# Propping up predicates: Adjectival predication in Ttichch Yatii** 

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#### Abstract

In Tł̨chǫ Yatıï (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: Tłł̨chǫ; Dogrib; copula; adjective; agreement

## 1 Introduction

This article examines an asymmetry in the behaviour of predicative adjectives in Thccho 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 elı.
chekoa [edı $\emptyset$-lı]
child warm/feverish 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)

[^0]| c. Ixę̀e edı. lxę̀e yesterday 'Yesterday | edı warm/feverish was warm. ${ }^{2}$ |  |
| :---: | :---: | :---: |
| d. *Ixęę edı ell. |  |  |
| 1xę̀e | [edı | $\left.\emptyset-1{ }_{1}\right]$ |
| yesterday | warm/feverish | IPFV.3.SBJ-COP.IPFV |
| (Intended | esterday was | arm.') |

(MLBW 2009)
(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 $\Phi$-features, whether interpretable or uninterpretable, to be checked. That is, an unmatched feature, even if interpretable, will cause the derivation to crash.

## 2 Tłlıcḥ̨ Yatıì and its morphosyntax

Thtcho Yatıì (formerly known as Dogrib) is a Dene language spoken in the communities of the Tłıcho Government and in nearby Yellowknife, Ndilo and T’è?ehdaà (Dettah), Northwest Territories.
In common with other Dene languages, Tłtchǫ Yatì 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

[^1]and aspect, which immediately precede the stem. Thirdly, object agreement occurs outside of subject agreement. ${ }^{6}$
An example of a representative Thtcho verb appears in (2).
(2) Verb morphology in Tł̌cho Yatıì

Naxısinıyats'eehti.
$\begin{array}{llllllll}\text { naxı- } & \text { sinì- } & \text { ya- } & \text { ts'e- } & \text { e- } & \varnothing \text { - } & \text { h- } & \text { tı } \\ \text { 2PL.OBJ- } & \text { THM- } & \text { THM- } & \text { 1PL.SBJ- } & \text { CJ- } & \text { IPFV- } & \text { CLF- } & \text { speak.IPFV }\end{array}$
(MLBW 2012)
This verb is inflected for subject and object agreement and aspect and has two lexical portions: the thematic prefixes sinì- and $y a$-, which together etymologically mean something like 'prepared words', and the stem $t$ (etymologically 'speak'), which together with the classifier morpheme ( $h$ - in this case) comprise the verb theme sinìya-h-t 'judge'.'
As can be seen by comparing the morpheme-by-morpheme gloss with the word, Ttıcho 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 Tltcho Yatıì that is uninflecting, hosting no aspect or agreement morphology. The class of predicative adjectives in Tł九chǫ Yatì reveals facts about agreement and predication that provide a window into the realization of $\Phi$-features.

## 3 Adjectives in Tł̨chǫ Yatıì

Adjectives in TłŁcho Yatı̀ 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 Tł̨chọ Yatı̀ by stative verbs. Nevertheless, adjectives do exist as a class, and can act either as predicates or as

[^2]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't 'correct' ( $4 \mathrm{c}-\mathrm{d}$ ). By contrast, the stative verbs etedeht't 'be poor/pitiful' and etèak' 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 ehłt t'à, edı ehłt.

| [eya | h-l $\left.l_{l}\right]$ | t'à, |
| :--- | :--- | :--- |
| sick/painful | IPFV.1SG.SBJ-COP.IPFV | because |
| [edı | h- $l_{\ell}$ ] |  |
| warm/feverish | IPFV.1sG.SBJ-COP.IPFV |  |
| 'Because I'm sick, I'm feverish.' |  |  |

(MLBW 2009)
b. Ixęę eya ıllè.
lxęe [eya t-lè]
yesterday sick/painful PFV.3.SBJ-COP.PFV
'Yesterday he was sick.'
(MLBW 2009)
c. Edza dì̀!
edza dì̀
cold really
'[The weather] is really cold!'
(MS 2007)
d. Neyatıì ehkw'ı ha họt'e.
ne-yati-ì ehkw's ha hott'e
2SG-word-PNS correct FUT FOC
'Your words must be correct.'
(MLBW 2012) ${ }^{13}$
e. Etedeht'ı.
etede-h-t't
THM-IPFV.1SG.SBJ-be.poor/pitiful.IPFV
'I am poor.
(MLBW 2009)
f. Tł'àreh ełèak'à.
tł'àreh 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.

[^3]
### 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 nęwq '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 ell̨ (5a), while in (5b), edza 'cold' is the complement of the psych verb ts'? hwho 'we think'. Adjectives are barred as complements of wegaat't 's/he appears, is seen as' in (5c), which takes clausal complements (5d). In (5e) we see the adjective ezhl 'crazy' appearing with the copula, and in (5f), ezhı taking computer ghq 'about computers' as a complement. In ( $5 \mathrm{~g}, \mathrm{~h}$ ) the adjectives deèdlly 'original/authentic' and edza 'cold' appear attributively, following the nouns they modify, in contrast to the noun nıhtt'e 'paper/ book' (5i), which (in compound nouns) precedes the noun it modifies.
(5) Properties of adjectives
a. Eyı ts'èko sì̀ ahxe ell.

| ey1 | ts'èko | sìı | ahxe | $\emptyset-l_{l}$ |
| :--- | :--- | :--- | :--- | :--- |
| DEM | woman | FOC | rich | IPFV.3.SBJ-COP.IPFV |

(MLBW 2009)
b. Edza ts'łhwho.
edza ts'ulh-wq
cold IPFV.1PL.SBJ-think.IPFV
'We think it's cold.'
(MLBW 2009)
c. *İ̀zha1 wegaat'?.

ذ̀̀zha we-gaa-Ø-t't
shy 3.OBJ-THM-IPFV.3.SBJ-See.IPFV
(Intended: 'She looks shy.')
(MLBW 2009)
d. Gıgha hozzz laànì gıgaat'k.
gl-gha ho-l-zt laànì g1-gaa-Ø-t't
3PL-for THM-IPFV.3.SBJ-be.good.IPFV like 3PL-THM-IPFV.3.SBJ-See.IPFV
'They look like they enjoy it.' (Th̨chọ Community Services Agency 2007)
e. Ezhat ehll.
ezhı̣ h-lı
crazy IPFV.1sG.SBJ-COP.IPFV
'I'm crazy.'
(MLBW 2009)
f. Computerghọezhḷ laàht'e.
computer gho ezh ${ }_{l}$ laà-h-t'e
computer about crazy like-IPFV.1sG.SBJ-COP.IPFV 'I'm crazy about computers.'
(MLBW 2009)
g. Dil sìl godı deèdllıt hǫt'e.
dı sì godı deèdlı họ-t'e
DEM FOC story real/worthy IPFV.3.SBJ-IPFV-COP.IPFV
'This is a real story.'
(MLBW 2009)

[^4]h. Dzęedzaanìhòkw'ı ha.
dzę edza- $\mu$ nì-hò-kw'ı ha
day cold-REL THM-AR.IPFV-arrive.IPFV FUT
'Cold days will come.'
(MLBW 2009) ${ }^{15}$
i. Eyı n̨̨htłèkò̀ hǫt'e.
eyı nųhtl'èkò ha-l-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 ì̀zha 'shy/ashamed' are adjectives (a, b), but etedeht' 'I am poor/pitiful' and xàhohdḷ 'I am proud' are fully inflected verbs (c, d).
(6) Adjectives versus stative verbs

a. Ahxe ehłt. $\begin{array}{ll}\text { ahxè } & \mathrm{h}-\mathrm{l}_{\ell} \\ \text { rich } & \text { IPFV.1sG.SBJ-COP.IPFV }\end{array}$
'I am rich.'
(MLBW 2009)
b. İ̀̀zhav ehłt.
ì̀zha $\quad \mathrm{h}-\mathrm{l}$ t
shy IPFV.1SG.SBJ-COP.IPFV
'I am shy.'
(MLBW 2009)
c. Etedeht' ${ }^{\prime}$.
etede-h-t't
THM-IPFV.1SG.SBJ-be.poor/pitiful.IPFV
'I am poor.'
(MLBW 2009)
d. Sezha gıgho xàhohdì.
se-zha gl-gho xàho-h-dì̀
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 p̨la 'tightly packed', mqq 'smelly', neqodea 'youngest', nòqht'ò 'sharp/wedge-shaped' and soèthe 'original/canonical' cannot be predicates.

[^5]| ahxe | rich/capable | !kw'oq | skinny and long |
| :---: | :---: | :---: | :---: |
| edı | warm/feverish | dla | tightly packed |
| edza | cold (weather) | maqa | smelly |
| ehkw'ı | correct | nopdea | youngest |
| etad!! | different/foreign | nęght'ò | sharp/wedge-shaped |
| eya | sick/painful | sıdiì | funny/strange |
| ezhl/ezhine | crazy | sòo | cool/hip |
| dht'e | raw | scoitul | original/canonical |
| !ht'edé | naked | deedlut | real/worthy |
| ìzzha | shy/ashamed | weelie | fresh |

Table 1: Adjectives in Ttłcho Yatii.
(7) Attributive-only adjectives ${ }^{16}$
a. łèwò plıa
[łè-wò ılıa]
flour-skin tightly.packed
'a tightly packed flour sack'
*'The flour sack is tightly packed.'
(MS 2009)
b. t'asìts'ì̀ mąą
[t'asìts'ıì mąą]
garbage smelly
'smelly garbage'
*'(The) garbage is smelly.'
(MS 2009)
c. tha noodea
[th-a noqdea]
dog-DIM youngest
'the youngest puppy'
*'The puppy is the youngest.'
(MLBW 2009)
d. *Tła noqdea ell.
thl-a [noqodea $\varnothing$ - $l_{2}$ ].
dog-DIM youngest IPFV.3.SBJ-COP.IPFV
(Intended: 'The puppy is the youngest.')
(MLBW 2009)
e. datı nọ̀oht'ò
[datı nò̀oht'ò]
needle sharp/wedge-shaped
'a sharp-sided needle' (e.g., a leather needle)
*‘The needle is sharp-sided.'
(MS 2009)
f. dı bò soọ̀ł!
[dıı bọ̀ sọòłır]
DEM meat authentic/original
'this authentic meat'
*'This meat is authentic.'
The rest, to varying degrees, are acceptable as predicates; however, only the $P$ (redicative)adjectives in Table 2 commonly occur as predicates.

[^6]| ahxe | rich | eya | sick/painful |
| :--- | :--- | :--- | :--- |
| edı | warm/feverish | ezh!(ne) | crazy |
| edza | cold | ì̀zha | 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 $\mathrm{T}_{\imath}$ chọ Yatì̀ 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 ehłt t'à, edı ehłṭ.

| [eya | $\left.\mathrm{h}-\mathrm{l}_{4}\right]$ | t'à, because |  |
| :---: | :---: | :---: | :---: |
| sick/painful | IPFV.1SG.SBJ-COP.IPFV |  |  |
| [edı | $\mathrm{h}-\mathrm{l}_{\ell}$ ] |  |  |
| warm/feverish | IPFV.1SG.SBJ-COP.IPFV |  |  |
| 'Because I'm sic | k, I'm feverish.' |  | (repeated from (4a)) |

b. Ixęę eyąlè.
lıxę̀e [eya t-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 ( $8 \mathrm{a}, \mathrm{b}$ ), but not in others ( $9 \mathrm{a}, \mathrm{b}$ ).
(9) Bare adjectival predicates
a. Selakw'oọ̀hazọ̀ eya (*ellı/ *gqlılı).
[se-lakw'ọ̀ hazǫ̀̀] eya
1sG-finger all sick/painful
'My fingers are all sore.'
(MLBW 2009)
b. Dıı dzęè edza (*elı̣).

| dıı | dzęè | 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. İ̀zzha 'shy/ashamed' may be predicated of chekoa 'children' only if the predicate includes the copula ell (a); without the copula (b), the sentence is ungrammatical. The same is true of eya 'sick' and its subject tth '(the) dog' in (10c, d).
(10) Copulas and animate subjects
a. Chekoa ì̀zha gıtlı dì̀.

| chekoa | [ì̀zzha | glt |  |
| :---: | :---: | :---: | :---: |
| child | shy | IPFV. | ally |
| The children are really shy.' |  |  |  |

(MS 2007)
b. *Chekoa ì̀zzha dì̀.
chekoa [ì̀̀zha] dì̀
child shy really
(Intended: ‘The children are really shy.')
(MS 2007)
c. Tty eya ell.
th [eya $\varnothing$ - $l_{\ell}$ ]
dog sick IPFV.3.SBJ-COP.IPFV
'The dog is sick.'
(MLBW 2009)
d. *Tłt eya.
$\mathrm{th}_{\ell}$ 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. Eyaell.
eya $\varnothing$ - $l_{t}$
sick IPFV.3.SBJ-COP.IPFV
' S /he is sick.'
(MLBW 2009)
b. Sılà eya.
se-là eya
1sG-hand sick/painful
'My hand hurts.'
(MLBW 2009)
(12) Copulas and subject animacy (continued)
a. Edı ell.
edı $\quad$ - $l_{t}$
warm/feverish IPFV.3.SBJ-COP.IPFV
'S/he has a fever.'
(MS 2007)

[^7]b. Edi.
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 deèdll.
[godı deèdlı] / [godı] [deèdlı]
story real story real
'a real story' 'The story is real.'
(MLBW 2009)
b. *Godı deèdlı elı. godı [deèdly
$\emptyset-12]$
story real IPFV-COP.IPFV
(Intended: 'The story is real.')
(MLBW 2009)
c. Dıı bò weellı.
dı [bò weelı] / [dıı bò ] [weel $]$
DEM [meat fresh/pure] [DEM meat] [fresh/pure]
'this fresh meat'
'This meat is fresh.'
(MLBW 2009)
d. *Dılı bò weelt elı.
dı bò weel ${ }_{l} \quad \emptyset-l_{l}$
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 Thyche Yatiì takes the form of an extra mora on the final vowel: ${ }^{18}$
(14) Modification derived from predication
a. behchị̀ k'èdìı dọ̀̀ behchị̀̀ k'è- $\varnothing$-dì- $\mu \quad$ dQ-
vehicle around-IPFV.3.SBJ-drive.IPFV-REL person-PNS 'driver'
(Th̨chǫ Community Services Agency 2007)
b. Dzę edzaa nì̀rọ ha.
$\begin{array}{llll}\text { dzę } & \text { edza- } \mu & \text { nì-Q } & \text { ha }\end{array}$
day cold-REL THM-arrive.IPFV FUT
'Cold days will come.'
(MLBW 2009)

[^8]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 che$k o a$ 'child' and do 'person', are grammatical, while (15b, d), which lack copulas, are not: ${ }^{19}$
(15) Ungrammaticality of bare AP predicates of animate subjects
a. Eyı chekoa ì̀̀zzhaelı̨t gode ha nı̨wo-le.

| $\left[\begin{array}{lll}\text { eyı } & \text { chekoa } & \text { ì̀zzha } \\ \text { Ø- } 11-\mu]\end{array}\right.$ | go- $\varnothing$-de |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| DEM | child | shy | IPFV-COP.IPFV-REL | THM-IPFV-speak.IPFV |

ha ne-ne-wo-le
FUT THM-IPFV-want.IPFV-NEG
'That shy child doesn't want to speak.'
(MLBW 2009)
b. *Eyı chekoa ì̀zzhaa gode ha nıwo-le.
[eyı chekoa ì̀̀zha- $\mu$ ] go-Ø-de
DEM child shy-REL THM-IPFV-speak.IPFV
ha ne-ne-wo-le
FUT THM-IPFV-want.IPFV-NEG
(Intended: 'That shy child doesn't want to speak.')
(MLBW 2009)
c. Dọ ezhţ elıtı eyı kọ̀ nàdè.

person crazy IPFV.3.SBJ-COP.IPFV-REL DEM house THM-IPFV-live.IPFV
'The crazy person lives in that house.'
(MLBW 2009)
d. *Do ezhı̧ı eyı kò nàdè.
[dọ ezht̨- $\mu$ eyı kò 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 dzęè 'day(s)'. The clauses in (16b, d), which are versions of ( $16 \mathrm{a}, \mathrm{c}$ ) with an added copula, are ungrammatical.
(16) Ungrammaticality of copulas with AP predicates of inanimate subjects
a. Bò t̨ht'ee ladà ka whero.
[bò ı̨ht'e- $\mu$ ] ladà ka whe- 29
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 elụ ladà ka whesq.
[bò ı̨ht'e $\left.\boldsymbol{\emptyset}-1 \frac{1}{-}-\mu\right] \quad$ ladà ka whe-ro
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. Dzęę̀ edzaa nìhòkw'ı ha.
[dzęę̀ edza- $\mu$ ] nìhò-Ø-kw'1 ha
day cold-REL THM-IPFV-come FUT
'Cold days will come.'
(MLBW 2009)

[^9]d. *Dzęę edza elı̣t nìhòkw'ı ha.

| $\left[\begin{array}{lll}\text { dzęè } & \text { edza } & \varnothing-11-\mu\end{array}\right]$ | nìhò- $\varnothing$-kw'1 | ha |  |  |
| :--- | :--- | :--- | :--- | :--- |
| day | cold | IPFV-COP.IPFV-REL | THM-IPFV-come | FUT |
| (Intended: ‘Cold days will come.') |  | (M |  |  |

(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 Th̨chọ Yatıì, 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. Bògqò̀ gho shèhttı.
bò-gq̣̀ gho shè-h-tl
meat-dry of THM-IPFV.1SG.SBJ-eat.IPFV
'I'm eating drymeat.'
(MS 2009)
b. Sechı bògoq̀ ghọ shètt.
se-chı bò-gqò gho shè- $\varnothing$-tt
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 thirdperson 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 do slılàı tegeèt’’ı.

| [ey1 | dQ | $\left.s_{l} l a ̀ ı\right] ~$ | te-geè-tł’1 |
| :--- | :--- | :--- | :--- |
| DEM | person | five | water-PFV.3PL.SBJ-fall.plural.PFV |

'Those five men fell into the water.'
(ANON 2013)
b. Eyı kwe sılàı teètł'1.
[eyı kwe slà̀ı] te-è-tt'ı
DEM rock five water-PFV-fall.plural.PFV
'Those five rocks fell into the water.'
(ANON 2013)
c. Eyı dọ sılı̀̀ Tł九cho-dọò agıtt'e.
[ey1 do slàı] th̨cho-dọ- ${ }^{\text {en }}$ a-glt-t'e
DEM person five Th̨cho-person-PNS THM-IPFV.3PL.SBJ-COP.IPFV
'Those five people are Tltcho people.'
(ANON 2013)
d. Eyı tsı stlàı edzo hǫt'e.
[eyı tsı slààı edzo ha-1-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. do nàke dèè k'e eghàlageedaa sìı
[do nàke] dèè k'e eghàla-gee-da- $\mu$ sì
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. Dechı̣ gedlu sekò ga nàèyaa sì
[dechḷ k'edılı] se-kò ga nà-è-ya- $\mu$ 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'ọọhazoq̀ eya (*ellı/ *gyllıl).
[se-lakw'oòhazoò] eya $\quad$ - -1 !
1SG-finger all sick/painful IPFV.3.SBJ-COP.IPFV IPFV.3PL.SBJ-COP.IPFV
'My fingers are all sore.'
(MLBW 2009)
b. Chekoa hazqò eya (*elḷ) glll
[chekoa hazǫ̀̀] eya $\emptyset-\mathrm{l}_{1}$
gull
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 |  |
| :--- | :--- | :---: | :---: |
| Subject animacy | Animate | plural agreement-V | A + plural agreement-copula |
|  | Inanimate | V | AP |
|  |  | Modifier type |  |
|  |  | Relativized clause |  |
| Subject animacy | Animate | plural agreement-V | A + plural agreement-copula- $\mu$ |

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 nàttso!
sade dı dzeę k'e nà- - -tso
sun DEM day LOC THM-IPFV.2SG.SBJ-be.strong.IPFV 'Sun, you are bright (lit. 'strong') today!'
(MLBW 2012)
b. Who, danıgho nàahtso?
whe danıgho 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. Dzee eyıts'ǫ tòò, danıgho eładlıt aaht'e?
dze eyıts'o tòò, danıgho eładlt aah-t'e
day and night why different IPFV.2PL.SBJ-COP.IPFV 'Day and night, why are you different?'
(MLBW 2012)

[^10]b. Xok'è, dàanìgho edza nelı̣?
xok'è dàanìgho edza ne-lı
winter why cold IPFV.2SG.SBJ-COP.IPFV
'Winter, why are you so cold?'
(MLBW 2012)
c. Zah, dàano edza nelı?
zah dàano edza ne-lı
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. Tsà ehrı nı̨dè, wehk'è-a.
tsà h-?l nl̨dè 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. Nezit̀̀ xaàsenıtıto.
ne-Ø-zḷ-
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 thirdperson 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. Tsà weh̨̨ nè, wehk'è-a.
tsà weh-rl 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, ıhıà.
jıèk'o na-èh-dì 1 -rà
orange THM-PFV.1SG.SBJ-buy.PFV PFV.1SG.SBJ-eat.PFV
'I bought an orange and ate it.'
(AW 2012)

[^11]c. *Jè̀k'o naèdì, wihłà.

$\begin{array}{lll}\text { jıèk'o } & \text { na-èh-dì } & \text { we-1h-rà } \\ \text { orange } & \text { THM-PFV.1SG.SBJ-buy.PFV } & \text { 3.OBJ-PFV.1SG.SBJ-eat.PFV }\end{array}$
(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 g-
a. Gısınìyaahtì nıtdè, eded sì̀ naxesınìyagetı ha.

> gı-sınìya-ah-tı nı̨dè

3PL.OBJ-THM-IPFV.2PL.SBJ-judge.IPFV if
eded ${ }_{l}$ sì 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.'
(Tłtcho Community Services Agency 2007)
c. *Segha ełexègıhtà ha.
se-gha ełe-xè-g1-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 $\mathrm{T}_{\imath}$ chọ 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.'
(Th九chę Community Services Agency 2007)
b. Behchit̀̀ ełenìdọ̀̀ łeetła.
behchị̀ ełe-nìdọ̀ łe-e-tła
vehicle RECP-facing RECP-PFV-meet.PFV
'The vehicles met each other head-on.'
(Thtchọ Community Services Agency 2007)

[^12]Anaphoric object marking: disjoint
a. Wek'èèt'tı ełàyıhwhı sọ̀̀̀!
wek'èèt'tı ełà-ye-1h-whı sọ̀̀
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'ò yeèk'a.

Madlę̀ gozì ni-ì-chì
Madeleine ball THM-PFV.3.SBJ-take.chunky.object.PFV
Mishè ts'ò 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
nil̀le, Mıshè ts'ǫ yeèdè.
Madlę̀ gozì nàke ni-ì-le
Madeleine ball two THM-PFV.3.SBJ-take.plural.objects.PFV
Mıshè ts'ò 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- | $3^{\text {rd }}$ person; non-3 $3^{\text {rd }}$ person subject | animate object | plural |
| gI- | $3^{\text {rd }}$ person; non-3 $3^{\text {rd }}$ person subject | animate object |  |
| ede- |  | coindexed with subject | mutuality |
| ete- |  | coindexed with 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 gl- 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 gl- 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 Thıcho 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 firstperson singular pronominal argument of gha 'for' (a) contrasts with a third-person plural argument (b).

[^13](29) Postpositional object marking
a. Dil kw'à segha dąka.

| dı1 | kw'à | se-gha | da-l-ka |
| :--- | :--- | :--- | :--- |
| DEM | plate | 1sG-for | up-IPFV.2SG.SBJ-hold.IPFV |

'Hold us this plate for me.' (Th̨cho Community Services Agency 2007)
b. Glgha gokwı nanek'à.
g1-gha gokwt na-ne-k'à
3PL-for axe THM-IPFV.2SG.SBJ-file.IPFV
'File the axe for them.' (Tłұcho 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. Naxıl tsekoa gıgà naahza nì dè, tsekoa gır̀̀̀ naahza nì dè?

| naxt | [tsekoa | g1-gà] | na-aah-za | nì |
| :---: | :---: | :---: | :---: | :---: |
| 2PL | child | 3pl-beside | THM-IPFV.2PL.SBJ-stand.IPFV | QN |
| sekoa | g12̀̀̀] | na-a | nì | dè |
| child | 3pl-behind | THM-IPF | .2PL.SBJ-stand.IPFV QN | or |

'Are you all beside the children or behind them?'
(AW 2012)
b. Naxıl dechị wegà naahza nì dè, dech ${ }_{l}$ gı1̣̀̀ naahza nì dè?
 'Are you all beside the trees or behind them?'
c. * Naxt dechı̣ gıgà naahza nì dè, decḥ̂ gıł̣̀̀t naahza nì dè?

| naxt [decht | g1-gà] | na-aah-za | nì | İ |
| :---: | :---: | :---: | :---: | :---: |
| 2PL tree | 3pl-beside | THM-IPFV.2PL.SBJ-stand.IPFV |  |  |
| [dech! | g12̀̀̀ | na-aah-za | nì dè |  |
| tree | 3pl-behind | THM-IPFV.2PL.SBJ-stand.IPFV | QN or |  |

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 $\{[-\mathrm{me}],[-y o u]\} .{ }^{26}$
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 Th̨chọ Yatı̀ 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 Tłtcho Yatıì, 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.
\{Referring expressions\}

$\{3\}$ [PARTICIPANT]

\{1\}
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 Thcho Yatì 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

[^14](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:
$\Phi$-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 $\Phi$-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 ̀̀̀̀zhaelı ha.

| chekoa ì̀̀zha | $\emptyset-l_{l}$ | ha |
| :--- | :--- | :--- |
| child shy/ashamed | IPFV.3.SBJ-COP.IPFV | FUT |
| 'The child will be shy/ashamed.' |  |  |

(MLBW 2009)
b. Eyaell welè!

| eya | $\varnothing$ - $l_{l}$ | 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 $\Phi$-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

[^15]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 $\mathrm{Tl}_{\imath} c h \neq$ Yatı̀ 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 Tłtchq Yatì are evidence that these assumptions are in fact correct for some languages. The Th̨cho 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: $\mathrm{AR}=$ areal; $\mathrm{CJ}=$ conjugation marker; CLF = classifier; COP = copula; DEM = demonstrative; $\mathrm{FOC}=$ focus; FUT $=$ future; IPFV = imperfective; JUSS = jussive; OBJ = object; OPT = optative; PFV = perfective; PL = plural; POSS $=$ possibility; $\mathrm{PROH}=$ prohibitive; $\mathrm{RECP}=$ reciprocal; $\mathrm{REL}=$ relativizer; SBJ = subject; THM = thematic prefix

## Competing Interests

The author declares that he has no competing interests.

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How to cite this article: Welch, Nicholas. 2016. Propping up predicates: Adjectival predication in Tticheq Yatii. Glossa: a journal of general linguistics 1(1): 2. 1-23, DOI: http://dx.doi.org/10.5334/gjgl. 7

Published: 01 April 2016
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[^0]:    * I am grateful to Marie-Louise Bouvier White, Mary Siemens, Archie Wedzin and two anonymous consultants for sharing their language with me, and to Susana Bejar, Bronwyn Bjorkman, Elizabeth Cowper, Keffyalew Gebregziabher, Arsalan Kahnemuyipour, Monica Irimia, Diane Massam, Will Oxford, Keren Rice, Elizabeth Ritter, Leslie Saxon and two anonymous reviewers for feedback and suggestions. Research for this article was supported by the Social Sciences and Humanities Research Council of Canada (Doctoral Scholarship 752-2010-2724), the University of Calgary, the University of Toronto, the Northern Science Training Program, the Jacobs Research Funds, and the Phillips Fund for Native American Research
    ${ }^{1}$ The examples of Thıcho 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 Thtchǫ Yatıì. An apostrophe represents glottalization, an ogonek (ą) nasalization, and a grave accent (à) low tone. ch $=\left[\mathrm{t}^{\mathrm{h}}\right]$; dz $=[\mathrm{ts}] ; \mathrm{gw}=\left[\mathrm{k}^{\mathrm{w}}\right]$; kw $=\left[\mathrm{k}^{\mathrm{wh}}\right]$; sh $=\left[\int\right]$; ts $=\left[\mathrm{ts}{ }^{\mathrm{h}}\right] ; \mathrm{y}=[\mathrm{j}]$; $\mathrm{dl}=[\mathrm{t}]] ; \mathrm{gh}=[\mathrm{y}] ; \mathrm{j}=[\mathrm{t}] ; \mathfrak{l}=[\mathrm{l}] ; \mathrm{tl}=\left[\mathrm{tt}^{\mathrm{h}}\right] ; \mathrm{wh}=[\mathrm{m}] ; \mathrm{zh}=[3]$.

[^1]:    ${ }^{2}$ 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 Th̨cho Yatıì 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 Thicho Yatì̀Multimedia Dictionary (Tł九chọ Community Services Agency 2007), Lynda Ackroyd's Dogrib Grammar (1982) and the Dogrib New Testament (Dogrib Translation Committee 2003).
    ${ }^{4}$ In Tłıcho Yatı̀ (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 Thtcho Yatiì employs only one of the copulas (ely in the third-person singular imperfective), though in the closely related Slave dialect complex (Rice 1989: 389), the other copula also appears (ot'e, cognate with Tlıcho hot'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 Tł̧chọ Yatiì, diachronic fusional processes have rendered stems morphologically opaque (Ackroyd 1982: 76; Jaker 2012: 36). The majority of Tłıcho stems are of the form CV, though CVh and CV: stems also exist (Leslie Saxon, pc, 2012).

[^2]:    ${ }^{6}$ 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).
    ${ }^{8}$ Thcho Yatı̀ 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).

[^3]:    ${ }^{11}$ In Thcho Yatì̀, 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 hotte 'must' is a lexicalization of the clausal/verum focus marker hot'e taking a future clause in its scope.

[^4]:    ${ }^{14}$ The relationship between adjectives and copulas is not complementation in the selectional sense. Rather, as I claim in Section 5, copulas appear to realize $\varphi$-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.

[^5]:    ${ }^{15}$ The suffix glossed REL in (5h) is discussed in section 4.2.

[^6]:    ${ }^{16}$ I do not investigate these M (odifying)-adjectives in this paper, confining my analysis to predication.

[^7]:    ${ }^{17}$ 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.

[^8]:    ${ }^{18}$ This suffix has the effect of relativizing predicates; see Saxon (2000) for discussion and analysis.

[^9]:    ${ }^{19}$ Ezhl 'crazy', which appears in (15c) is a variant form of ezhųne.

[^10]:    ${ }^{20}$ 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.

[^11]:    ${ }^{22}$ 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.

[^12]:    ${ }^{23}(25 c)$ could only mean "I bought an orange $e_{i}$ and ate him" (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.

[^13]:    ${ }^{25}$ There is another object marker gl- 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.

[^14]:    ${ }^{26}$ 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.

[^15]:    ${ }^{28}$ 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 Sułné, a close relative of Th̨chọ Yatı̀̀, it is apparently possible to say $\mathrm{Z}_{\text {R }}$ Reya '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 Ttıchǫ Yatıì, and that past marking is not (and in fact is optional and adjunctive).

