following abbreviations appear in the glosses: AR = areal; CJ = conjugation marker; CLF = classifier; COP = copula; DEM = demonstrative; FOC = focus; FUT = future; IPFV = imperfective; JUSS = jussive; OBJ = object; OPT = optative; PFV = perfective; PL = plural; POSS = possibility; PROH = prohibitive; RECP = reciprocal; REL = relativizer; SBJ = subject; THM = thematic prefix

Competing Interests

The author declares that he has no competing interests.

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