



Boletim do Museu Paraense Emílio Goeldi. Ciências Humanas

ISSN: 1981-8122

ISSN: 2178-2547

MCTI/Museu Paraense Emílio Goeldi

Auwera, Johan van der; Krasnoukhova, Olga  
Revisiting postverbal standard negation in the Jê languages  
Boletim do Museu Paraense Emílio Goeldi. Ciências Humanas, vol. 17, no. 2, e20210062, 2022  
MCTI/Museu Paraense Emílio Goeldi

DOI: <https://doi.org/10.1590/2178-2547-BGOELDI-2021-0062>

Available in: <https://www.redalyc.org/articulo.oa?id=394072583008>

- How to cite
- Complete issue
- More information about this article
- Journal's webpage in redalyc.org

UABM  
redalyc.org

Scientific Information System Redalyc  
Network of Scientific Journals from Latin America and the Caribbean, Spain and Portugal

Project academic non-profit, developed under the open access initiative

## Revisiting postverbal standard negation in the Jê languages Revisitando a negação padrão pós-verbal nas línguas Jê

Johan van der Auwera<sup>I</sup>  | Olga Krasnoukhova<sup>I, II</sup> 

<sup>I</sup>University of Antwerp. Antuérpia, Bélgica

<sup>II</sup>Leiden University. Leiden, Netherlands

**Abstract:** In the Jê languages standard negators tend to take a post-verbal position. This paper asks why this should be the case and therefore discusses earlier accounts relating Jê standard negators to either negative verbs or privative postpositions. We argue that these accounts do not have to exclude each other. In particular, we propose that an existential negator can be reanalyzed as a privative one. We also argue that if the origin of the standard negator is a verb with the meaning 'finish', we may be dealing with a scenario that is similar to the 'Negative Existential Cycle'. In both, the existential negator denies the existence of a state of affairs and then turns into a standard negator. But whereas in the Negative Existential Cycle the non-existence of a state of affairs is modelled on the non-existence of an object, in the 'new' scenario the non-existence of a state of affairs derives from the fact that a process or event has come to an end.

**Keywords:** Standard negation. Postverbal negation. Jê languages. Existential negation. Privative negation. Prohibitive negation.

**Resumo:** Nas línguas Jê, os negadores padrão tendem a ocorrer na posição pós-verbal. Este artigo pergunta por que isso deve ser o caso e, portanto, discute análises anteriores, relacionando os negadores padrão Jê a verbos negativos ou a posposições privativas. Argumenta-se que essas duas possibilidades não são necessariamente mutuamente exclusivas. Em particular, sugerimos que um negador existencial pode vir a ser reanalisado como um negador privativo. Também argumentamos que, caso a origem do negador padrão seja um verbo com o significado de 'terminar', pode se tratar de um cenário semelhante ao chamado 'Ciclo Negativo Existencial'. Em ambos esses cenários, o negador existencial serve para negar a existência de um estado de coisas, posteriormente transformando-se em um negador padrão. Mas, enquanto no Ciclo Negativo Existencial a expressão da inexistência de um estado de coisas tem por modelo a expressão da inexistência de um objeto, no 'novo' cenário, a inexistência de um estado de coisas é derivada do fato de um processo ou evento ter chegado ao fim.

**Palavras-chave:** Negação padrão. Negação pós-verbal. Línguas Jê. Negação existencial. Negação privada. Negação proibitiva.

---

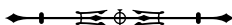
Auwera, J., & Krasnoukhova, O. (2022). Revisiting postverbal standard negation in the Jê languages. *Boletim do Museu Paraense Emílio Goeldi. Ciências Humanas*, 17(2), e20210062. doi: 10.1590/2178-2547-BGOELDI-2021-0062

Autor para correspondência: Johan van der Auwera. University of Antwerp. Prinsstraat 13, Antwerp 2000, Bélgica (johan.vanderauwera@uantwerpen.be).

Recebido em 06/07/2021

Aprovado em 02/12/2021

Responsabilidade editorial: Adam Singerman



## INTRODUCTION

In this paper we revisit postverbal standard negation in the Jê languages. There are two earlier studies, viz. Miranda (2015) and Beauchamp et al. (2017). This study differs from Miranda (2015) in two ways. We focus on standard negation and on its origin. Miranda (2015) deals with more types of negators and concentrates on the synchrony. We share our restriction to standard negation with Beauchamp et al. (2017), but we look at more languages. We differ from both studies also in that we bring in data from the wider Macro-Jê family and that we tie up our analysis more closely with insights or issues from the general typology of negation. And though we gratefully rely on both studies, on some matters we disagree and propose alternative hypotheses.

In the Jê languages standard negation is overwhelmingly postverbal, as illustrated in (1) and (2).

- (1) Apinajé (Goyaz) (Oliveira, 2005, p. 251)

**Pa kot paj ix-pi-kunok kêt=ně.**

1.NOM IRR 1.NOM.IRR 1-ANTIC.NF-lose.NF NEG

'I won't get lost.'

- (2) Xavánte (Central) (Estevam, 2011, p. 271)

**Wa-tsi-wadza-ri mono õ di dza.**

1.PL.ABS-MI-mix-NF IT NEG EX PROSP

'We are not going to mingle.'

The negators are *(h)kêt=ně* and *õ* and they occur after the verbs *-pi-kunok* and *-tsi-wadza-ri*. The South American languages have been claimed to overrepresent postverbal negation, as compared to the rest of the world (Muysken et al., 2014, pp. 306-307; see also Dryer, 2013; Vossen, 2016, pp. 318-321; Krasnoukhova et al., under revision). So in this respect the Jê languages are not exceptional. In the case of the Jê languages the literature gives us plausible hypotheses as to why their standard negators are postverbal. They have been claimed to derive from either a verb or a privative postposition. The verbs that result in standard negators generally go to the right periphery of the clause (in line with the general head-final character of the Jê languages, Rodrigues, 1999, p. 187) and they take another verb in a non-finite (nominalized) form as its intransitive subject. We arguably see this in (1): *(h)kêt=ně* derives from a verb or, at least, a predicate; there is another verb, *-pi-kunok*, which appears in a non-finite form. When *(h)kêt=ně* functions as a standard negator, it ends up to the right of this verb. If the source or the synchronic status of the negator is a privative postposition, the latter too may take a verb in a non-finite form, which, of course, precedes the negator. This is arguably the case in (2), with *õ* as a privative postposition to the verb *-tsi-wadza-ri* 'mingle'. So much is plausible. But much remains undecided too. First, for some languages it is unclear whether the source and/or status of the standard negator is a verb or a postposition. Second, the nature of the verb that would become or count as a standard negator is unclear. Third, languages may move their negators from the position their ancestors used to be in or resort to additional exponents of negation. Fourth - and not the least of our concerns - the Jê data should be looked at from the perspective of the general typology of negation. It is these issues that this paper will focus on.

The next section briefly raises the question of whether the postverbal Jê negators are not just postverbal but also clause-final. In the section that follows it we discuss standard negators that have been claimed to relate to

existential or privative negators. Then we turn to standard negators that (may) derive from verbs meaning ‘finish’. The penultimate section is devoted to negators that are not postverbal. The last section is the conclusion.

As said earlier, we focus on standard negation. However, we bring in existential, privative and prohibitive negation to the extent that these uses can shed light on the origin of the standard negator. For the same purpose we occasionally bring in negators of the wider Macro-Jê family. It is obvious that a comprehensive account requires a look at all negative forms, in the manner of Miranda (2015), and in the whole Macro-Jê family. Similarly, we do not discuss the properties of the non-finite verbs that typically occur in standard negation, and we don't say much about the alignment patterns of either the ancestral or the present-day negative constructions (see esp. Castro Alves, 2010; Beauchamp et al., 2017; Gildea & Castro Alves, 2010, 2020).

In the literature, the Jê and Macro-Jê languages are named, spelled and classified in different ways. We follow the glossonyms, spelling and classification proposed by Andrey Nikulin (personal communication, 2020) (*cf.* also Nikulin & Salanova, 2019). Figure 1 shows the Jê languages that are central to this paper. For three languages we add alternative glossonyms. ‘Akuwẽ’ corresponds to the traditional label ‘Central’, and ‘Goyaz’ and ‘Paraná’ are close to what traditionally refers to ‘Northern’ and ‘Southern’, respectively.

We adjusted the orthography of the examples with the help of Andrey Nikulin so as to match the spelling conventions in use by the speech communities. We modified the glossing of the sources when our analysis differs in a relevant way or when, again on the advice of Andrey Nikulin, it could be improved or homogenized.

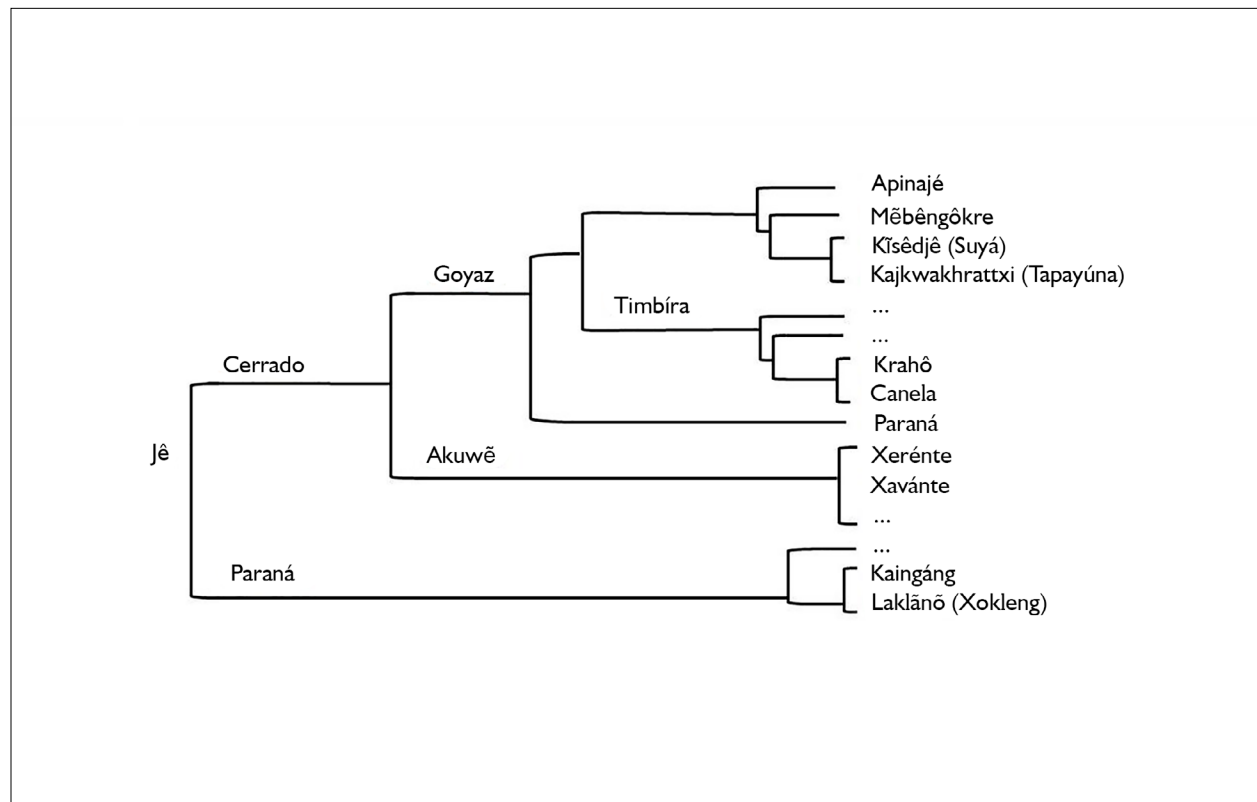


Figure 1. The Jê languages.

## STANDARD NEGATION IN THE JÊ LANGUAGES: POSTVERBAL OR CLAUSE-FINAL?

The standard negation systems of the Jê languages are similar in that they are overwhelmingly postverbal. But similarity comes in degrees. Thus, first of all, the Jê languages clearly have different sets of standard negators. This is already illustrated with *(h)kêt=ně* in (1) and *õ* in (2). Table 1 is a listing of the negators that we focus on.

Table 1. Standard negators in the Jê languages.

Branch	Language	NEG	Source
Goyaz	Apinajé	<i>(h)kêt / (h)kêt=ně</i>	Oliveira (2005, p. 248)
	Mëbêngôkre	<i>kêt</i>	Costa (2015, <i>passim</i> )
	Kisêdjê	<i>khêt / khêrê</i>	L. Santos (1997, pp. 52, 94-96)
	Kajkwakhrattxi	<i>kêt / kêrê</i>	Camargo (2015, pp. 80, 142)
	Canela	<i>nare</i>	Gildea and Castro Alves (2010, pp. 176-180)
	Krahô	<i>nare</i>	Miranda (2015, pp. 250-251)
	Panará	<i>pjoo</i>	Dourado (2001, pp. 76, 117); Bardagil-Mas (2018, p. 55, <i>forthc.</i> )
	Panará	<i>inkjoo</i>	Bardagil-Mas (2018, p. 165, <i>forthc.</i> )
	Panará	<i>rõ</i>	Dourado (2001, p. 121); Bardagil-Mas (2018, p. 56, <i>forthc.</i> )
Akuwẽ	Xerênte	<i>kõ</i>	Sousa Filho (2007)
	Xavánte	<i>õ</i>	Estevam (2011)
Paraná	Kaingáng	<i>tũ</i>	M. S. Silva (2011, p. 142)
	Laklânô	<i>tũg</i>	Gakran (2015, pp. 205-207)

Second, for some languages the negator may not only be postverbal but clause-final. Of course, Jê languages have their verbs in the right periphery of the clause, a negator that is strictly speaking only postverbal and not clause-final will often end up in clause-final position anyway. But for at least four languages there are explicit claims that the negator has to go at the end of the clause. It has been said for Krahô *nare* by Miranda (2015, pp. 250-251) and for Apinajé by Oliveira (2005, p. 248) and we have no reason to doubt these claims. It has also been claimed for Kaingáng. The claim comes from M. S. Silva (2011, p. 203), it concerns the negator *tũ* (*tõ* in (3)) and it is certainly true that most of the examples have it in clause-final position. But M. S. Silva (2011, p. 121) also claims that the clause-final slot is typical for aspect particles, and in the one example that has both a negator and an aspect particle, it is the aspect particle that comes last.

(3) Icatu Kaingáng (D'Angelis, 2008, p. 44, see also M. S. Silva, 2011, p. 142)

Ti wẽ le ue tõ nĩ.

3.SG.M NOM sun see NEG ASP

'He didn't see the sun.'

So Kaingáng *tũ* is postverbal, but not necessarily clause-final. For Panará, finally, the claim that the *inkjoo* negator has to go at the end of the clause is trustworthy. (4) illustrates this.

- (4) Panará (Bardagil-Mas, 2018, p. 165)

**Mãra hě ti=Ø=pĩri nãnkjo inkjoo, ti=Ø=pĩri kjiyti.**  
 3SG ERG 3SG.ERG=3SG.ABS=kill peccary NEG 3SG.ERG=3SG.ABS=kill tapir  
 'He didn't kill a peccary, he killed a tapir.'

In the following two sections we discuss the various postverbal negators.

## STANDARD NEGATORS AS/FROM EXISTENTIAL OR PRIVATIVE NEGATORS

### AKUWĒ \*kõ

In Xavante the standard negator is **õ** (J. Santos, 2008, p. 87), illustrated in (2), repeated below. It derives from Proto-Akuwẽ \*kõ (Nikulin, 2020, p. 130).

- (2) Xavante (Estevam, 2011, p. 271)

**Wa-tsi-wadza-ri mono õ di dza.**  
 1.PL.ABS-MI-mix-NF it NEG EX PROSP  
 'We are not going to mingle.'

Estevam (2011, pp. 270-271, 277) treats **õ** as one of two allomorphs, with **õ** for the 'indicative' – the standard negator – as in (2), and **tõ** for the 'subjunctive', used as the prohibitive in (5).

- (5) Xavante (Estevam, 2011, p. 274)

**Upi tõi!**  
 3.ABS.touch PROH  
 'Don't touch him.'

The allomorphy with a **t-** form could tempt one to see **õ** and **tõ** as related to the form **tũ** in the Paraná languages Laklãnõ or Kaingáng, to be discussed in the section on Paraná \*tũ<sup>K</sup>. While this relation cannot be excluded, the parallel is not convincing. First, there is nothing in the Paraná languages corresponding to indicative – subjunctive allomorphy. Second, the syntax of standard negation is different. The Xavante standard negator **õ** has to be followed by a **di** element, considered by Estevam (2011) and Beauchamp et al. (2017) to be an 'expletive' element.

In Xerente the etymological counterpart to Xavante **õ** is **kõ**. Xerente **kõ** also has to be followed by a **di** element, to the extent even that the grammarian Sousa Filho (2007, p. 140) writes **kõdi** as one word and glosses the whole thing as NEG.

- (6) Xerente (Sousa Filho, 2007, p. 285)

**Ta-hã mãku Ø-tê wrĩ kõdi.**  
 3.SG.NOM-EMPH duck 3-ERG kill.SG.NF NEG  
 'He doesn't kill a duck.'

Notwithstanding the similarity between Xavánte (2) and Xerénte (6), grammarians do not agree about the status of *di*. Let us start with Sousa Filho (2007) analysis. Sousa Filho (2007) distinguishes three non-negative uses of *di*. In one use it is called a ‘predicative morpheme’ and it is usually glossed as *PRED* (Sousa Filho, 2007).

(7) Xerénte (Sousa Filho, 2007, pp. 216, 215, 219)

(a) **Kâ-mba kuba-di.**

river-INES canoe-PRED

‘There is a canoe in the river.’

(b) **Da-sa srurê-di.**

GEN-food little-PRED

‘There is little food.’

(c) **Wa ã-pkê-psê-di.**

1.SG.NOM 1.SG-heart-good-PRED

‘I am good.’

What unites these uses, we propose, is that the existence of something, like a canoe, a small quantity or somebody’s good heart, is presented as a predicate of something else, like the river, the food or the speaker. The term ‘predicative’ is justified, but so is the term ‘existential’. ‘Existential’ may even be better, for we think that ‘existential’ as applied to *di* implies ‘predicative’, but not the other way round.

In a second, non-negative use, *di* is claimed to form participles.

(8) Xerénte (Sousa Filho, 2007, p. 164)

**Wa waihku-di.**

1SG.NOM know-PTCP

‘I have knowledge.’

It would not be a productive process, and Sousa Filho (2007, p. 164) leaves it open as to whether this use is different from the first use, now called ‘predicative-stativizing’.

A third use is illustrated in (9).

(9) Xerénte (Sousa Filho, 2007, p. 226)

**Supra-di re sika-krê ã-kamõ.**

Supra-? PST.DIST hen-egg 1.SG-give

‘Supra gave me eggs.’

Sousa Filho (2007, p. 226) does not analyze this use, hence the question mark in the glosses. One wonders whether it could be a kind of topic (or focus) structure – at least, originally – with ‘Supra’ as topic (or focus), suggesting something like ‘It is Supra that gave me eggs’, in which English too uses a stative copula.

Xerênte *di* thus has a variety of related but slightly different uses, viz. of a predicative, stativizing and existential nature. Its negative uses fit here too: Sousa Filho (2007, p. 140) calls it 'predicative', while Miranda (2015, p. 265) and Cotrim (2016, pp. 119-120) use 'stative', and we don't see any objection to calling this use 'existential'.

This analysis is mirrored by most analyses of Xavánte, but not by all. Thus McLeod and Mitchell (1977, pp. 72-76), followed by Pickering (2010, p. 58), call *di/ti* a stativity marker and they make the claim that it can be used to predicate existence, especially in the negative.

(10) Xavánte (McLeod & Mitchell, 2003, pp. 69-70)

(a)	Pi'õ	ti.	(b)	Pi'õ	õ	di.
	women	EX		women	NEG	EX
	'There are women.'			'There are no women.'		

J. Santos (2008, p. 87) calls *di* a marker of stativity and existence, and Oliveira (2007) calls it 'stative'. In Lachnitt (1987, p. 22) *di* is glossed as *ser, estar, ter, haver* 'be, have' and in Hall et al. (2004, p. 31) as 'a word that indicates a state or a position'. Quintino (2020), finally, considers *di* to be a stative copula.

A divergent hypothesis is offered by Estevam (2011), followed by Beauchamp et al. (2017). For Estevam (2011) *di* is either an expletive or an impersonal subject pronoun. It is expletive in negative structures, and impersonal with stative verbs. The latter is illustrated in (11).

(11) Xavánte (Estevam, 2011, p. 222)

ĩ-wa'a	di.
1.SG.ABS-bore.NF	IMPERS
'It bores me.'	

Estevam (2011) agrees, though, about the existential origin of *di*, with an explicit reference to McLeod and Mitchell (2003) (Estevam, 2011, pp. 73, 220, 278, 440, 488). She cites an example like (10), making the point that this pattern is typical for the Culuene dialect studied by McLeod and Mitchell (2003), but no longer found in the São Marcos dialect that she studied. She does not make it explicit what the São Marcos dialect uses instead, but there are examples with the verbs *hõimana* 'live, exist, stay' (Estevam, 2011, p. 269) and *robaba* 'be absent, be empty' (Estevam, 2011, pp. 104, 462). Quintino (2020) mentions the word *õneharé*<sup>1</sup>. Estevam (2011, p. 411) further argues that even in the São Marcos dialect, there are *di* uses that can still be taken to mark existence.

(12) Xavánte (Estevam, 2011, p. 441)

Duréihã	da-dzépu'u	õ	di	...
in.the.old.days	3.GEN-be.sick.NF	NEG	EX	
'In the old days there was no disease ...'				

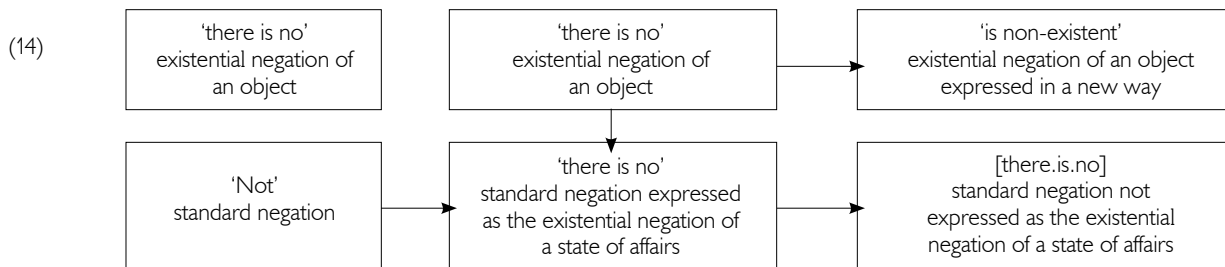
<sup>1</sup> Estevam (2011) has an example with *õneharé*, but it is glossed as *directement* 'immediately' (Estevam, 2011, p. 232).



We find the hypothesis that *di* is a pronoun implausible. First, we are not aware of any cross-linguistic parallel for a development of an existential verb into a pronoun. Second, this change would result in a postverbal position for a pronoun, a position that is otherwise impossible in this language (Oliveira, 2007, p. 192)<sup>2</sup>.

Claiming a link between standard and existential negation urges one to bring in the notion of the 'Negative Existential Cycle' ('NEC'). There are a few different approaches in the literature (see Croft, 1991; Veselinova, 2013, 2014; Veselinova & Hamari, 2021; van der Auwera et al., 2021). The basic idea is that first a dedicated expression for the negation of the existence of an object is also used for standard negation, viz. by expressing the negation of the existence of a state of affairs, and that these two uses later split (and thus prepare the ground for this kind of change to happen again). (13) and (14) illustrate this with pseudo-English. 'There is/are no' is used for denying the existence of an object - (13a) and (13b) shows that in pseudo-English 'The hunter is not chasing the bear' is expressed as a denial of the existence of a state of affairs of the hunter chasing the bear. This may be preceded by a stage in which pseudo-English was just like English and expressed 'The hunter is not chasing the bear' as, to wit, 'The hunter is not chasing the bear'. It is this version of the NEC that is schematized in (14) and we see that 'there is no' takes over from 'not' for the expression of standard negation. What happens then is that pseudo-English makes another exponent for the existential negation of an object, e.g. 'is non-existent' – (13c). In addition, pseudo-English may drop the semantic existential component in the expression of standard negation relative to a state of affairs – (13d). In the latter case the form may still reflect the existential original – we represent the new standard negator deriving from an earlier existential negator as '[there.is.no]'.<sup>3</sup>

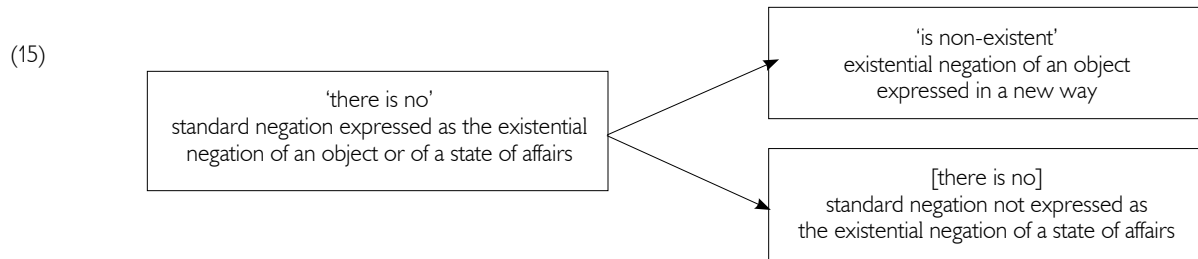
- (13) Pseudo-English
- (a) There are no black swans.
  - (b) There is no chasing by the hunter of the bear.  
'The hunter is not chasing the bear.'
  - (c) Black swans are non-existent.
  - (d) The hunter [there is not] chasing the bear.



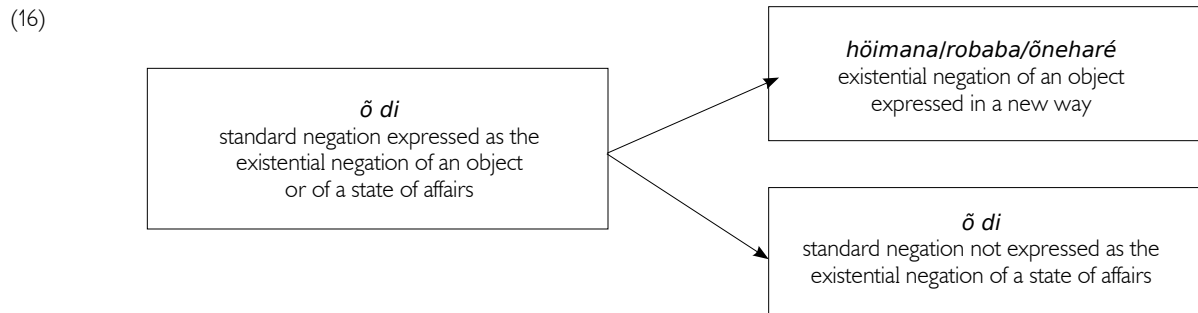
The schema makes it clear that the third stage is similar to the first stage in having two different negators. But the negators are formally different from the ones in the first stage, with this special feature that the new standard negator derives from the old existential one.

<sup>2</sup> The claim that the existential predicate became a pronoun is connected with a claim about the status of the lexical verb. In the pattern with the expletive or impersonal subject, the verb is claimed to be finite and 'aorist', though it was non-finite at the stage when *di* was an existential verb (Estevam, 2011, pp. 312-313). This brings us to the wider issue of the interpretation of the 'long' vs 'short' verb forms in the Jê languages. As to Xavante, all we dare to say is that since we don't find the claim about the change from an existential predicate to a pronoun convincing, we cannot take this as support for the claim that the non-finite lexical verb became finite.

(15) shows the variant in which pseudo-English had no exponent of standard negation other than a negative existential – or for which we don't know that it had one.



In Xerénte and the Culuene dialect of Xavánte standard negation is construed as the non-existence of a state of affairs. In the São Marcos dialect of Xavánte, however, the marker is hardly used for negative existence, and the latter is expressed with something else. In this dialect *õ di* still has stative, predicative uses, but no longer the subtype used for existence. (16) is a sketch of the NEC for the São Marcos dialect of Xavánte.



Interestingly, both Estevam (2011) and Quintino (2020) mention examples in which *õ* takes care of standard negation without *di*.

- (17) Xavánte (Quintino, 2020)
- |                      |                |     |
|----------------------|----------------|-----|
| Õhã                  | ĩ-tsõtõ        | õ.  |
| 3.SG                 | 3.ABS-sleep.NF | NEG |
| 'He does not sleep.' |                |     |

It makes sense to see bare *õ* as a further development of the standard negator *õ di*: the *di* part could be dropped because *õ di* would not express negative existence anymore, nor would *di* express existence. On the other hand, in Estevam (2011) the majority of the *di*-less *õ* negators (11 out of 13) occur in subordinate clauses. We know from the literature on negation (van der Auwera, 2010, pp. 83-84; van der Auwera & Krasnoukhova, 2019, p. 24) that older negators may survive longer in subordinate clauses. So from this perspective they might be seen as preserving an older *di*-less negator.

(18) Xavante (Estevam, 2011, p. 444)

Wa-tsihutu      ã      ré      hã,      robduri      ma      ãwitsi      dzadzahöi      hã.  
 1.PL.ABS-reach.NF    NEG    SUB    EMPH    truck    PRF    3.ABS.bring    clothes    EMPH  
 'Before we arrived, the truck had brought clothes.'

Estevam (2011) does not herself allude to the NEC, and neither does she in the co-authorship of Beauchamp et al. (2017). In fact the latter provide an alternative account. They combine the observation that *di* still has positive stative uses, as in (11), with the observation that *ã* can be found with a privative meaning ('without').

(19) Xavante (Beauchamp et al., 2017; Estevam, 2011, p. 305)

marĩ-dai-'õ      re  
 thing-use-PRIV    DIM  
 'Useless things.'

Examples like (19) are mentioned by Lachnitt (1988, p. 73) and Quintino (2020) as well. They are all lexemes, not phrases, and we can think of this *õ* use as a derivational element. More importantly, could this seemingly privative use mean that *õ di* originally meant 'be without'? We do know that there is such a thing as a Privative Cycle, similar to the NEC, with a language developing a standard negator from a privative marker (Michael, 2014b) and that the Cycles are very similar (van der Auwera & Krasnoukhova, 2020, p. 109).

But we are doubtful. First, it is not because (19) can be paraphrased with 'without' giving 'things without use', that one can conclude that *õ* is a privative morpheme. 'Not use things', 'non-existent-use things' would do as well, and in fact the gloss in Beauchamp et al. (2017), following Estevam (2011, p. 305), is simply 'NEG'. Of course, the notions of privative and existential negation are closely related: when somebody/something is without somebody/something, then the latter somebody/something does not exist with respect to the first one. So it is no surprise that in Veselinova (2013) 95 language-sample the existential and privative negators are identical in ten languages. In those cases, one could think of the negators as a kind of labile operator, for the entity that does not exist is also the entity that the states of affairs is deprived of ('is without').

- (20) (a) I broke the vase.                      ↔            The vase broke.  
 (b) The meadow was without cows.       ↔            There were no cows.

So we do not exclude that the Xavante *õ* was a labile existential-privative operator. Second, 'be without' forms a positive predication, which ascribes a negative property, and it is also a stative predicate. So one would expect the positive stative predicate 'be without' to be expressed the same way as, for example, 'be thirsty'. In Xavante 'be thirsty' is indeed taken as stative predicate – and, as one might expect, not as an adjective, for the language does not have adjectives – and this is expressed impersonally.

(21) Xavante (Estevam, 2011, p. 178)

ĩĩ-ma      'rubu      di.  
 1.SG-DAT    make.thirsty    IMPERS  
 'I am thirsty.' (lit. 'it makes thirsty to me', 'there is making thirsty to me')

So 'be without' would have to be construed impersonally, too. Thus (2) should not be paraphrased as 'we are going to be without mingling' but rather as 'it is without us going to mingle' or 'there is without us going to mingle'. But these paraphrases amount to the existential 'there is no us going to mingle'. So we conclude that at the relevant stage a would-be privative construal boils down to negative existence.

Intriguingly, Estevam (2011) does have a use for the 'privative' gloss, as in (22).

- (22) Xavánte (Estevam, 2011, p. 104)
- |    |       |      |              |        |       |      |
|----|-------|------|--------------|--------|-------|------|
| Te | dza   | duré | rob-dzépata  | dza'ra | ö     | ãna. |
| 3  | PROSP | also | ANTIP-suffer | PL     | water | PRIV |
- 'They will suffer more without water.'

The first thing to note is that the use in (22) is not predicative but copredicative. It forms a secondary predication, subordinate to a main predicate. In (22) the main predication says that they will suffer more and the secondary one says that this will happen without water. All the examples in Estevam (2011) are copredicative. We could also note that the privative marker is not *ö*, but *ãna*. This is interesting, but it does not damage the privative analysis of *ö*. The latter could simply be the old privative, kept in lexemes and in the standard negator, and which was replaced in the copredicative use.

It is also interesting that *ãna* is reported with something like a standard negation use. (23) is one of the two examples provided by Estevam (2011, p. 463)<sup>3</sup>.

- (23) Xavánte (Estevam, 2011, p. 463)
- |            |     |                |               |            |      |
|------------|-----|----------------|---------------|------------|------|
| Dati'ö,    | e   | aa-nhihudu     | aa-te         | wamri      | ãna? |
| mother.VOC | INT | 2.HON-grandson | 2.HON.ERG-AUX | 3.ABS.name | PRIV |
- 'Mother, you are not going to give a name to your grandson?'  
(lit. 'Mother, without your giving a name to your grandson?')

Both examples are elliptical questions. The speaker in (23) may just have heard that his/her mother is going to be present at some ceremony. Something like this is the contextually understood main predication, which is accompanied by the secondary predication.

- (24) Mother, you are going to be present at the ceremony without giving a name to our grandson?

What (23) shows, we propose, is that when the main predication is clear from the context, as when it has just been mentioned, the secondary predication can have the effect of a main predication. The process resembles insubordination, *i.e.*, the conventionalized main predication use of a subordinate predicate. This is a cross-linguistically widely distributed phenomenon (Evans & Watanabe, 2016), illustrated in (25) and (26) with Chilean Spanish and English.

<sup>3</sup> This construction is reported only for Xavánte.

- (25) Chilean Spanish (Gras & Sansiñena, 2017, p. 22)

**Que eris fe-a y tont-a!**  
 that be.PRS.2SG ugly-F.SG and silly-F.SG  
 'You are so ugly and silly!' (lit. 'That you are ugly and silly!')

- (26) English

If only he had told me.  
 'I wish that he had told me.'

But there is also a difference with insubordination. The 'that' structures like that of (25) occur in a limited set of contexts (like astonishment) and the 'if only' structures like in (26) occur with apodoses that allude to an unpleasant consequence. This constancy allows for conventionalization. With the main predication use of a secondary predication like in (23), however, there are no typical contexts and hence the chances for conventionalization are slim.

To conclude about Xavánte, even an example of a seemingly standard negation use of a privative negator as in (23) has not changed our opinion on the origin of the present-day Xavánte standard negator *õ*. It is unlikely to have arisen from an earlier privative use in the context of the promotion of a secondary predication to the status of a primary predication.

Let us, finally, briefly return to Xerénte. The Xerénte standard negator is *kõdi*, and we offer the same analysis as for Xavánte. What furthermore pleads for the NEC is that *di* still has an existential use, illustrated in (7). There seem to be two privative markers. One is *knã*, which, a reviewer points out, must be cognate to Xavánte *ãna*, illustrated in (23), with both Xavánte *ãna* and Xerénte *knã* as regular reflexes of *\*kãñã*<sup>4</sup>.

- (27) Xerénte (Sousa Filho, 2007, p. 189)

**Da-sa-ze nĩpkra-hi knã măt kmãsi.**  
 GEN-eat.INTR-NMLZ hand-bone PRIV 3.PST.PFV.R eat.PL  
 'He ate without a fork.'

The second one is *tõ*, documented by Miranda (2015, p. 267). It seems to be a derivational use, just like in Xavánte (18). We return to this element in the section on Paraná *\*tũ*<sup>K</sup>.

- (28) Xerénte (Miranda, 2015, p. 267)

**kwa=tõ**  
 tooth-PRIV  
 'Toothless.'

To conclude about Xavánte and Xerénte, it is likely that the Xavánte *õ di* and Xerénte *kõdi* negators have an existential origin, *i.e.*, that they arose with a NEC. This conclusion, however, is not quite final yet. The analysis in the

<sup>4</sup> The prohibitive uses the same form, which must be a coincidence, assuming that the prohibitive comes from a univerbation of *kõ* and the imperative marker *-nã* (Sousa Filho, 2007, p. 160).

next section will give us a reason to return to at least Xerénte and bring in a privative hypothesis nevertheless, not as a replacement of the existential hypothesis, but as an addition.

A final remark: *õ* and *kõ* must be very old. Nikulin (2020, p. 130) reconstructs them to a Proto-Jê NEG form, because of the possible Karajá cognate *-kõ* (Ribeiro, 2012, p. 63).

### GOYAZ \**kêt*

What Nikulin (2020, p. 515) reconstructs for Goyaz as *\*kêt* occurs in a few forms and a few languages – see Table 1. One form is *kêt* – or with a clause-final echo vowel *khêrê/kêrê* in Kĩsêdjê and Kajkwakhrattxi. Apinajé has *hkêt* as well as *(h)kêt=ně*, and they function in different ways. Dynamic verbs referring to non-habitual actions take *(h)kêt=ně*, and dynamic verbs referring to habits, stative verbs, nominal predicates and existentials take *(h)kêt* (Oliveira, 2005, p. 390). In (29) we see its use with a non-habitual action.

(29) Apinajé (Oliveira, 2005, p. 251)

Na	pa	a-to	ix-pi-mti-r	kêt=ně.
R	1.NOM	2-INSTR	1-ANTIC.NF-dream-NF	NEG=FCT

'I didn't dream about you.'

The *=ně* part is a factive clitic (Oliveira, 2005, p. 390), which also occurs on its own.

(30) Apinajé (Oliveira, 2005, p. 156)

Na	pa	ix-punuj	rũnh	ně.
R	1.NOM	1-ugly	INTS	FCT

'I am very ugly.'

Another complex form is Kajkwakhrattxi *kêrê-re*, with an originally emphatic *-re* element, glossed as 'diminutive' by Camargo (2015).

(31) Kajkwakhrattxi (Camargo, 2015, p. 80)

(a) I-khrã j-akot-re.  
1.SG-head REL-round-DIM  
'My head is very round.'

(b) Nayara ra kīj kêrê-re  
Nayara DEF joyful NEG-DIM  
'Nayara is not joyful.'

As we can see in Apinajé (29), Oliveira (2005, p. 251) takes the lexical verb that combines with the *(h)kêt* negator to be non-finite. So do Beauchamp et al. (2017) and Gildea and Castro Alves (2010, p. 187) and they all furthermore take *(h)kêt* to come from a negative existential (Oliveira, 2005, p. 390; Gildea & Castro Alves, 2010;

Beauchamp et al., 2017). Miranda (2015, p. 215), however, tentatively proposes ‘not do’ as the original meaning. We will come back to the latter idea later. (32) and (33) illustrate existential uses.

- (32) Apinajé (Oliveira, 2005, p. 250)  
**Kormã gô kagro hkêt.**  
 yet water hot NEG  
 ‘There is no hot water yet.’

- (33) Mëbêngôkre (Salanova, 2007, p. 58)  
**Tep kêt.**  
 fish NEG  
 ‘There is no fish.’

In Apinajé existential *(h)kêt* alternates with *hamrakati*.

- (34) Apinajé (Oliveira, 2005, p. 250)  
**Pixô=rã rârâr-e na jari hamrakati.**  
 plant=flower yellow-DIM R here NEG.EX  
 ‘There are no yellow flowers around here.’

This is not a problem for thinking that standard *(h)kêt* derives from an existential. The NEC hypothesis allows a language that has construed standard negation with a negative existential to make a new existential negator.

In Mëbêngôkre *kêt* also has a privative use – illustrated in (35), *cf.* also Trevisan & Pezzotti (1991, p. 43), whose lemma for *kêt* has ‘not, without, be nothing, be extinct’. It is reported as one of at least two privative markers in Krahô, the other one being *=nõ*<sup>5</sup>, but in this language *kêt* is used for neither standard nor existential negation.

- (35) Mëbêngôkre (Beauchamp et al., 2017)  
**Ø-no kêt**  
 3-eye NEG  
 ‘Blind.’
- (36) Krahô (Miranda, 2015, p. 260)  
**i-për=kêt**  
 3-speech=NEG  
 ‘Dumb.’

<sup>5</sup> For “Canela-Krahô”, Popjes and Popjes (1986, pp. 161-162) also report a compositional structure in which the standard negator *nare* scopes over an instrumental postposition, giving ‘not with’.

So like for Xavánte *õ*, the *\*kêt* negator has both existential and privative uses. But different from Xavánte scholarship, the linguists who have pronounced themselves on the origin of the standard negation use only adopted an existential analysis, not a Beauchamp et al. (2017). privative analysis. But there could be another factor advocating a privative approach.

This other factor is a process through which an extra-clausal left periphery topic (or focus) gets integrated into the clause and becomes its subject – described in the context of the ‘nominative-absolutive alignment’ hypothesis put forward by Castro Alves (2010), followed by Gildea and Castro Alves (2010, 2020). It is a process hypothesized for a variety of grammatical operators, not just negators. Extra-clausal left-periphery topic structures are considered a property of all the Goyaz languages. When the topic is a pronoun, it usually takes nominative marking and when it is a noun, it is unmarked. The front position constituent is coreferential with another constituent in the clause, whatever case marking this coreferential constituent has there. In (37) we first get the nominative pronoun *ga*, which is coreferential with *a-je*, which is ergative. The reason why the pronoun *a-je* is ergative is that subordinate clauses, including the non-finite constructions that go with the negator, have ergative-absolutive alignment. This topic then becomes integrated into the clause, it becomes its subject, and since there is also the coreferential subject argument of the erstwhile subordinate clause, we can speak of ‘subject doubling’ (cf. Salanova, 2007, pp. 34-35)<sup>6</sup>.

(37) Mëbêngôkre (Gildea & Castro Alves, 2020, p. 94)

<b>Ga</b>	<b>a-je</b>	<b>Ø-ma-ri</b>	<b>kêt.</b>
2.NOM	2-ERG	3.ABS-know-NF	NEG

‘You don’t know it.’

In some structures in some languages, the integration is very strong. It can exert influence into the subordinate clause by forbidding it to contain an ergative constituent and forcing coreferentiality with the absolutive argument – hence the label ‘nominative-absolutive alignment’. We see this in (38). When the clause-initial constituent is a noun, there cannot be a coreferential ergative pronoun.

(38) Kĩsêdjê (Gildea & Castro Alves, 2010, pp. 186, 2020, p. 97)

<b>Ro-txi</b>	<b>ra</b>	<b>*...ERG</b>	<b>mĩ-txi</b>	<b>pĩ-rĩ</b>	<b>khêrê.</b>
anaconda-AUG	DEF		alligator-AUG	kill.SG-NF	NEG

‘The anaconda didn’t kill the alligator.’

If this analysis is correct, then, we propose, the negator changes its status. Earlier it was an intransitive non-existence verb with the non-finite verb form as its subject. Now, it has the nominative clause-initial constituent as its subject and it becomes quasi-transitive, with the non-finite verbal constituent as its object. It could be seen as a ‘not do’ auxiliary, picking up the suggestion by Miranda (2015, p. 215). However, it is more plausible to take it as a privative auxiliary,

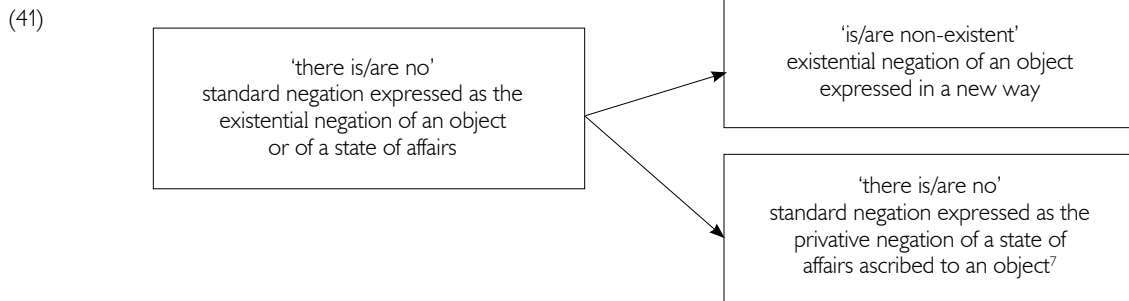
<sup>6</sup> One reviewer points out that at least in Mëbêngôkre there are structures in which (what we take to be) the subject of the erstwhile subordinate clause is preceded by both (what we take to be) the new subject, as well as a left-periphery topic. Does this cast doubt on the proposed analysis? We see it as evidence that the topic-to-subject process can be cyclical.



given the fact that *kê*t has privative uses and given that the step from ‘not exist’ to ‘be without’ is smaller than the one between ‘not exist’ and ‘not do’ – see the discussion around (20). Schematically:

- (39) as for the topic/focus constituent  $\alpha$ , a state of affairs in which  $\alpha$  is involved does not exist  
 ↓  
 $\alpha$  is without a state of affairs in which  $\alpha$  is involved
- (40) topic/focus [non-finite form with absolutive alignment] existential negator  
 ↓  
 subject [non-finite form with absolutive alignment] privative negator

We thus end up embracing both the existential and privative hypotheses on the origin of *\*kê*t. We claim that *\*kê*t is originally and in some constructions still an existential negator, and that the introduction of a topic-derived subject turns the existential into a privative. (41) adds the path from the negative existential to the privative onto the general schema in (15). Note that ‘there is/are no’ keeps the form of the existential negation – at least initially – but that its meaning is privative.



The reanalysis of the topic as a subject like the reanalysis of the negator is a gradual process. We have seen that in Kĩsêdjê the ban on the ergative inside the subordinate structure and the reanalysis of the negator only works with nouns (see (38)). It does not work with pronouns. The latter do not normally (*cf.* Gildea & Castro Alves, 2010, pp. 188-189) allow the topic construction, and there is no reason to deny that standard negator in (42) is anything other than an existential negator.

- (42) Kĩsêdjê (Gildea & Castro Alves, 2020, p. 98)
- \*... NOM    *kô-re*    *i-kakhê-n*    *khêrê*.  
                  3-ERG    1SG.ABS-scratch-NF    NEG  
 ‘He didn’t scratch me.’

In Apinajê, however, the integration applies to pronouns too (Gildea & Castro Alves, 2010, pp. 180-181).

<sup>7</sup> ‘Object’ is not ‘object’ as compared to ‘subject’, but ‘object’ as compared to ‘state of affairs’.

We will see in the section on Timbira *\*inõare* that Canela has gone through the process of ‘privativization’ of the existential negator, too, but with a different negator. Canela, like the *\*kêt* languages, is a Goyaz language. Could this process be unique to Goyaz? Gildea and Castro Alves (2020, p. 90) remark that what we call ‘clefing’ is indeed found throughout Goyaz, but that does not mean that it cannot occur elsewhere. In fact, we have already suggested that we may see clefing in Xerênte (9), where it could be argued to have the stativizer *di*. It is also useful to review the Xerênte example (6), repeated below.

- (6) Xerênte (Sousa Filho, 2007, p. 285)
- |          |      |       |            |       |
|----------|------|-------|------------|-------|
| Tahã     | māku | Ø-tê  | w-ĩ        | kōdi. |
| 3.SG.NOM | duck | 3-ERG | kill.SG-NF | NEG   |
- ‘He doesn’t kill a duck.’

There are two exponents for the third person actor, a nominative and an ergative one. To the extent that the nominative one is integrated in the clause, a privative reanalysis of the existential negator seems possible.

A final word on the proto history of *\*kêt*. Nikulin (2020, p. 441) reconstructs *\*kêt* to Proto-Jê and there are reflexes in Paraná. It does not seem to occur in the wider Macro-Jê family. If the *kêt* forms originally expressed negative existence, then there are two possibilities for deriving this meaning from something else (but cp. Oliveira, 2005, p. 298). One possibility is that the original *kêt* word is a univerbation of a negator and an existence marker. One wonders whether *kêt* could derive from the ancestors of Xerênte *kō* and *di*. The alternative etymology would derive *kêt* from a word with a negative meaning. Curiously, Nikulin (2020, p. 515) lists a Canela form *-hkêt* with the meaning ‘stop’ as ultimately deriving from a Proto-Jê negator<sup>8</sup>. Could the modern ‘stop’ meaning be a remnant of an ancient ‘stop’ meaning? In any case, the next section will show that the Jê languages do manifest trajectories with negators deriving from something close to a ‘stop’ verb.

## FROM ‘STOP, FINISH’ TO ‘NOT’

There are indications in the Jê languages that standard negators can come from verbs meaning ‘finish’. This relates to an interesting issue in the typological literature. Givón (1973, p. 917, 1978, p. 89, 1984, p. 232) claims that negative verbs can lead directly to what we now call ‘standard negators’ (cf. also Heine, 1993, p. 34). The idea is intuitive, but, as pointed out in van der Auwera (2010, p. 75), there is little data to show this. Ten years further, there is still little evidence. Heine and Kuteva (2002, pp. 283-284) do document a change from ‘stop’ into negation, but only for prohibitives. This is true for Kuteva et al. (2019, pp. 412-414) too: they list 10 languages in which ‘stop’ became a negator and in each case the negator is prohibitive. (43) is an example from a Kru language.

- (43) Wobé (Marchese, 1986, p. 192; Kuteva et al., 2019, p. 413)
- |     |      |      |         |
|-----|------|------|---------|
| (a) | ɔ    | bó   | blè-à.  |
|     | 3.SG | stop | sing-NF |
- ‘He stopped singing.’

<sup>8</sup> Nikulin (2020, p. 515) also lists closely related Pykobjê with a form *(-')quit* with a meaning ‘keep silent’.

- (b) ě bó à blāā.  
 2 NEG 1.PL hit.NF  
 'Don't hit us!'

Kuteva et al. (2019) – and earlier Heine and Kuteva (2002) – do list a variety of grammaticalization paths for ‘finish’ verbs, the most prominent one leading to completive markers (Kuteva et al., 2019, pp. 174-177). We find these in Jê as well (see e.g. Castro Alves, 2010, p. 450), but what makes Jê interesting is that they show a path from ‘finish’ to a non-prohibitive negator. This seems to be different from the path from ‘stop’ to prohibitive negation. After all, the verb ‘finish’ does not have the same meaning as ‘stop’, though they will be interchangeable in some contexts. ‘Finish’ is basically telic ‘stop’, at least in English, and we assume that this distinction has cross-linguistical relevance. So, when one finishes singing a song, one stops when the song comes to its end. Interestingly, the influential observation, originally in Givón (1973, p. 918), and resounding in his later work and in that of Heine (1993), lists a number of verbs with negative semantics that can turn into a negator, but ‘finish’ is never included.

Another reason for why a scenario of a development of a standard negator from a verb meaning ‘finish’ is interesting is that it should be looked at from the perspective of the NEC paper by Veselinova (2013, p. 137). We read there that in one third of her 95 language sample, negative existentials come from verbs with a negative content: another third involves the univerbation of markers for negation and existence – the remaining third stands for cases for which the diachrony is opaque. This would mean that a verb with a negative content can feed into the NEC, and this has been made explicit by van Gelderen (2021, pp. 544-545). But the data are scarce here too: van Gelderen (2021, p. 545) discuss only one case, viz. the Chinese verb *mei*, which is taken to have changed its meaning from ‘die, sink’ to ‘not exist’ to ‘not’. So new data are welcome, even though the Jê data are themselves also scarce. But at least, we seem to see a trajectory from ‘finish’ to standard negation there, as already adumbrated at the end of the discussion of the *\*ket* negator.

## PARANÁ *\*tũ<sup>K</sup>*

An indication that a standard negator can develop from a verb meaning ‘finish’ comes from Jolkesky (2010, pp. 215, 244), who reconstructs *\*tũ(-g)* for Proto-Paraná Jê, both for a standard negator and for a lexical verb meaning ‘complete, not have anymore, finish (something)’. Jolkesky (2010), however, does not connect the two etymologies. Nikulin (2020, p. 430) discusses only the etymology of the negative morpheme, he reconstructs it to Proto-Jê *\*tũ<sup>K</sup>* with ‘negation’ as the meaning, he does not discuss the ‘finish’ verb, but he thought that it was obvious that the ‘finish’ and negative meanings are related (A. Nikulin, personal communication). Neither Jolkesky (2010) nor Nikulin (2020) express any view on whether the *\*tũ(-g)* form could express existential negation. When we look at the present Paraná forms deriving from the Proto-Paraná Jê *\*tũ(-g)*, nobody has suggested a link either between verbs of ‘finishing’ and standard negation or between ‘finishing’ and existential negation. Nevertheless, the identity is clear in at least present-day Kaingáng, as described by Wiesemann (2011, p. 89). As to a link between existential and standard negation, Miranda (2015, p. 272) lists *tũ* for both Kaingáng standard and existential negation, but this is maybe only based on a dictionary lemma including ‘inexistente’ in the lemma for *tũ* (Wiesemann, 2011, p. 89). M. S. Silva (2011, pp. 156-157, 173) has examples. The meaning *sem* ‘without’ is in the Wiesemann (1972, 2011)

lemma too, so perhaps there is a standard – privative polyfunctionality as well (*cf.* also Gonçalves, 2007, p. 192). This polyfunctionality is definitely also found in Laklãnõ (Gakran, 2015, pp. 204, 206), as illustrated in (44)<sup>9</sup>.

(44) Laklãnõ (Gakran, 2015, pp. 206, 204)

(a) **Katxol te vũ ěnh pla-g tũ tẽ.**  
 dog SPEC SBJ 1 bite-NF<sup>10</sup> NEG IPFV  
 'The dog didn't bite me.'

(b) **Kujel tũ nũ jã.**  
 hunger PRIV 1.NOM AUX.1  
 'I am without hunger.'

These (potential) polyfunctionalities show the affinity of standard negation to both existential and privative negation, but they don't tell us anything about the diachrony.

As mentioned in the introduction to this section, the general typology prepares us to see an especially close link between a 'stop' verb and prohibitive negation. There is no evidence for *\*tũ\** 'finish' to have a special affinity with the prohibitive. Thus Laklãnõ uses a *\*tũ\** form for both standard and prohibitive negation (Gakran, 2015, pp. 203-208), and Kaingáng uses the *\*tũ\** form only for standard negation. Compare (44a) with (45) for Laklãnõ and (3) with (46) for Icatu Kaingáng.

(45) Laklãnõ (Gakran, 2015, p. 207)

**Ló kala tũ-g.**  
 IMP enter NEG-CAUS  
 'Do not come in.'

(46) Icatu Kaingáng (M. S. Silva, 2011, p. 65)

**Goio kronia tũ.**  
 WATER drink NEG  
 'Don't drink water.'

It is to be noted that Gakran analyzes the *-g* element (phonologically /-ŋ/) as a causative suffix. The velar nasal is absent in (44), but the distinction is not simply between standard and prohibitive negation. According to Gakran (2015, p. 207) in standard negation *tũ-g* is used for perfectives and *tũ* for imperfectives. We have nothing to contribute on this issue (*cp.* also note 150 in Nikulin, 2020, pp. 293-294).

It is clear, however, that *tũ* is an old form. The form that Nikulin (2020, pp. 430, 454) gives for Proto-Jê is also the origin of the *tũ* negator found in various functions in the Goyaz languages Xavánte, Xerénte and possibly<sup>11</sup> Panará.

<sup>9</sup> There is also the extinct language Ingain, for which Nikulin (2020, p. 430) lists *tũ* with a privative meaning.

<sup>10</sup> Nikulin (2020, pp. 294-299) analyzes this as a finite form.

<sup>11</sup> Nikulin (2020, p. 454) adds Panará with a question mark. In Xavánte and Xerénte the standard negator are *õ* and *kõ*, respectively. Nikulin (2020) does not rule out that these share the same protoform as the *tũ* negators.

For Panará, Nikulin (2020, p. 454) also claims that the reflection of the protoform would be *rõ*, and this is used for the privative (Dourado, 2001, p. 118). There are also cognates in the wider Macro-Jê family, both in the Trans-São Francisco and Jabutian groups (Nikulin, 2020, pp. 118, 387).

To conclude: *\*tũ* is widespread and old. An origin in a ‘finish’ verb is not excluded, but the evidence is not very strong. There is no evidence in favor of a Negative Existential or Privative Circle either. In fact, as the next section will show, if *\*tũ* originated from a ‘finish’ verb, it is likely that neither hypothesis is correct, *i.e.*, that it followed a somewhat different path.

### PANARÁ *pjo*

Dourado (2001, p. 119) states that the Panará standard negator *pjo* is related to an intransitive verb *pjo/pjoo* ‘finish’.

(47) Panará (Dourado, 2001, pp. 117, 120)

- (a) **Luzia jy=too pjo mũũ tă.**  
 Luzia R.INTR=go NEG Brasília ALL  
 ‘Luzia didn’t travel to Brasília.’

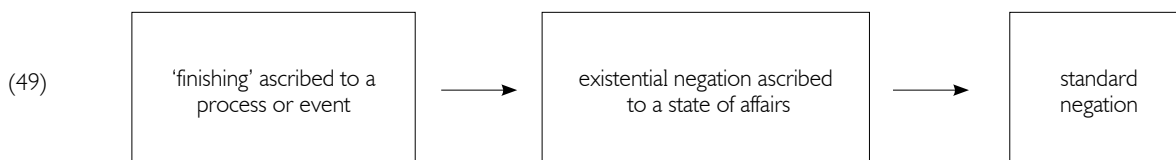
- (b) **Söse jy=pjoo.**  
 line R.INTR=finish  
 ‘The line ended.’

That Dourado’s (2001) phrase ‘related to’ means ‘derives from’ is plausible from the fact this verb also occurs with the ‘finish’ sense bleached into negation. This would then represent an intermediate stage in the development of a ‘finish’ verb to standard negation.

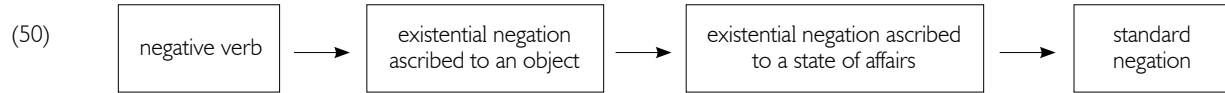
(48) Panará (Dourado, 2001, p. 120)

- Măra hě ti=py=so=kre jy=pjoo.**  
 3.SG.M ERG 3.SG.ERG=DIR=thing=plant R.INTR=NEG  
 ‘He will not plant again.’

If Dourado (2001) is right and the meaning of the *pjo* verb in (48) has bleached, one can say that it expresses non-existence: when a process or event is finished, it does not exist anymore. The discontinuation sense is still present in (48) but perhaps the verb can also be used to refer to the non-existence of a state of affairs, independently of whether a process or event is finished or has not even started. If that is possible, then the verb has widened its sense: from non-existence due to finishing to non-existence *tout court*. This scenario is schematized in (49).



This notion of existential negation is, of course, a key ingredient in the NEC, but it plays a different role there. In the NEC a negative existence sense applies to both objects and states of affairs. The NEC has a stage in which existence is denied to a state of affairs in the same way as it is denied to an object. There is no such stage in (49). What we see therefore in Panará is a scenario that is similar to the NEC, but it is crucially different. This scenario is also different from what van Gelderen (2021, p. 545) sketched in (50).



In (50) we see a negative verb feeding into the NEC. It is not to be denied that this is possible. But what we see in Panará is different: in Panará the verb skips the second stage of (50) and for objects the existential negator is different, viz. *inkjoo*, shown in (51).

- (51) Panará (Dourado, 2001, p. 117)
- |               |              |                |
|---------------|--------------|----------------|
| <b>Inkjoo</b> | <b>pakwa</b> | <b>kjôkjô.</b> |
| NEG.EX        | banana       | ripe           |
- 'There is no ripe banana.'

Panará does not use *pjo* as a privative negator either. Here *rõ* is used. We will come back to *rõ* at the end of the next section. *Pjo* is also not used for prohibitive negation, as becomes obvious from (52).

- (52) Panará (Dourado, 2001, p. 119)
- |           |              |            |
|-----------|--------------|------------|
| <b>ka</b> | <b>kukrê</b> | <b>să.</b> |
| IRR       | eat          | NEG        |
- 'Don't eat!'

To conclude, the Panará *pjo* is only used for standard negation. We hypothesize that it comes directly from the 'finish' verb and that it neither passed via an existential negation ascribed to an object nor via a privative negation. In synchrony, *pjo* is not used for existential or privative negation either. Given the typological literature one might have expected it to serve as a prohibitive negator but that it is also not the case. The reason might be that in the examples known from the literature, the 'stop' verb is a transitive one, with an actor subject, which in a prohibitive context, becomes the addressee that the prohibitive appeals to for action. For Panará, however, Dourado (2001, p. 119) makes it explicit that the source verb is intransitive, so one that involved something finishing, rather than somebody finishing something. This intransitive verb is therefore not immediately suitable for an appeal to an action. And we therefore do not find evidence for a close link between the Panará *pjo* and prohibitive negation.

## TIMBIRA *\*inõare*

In awareness of the grammaticalization literature deriving standard negation from negative verbs, Castro Alves (2010, pp. 468-469) claims that the Timbira standard negator *nare* (from *\*inõare*, A. Nikulin, personal communication, 2020)

is a grammaticalized form of ‘finish’<sup>12</sup>. A standard negation example is shown in (53). (54) illustrates a full verb use in closely related Mëbêngôkre (cf. also Costa, 2015, pp. 189-192).

- (53) Krahô (Miranda, 2015, p. 249)
- |           |               |           |               |               |              |
|-----------|---------------|-----------|---------------|---------------|--------------|
| <b>Me</b> | <b>h-ümre</b> | <b>te</b> | <b>cukryt</b> | <b>cura-n</b> | <b>nare.</b> |
| PL        | 3-M           | ERG       | tapir         | kill.SG-NF    | NEG          |
- ‘Men didn’t kill the tapir.’

- (54) Mëbêngôkre (Castro Alves, 2010, p. 469)
- |           |             |               |          |                  |
|-----------|-------------|---------------|----------|------------------|
| <b>Ga</b> | <b>arým</b> | <b>a-kõ-m</b> | <b>o</b> | <b>Ø-inõ-re.</b> |
| 2.NOM     | already     | 2-drink-NF    | INSTR    | 3-end-DIM        |
- ‘You have already finished drinking.’

Next to the *nare* form illustrated in (53), there is also the short form *na* (Castro Alves, 2004, p. 129). This kind of variability fits a grammaticalization hypothesis.

Like for Panará we should ask how the Timbira ‘finish’ verb acquired a standard negation sense. Castro Alves (2010, p. 468), followed by Gildea and Castro Alves (2020, pp. 87-88), explicitly says that the change involved an intermediate existential negation sense. This claim does not say what kind of existential negator it is. Like for Panará *pjo* we are not aware of any evidence that *nare* became an existential operator for objects. Of course, we don’t know about the earlier stages, but at least in present-day Krahô we find a negative verb *jamrëare* as an existential negator (55).

- (55) Krahô (Miranda, 2015, p. 255)
- |           |            |               |                  |
|-----------|------------|---------------|------------------|
| <b>Cô</b> | <b>kam</b> | <b>ro-hti</b> | <b>jamrëare.</b> |
| water     | LOC        | anaconda-INTS | NEG.EX           |
- ‘There are no anacondas in the river.’

There is also no present-day evidence for privative or prohibitive uses. As mentioned already, privative negation is served by either *kễt*, illustrated in (36), or *nõ*, and the latter also appears with a prohibitive function.

- (56) Krahô (Miranda, 2015, pp. 260, 254)
- (a) **Ø-wa=nõ**  
 3-tooth=NEG  
 ‘Toothless.’
- (b) **Ita py-r nõ.**  
 DEM take.SG-NF NEG  
 ‘Don’t take this.’

<sup>12</sup> Castro Alves (2010, p. 469) refers to Heine (1993, p. 35). The latter has one example, but the verb there does not mean ‘finish’, but ‘stop’.

**Nare** thus patterns very much like **pjo**. Both demonstrably come from ‘finish’ verbs, they are currently only used in standard negation, not existential, privative or prohibitive negation. We may assume, in agreement with Gildea and Castro Alves (2020, p. 87), that the ‘finish’ verb that is the source is intransitive.

Yet there are two complications. First, **nare**, in (57) showing up in a short from **na**, has developed nominative-absolutive alignment.

(57) Canela (Gildea & Castro Alves, 2010, p. 178)

Wa ha i-pyr na.  
1.NOM IRR 3.ABS-grab.NF NEG  
‘I will not grab it.’

The starting point is again, we propose, like for **kêt**, the integration of a topic/focus constituent integrating into the clause and then turning the existential into a privative, from ‘as far as you are concerned, there is no grabbing it’ to ‘you are without grabbing it’. We also see that the ‘privativization’ applies to pronouns, like it does for Apinajé, but not for Kĩsêdjê (see section on Goyaz **\*kêt**). So to this extent at least Canela does have a privative use of **nare** and in this respect **nare** is like **kêt**. There is no such evidence for **pjo**. Panará alignment is altogether different, with a generalized ergative-absolutive system.

A second complication concerns the Panará negator **rõ**. According to Gildea and Castro Alves (2010, p. 87) it is a cognate of **nare**. Their source, Dourado (2001), does not actually say this, and Nikulin (2020, p. 454) suggests that **rõ** might derive from **\*tõ**. In any case, its current patterning is not, in any strong way, related to that of **nare** or **tõ**. **Rõ** differs from **tõ** in that **tõ** is Panará phenomenon and **rõ** is not. **Rõ** also differs from **nare** in that **rõ** has a wider spread. In Panará, **rõ** is a standard negator as well as a privative one.

(58) Panará (Dourado, 2001, pp. 118, 122)

(a) Mõsy jy=kjõti rõ.  
maize.ABS R.INTR=sprout NEG  
‘The maize didn’t sprout.’

(b) Mära hẽ ti=py-ri inkõ saswâ-ri nõ amã.  
3SG.M ERG 3.SG.ERG=take-PFV water pour-PFV<sup>13</sup> NEG INES  
‘She carried water without spilling.’

We conclude that the question of the origin of **rõ** and its relation to **nare** remains open.

## OTHER NEGATIVE REFLEXES OF ‘FINISH’ VERBS

Timbira has a **jamre** ‘finish’ verb (Castro Alves, 2010, p. 450)<sup>14</sup>. It seems that this is a component in the regular negative existential verb **hamrẽare**, illustrated in (55). This would mean that two different ‘finish’ verbs have impacted in that language.

<sup>13</sup> Bardagil-Mas (2018, pp. 34-39) doubts that **-ri** is an aspect marker.

<sup>14</sup> One referee points out that Apinajé has **hãmri** ‘ready, finished’.



It is strange to see the second one only for negative existence of objects. We also see this in Apinajé *amrakati*, similarly an existential negator for objects (illustrated in (34)). Here the *amr-* component combines with *-kati*, which surfaces as negator in Mëbêngôkre (Costa, 2015, p. 120). This does not make it less mysterious, for an analysis of *amrakati* as ‘finish.NEG’ does not make much sense. Kĩsêdjê uses *hwêttxi* as a prohibitive marker (L. Santos, 1997, p. 148). Could it contain a form related to the verb *hwa* ‘kill, finish’ (Nikulin, 2020, p. 477), which is also a completive marker (L. Santos, 1997, p. 91), followed by what is possibly an intensifier *-txi* (L. Santos, 1997, p. 67)? Finally, Kaingáng has a standard negator *pijé ~ pe ~ pi* (Wiesemann, 1972, p. 107). We will discuss Kaingáng *pijé ~ pe ~ pi* in the next section, because it is preverbal rather than postverbal.

We also find the connection between ‘finish’ and a negator in the wider Macro-Jê family, with the Krenak standard negator *nuk*, which is related to *nôg* ‘to end’ in Maxakalí (Nikulin, 2020, p. 154; Nikulin & Coelho da Silva, 2020, p. 16)<sup>15</sup> and which may ultimately have the same Proto-Macro-Jê origin *\*tũ<sub>1</sub>k* as Proto-Jê *\*tũ<sup>\*</sup>* (Nikulin, 2020, pp. 118, 387). For the Arikapú prohibitive, van der Voort (2007, p. 140) gives *-pi*. It is intriguing that *-pi* might support that in this branch at least a special link between ‘finish’ and negation specifically relates to prohibitive negation (see the discussion around example (43)), a link that is not evidenced in the Jê languages.

## NON-POSTVERBAL STANDARD NEGATORS

Even though the Jê standard negators are mostly postverbal, there are some exceptions. The first two take us to Kaingáng. First, the dialect of the village Icatu (São Paulo) allows a preverbal pattern, which uses what looks like an allomorph of the postverbal negator *tõ*.

(59) Icatu Kaingáng (M. S. Silva, 2011, pp. 162, 152)

(a) **Ti-wă rere wé tõ.**

3SG.M-NOM sun see NEG

‘He didn’t see the sun.’

(b) **Kotit thu koia lengró.**

child NEG eat beans

‘The child does not eat beans.’

M. S. Silva (2011, *passim*) makes clear the Icatu speakers are in close contact with speakers of the Arawak language Terena and with Portuguese; the latter has become their first language (M. S. Silva, 2011, pp. 13, 35). Both Terena and Portuguese have a preverbal standard negator (see Michael, 2014a, pp. 211-212 for Terena), and we hypothesize that the preverbal position in (59b) is due to language contact. But perhaps this is not the only reason, for Kaingáng has a second negator, *pijé ~ pe ~ pi* (Wiesemann, 1972, p. 107) (*p’ia ~ pie ~ pij* in Valfloresiana, 1918, p. 558), which is also preverbal. There is no sign of *p’ia ~ pie ~ pij* in the Icatu dialect, as described by M. S. Silva (2011). Perhaps language contact pushed *thu* into a slot that was already available for negation and replaced its earlier occupant. In Wiesemann (1972, p. 107) and Wiesemann (2011, p. 74) this is an emphatic negator. However, judging from examples in Gonçalves (2007), like in (60), the emphatic effect may have bleached.

<sup>15</sup> In the extinct related language Malalí, M. A. Silva and Nikulin (2021) found a negator *nôk*.

(60) Kaingáng (Gonçalves, 2007, p. 159)

Ti ter ja nĩn hãra inh pi vé-g mũ.  
 3 die ASP ASP but 1 NEG see-FIN ASP  
 'He died, but I didn't see it.'

We do not know why *pijé ~ pe ~ pi* is preverbal.

The third exception takes us to the Timbira languages. Canela and Krahô have *nare* at the right periphery of the clause, and there can be a second exponent *nee* either in post-subject or clause-initial position.

(61) Canela (Castro Alves, 2004, p. 129)

Ahkrajre nee rop cahy-r prãm nare.  
 boy NEG dog hit-NF want NEG  
 'The boy doesn't want to hit the dog.'

Castro Alves (2004, pp. 129, 130) takes *nee* to be an intensifying particle, but it is not clear that the *nee ... nare* pattern is (still) emphatic. The grammar does not report any non-negative use of *nee*. Interestingly, Popjes and Popjes (1986, p. 162) give *nee* a scalar ('not even') reading. Given its shape and unusual position, we hypothesize that it comes from Portuguese *nem* 'not also, not even'. It would also explain why the language lacks a non-negative use of *nee*. This conjecture is further supported by the fact that Miranda (2015, p. 259) reports a connective *nee ... nee* use. We know from the typological literature that languages often express 'not ... too' ('neither') and 'not even' with the same negator (e.g. van der Auwera, 2021) and Portuguese *nem* is a case in point.

(62) Krahô (Miranda, 2015, p. 259)

Nee Piikẽn nee Jõhi jũm te me h-ũ-j-ahê-r  
 neither Piikẽn nor Jõhi someone ERG PL 3-ANTIP.NF-TH-hunt-NF  
  
 pĩn amji j-axà-r nare.  
 ABL REFL TH-insert.PL-NF NEG  
 'Neither Piik'ẽn nor Jõhi, nobody returned from hunting.'

The fact that doubling with a single *nee*, as in (61), lacks any emphatic or scalar nuance further suggests that this element of meaning has bleached, and that we are dealing with a Jespersen Cycle. Interestingly, in the Timbira language Pykobjê the double *nee ... nare* exponence is also found, and at least in the past<sup>16</sup> it is obligatory (Sá Amado, 2004, p. 123). She also considers a Jespersen Cycle hypothesis. It is important to point out that a typical Jespersen Cycle goes from the left to the right, but in this case the direction is different. It manifests what has been called 'Jespersen in reverse' (van der Auwera & Vossen, 2016, p. 208; Vossen, 2016), which makes perfect sense if the process starts off with a postverbal negator. A. Nikulin (personal communication, 2020) points out that the very fact that *nee* occurs in

<sup>16</sup> In the non-past there is another preverbal marker *wyr* (Sá Amado, 2004, pp. 126-128).

at least three Timbira languages suggests that it could be old and thus endogenous, and that the connective use in (62) would rather be an extension prompted by contact with Portuguese. This is certainly possible, yet Sá Amado (2004, p. 125) goes out of her way to say that we don't know whether the Pykobjê strategy is old or recent.

Finally, it has been suggested that Panará has a circumverbal pattern with *tõ* in preverbal position and *pjo* or, less commonly, *rõ* in postverbal position (Dourado, 2001, p. 120). (63) are Dourado (2001) examples, but the glossing of *tõ* is ours.

(63) Panará (Dourado, 2001, pp. 120, 121)

(a) **Ra=tõ=pôô**      **pjo**      **môtô**      **amã.**

3PL.ABS=EMPH=arrive    NEG      boat      INES

'Nobody arrived by boat.'

(b) **Akâ**      **hẽ**      **ti=tõ=swâ-ri**      **rõ**      **tepi.**

Akâ      ERG      3SG.ABS=EMPH=do-PFV    NEG      fish.ABS

'Akâ didn't catch any fish.'

Dourado (2001, p. 120) hedgingly states that the doubling may indicate strong negation. More recent work by Bardagil-Mas (forthc.) confirms that the pattern with *tõ* is emphatic, but he also shows that *tõ* is not dedicated to negative emphasis. (64) is an affirmative clause. We have therefore glossed *tõ* as an emphasizer both in negative and affirmative clauses.

(64) Panará (Bardagil-Mas, forthc.)

**Rê=tõ=Ø=py**      **kâjasâ.**

1SG.ERG=EMPH=3SG.ABS=take    machete

'I did take a machete.'

Should *tõ* become restricted to negation, it will count as a step in a Jespersen Cycle in reverse.

## CONCLUSION

This paper dealt with standard negation in the Jê languages. We started from the observation that standard negators tend to occupy a postverbal position and that there are two accounts that attempt to explain the origin of these negators. Some derive them from existential negators, others from privative negators. We explored both accounts and argued that the negative existential account is to be preferred, but also that the accounts need not exclude each other. In particular, we argued that the reanalysis of an extra-clausal topic with an existential negation into a subject may turn the existential negator into a privative negator, which can later function as a standard negator. We also claimed that there is a third scenario. It is similar to the negative existential scenario, but it differs in that the negative existence of a state of affairs is not aligned with the non-existence of an object. The non-existence finds its origin in a construction that expresses that an event or process is finished. This path is similar to the path known from the literature that starts from a construction that expresses that an event or process stops. But it is different: the 'stop' scenario is documented as yielding prohibitive

negation, whereas what we see in Jê languages yields standard negation. We also discussed a few cases of preverbal or circumverbal standard negation, and here we may see the effect of language contact.

## ABBREVIATIONS

1	first person	F	feminine	NMLZ	nominalizer
2	second person	FCT	factive	PFV	perfective
3	third person	FIN	finite	PL	plural
ABL	ablative	GEN	generic	PRED	predicative
ABS	absolutive	HON	honorific	PRF	perfect
ALL	allative	IMP	imperative	PRIV	privative
ANTIC	anticipative	IMPERS	impersonal	PROH	prohibitive
ANTIP	antipassive	INES	inessive	PROSP	prospective
ASP	aspect	INSTR	instrumental	PRS	present
AUG	augmentative	INT	interrogative	PST	past
AUX	auxiliary	INTR	intransitive	PTCP	participle
CAUS	causative	INTS	intensifier	R	realis
DAT	dative	IPFV	imperfective	REFL	reflexive
DEF	definite	IRR	irrealis	REL	relational
DEM	demonstrative	IT	iterative	SBJ	subject
DIM	diminutive	LOC	locative	SG	singular
DIR	directional	M	masculine	SPEC	specific
DIST	distant	MI	middle	SUB	subordinator
EMPH	emphatic	NEG	negator	TH	thematic consonant
ERG	ergative	NF	non-finite	VOC	vocative
EX	existential	NOM	nominative		

## ACKNOWLEDGEMENTS

This study was made possible by the Research Foundation Flanders, whose financial support is gratefully acknowledged: grant No G024117N awarded to Johan van der Auwera. Olga Krasnoukhova would like to acknowledge funding from the European Union's Horizon 2020 research and innovation program under the Marie Skłodowska-Curie grant agreement No 895548, made use of when finalizing the present paper. We are most grateful to Andrés Salanova (Ottawa), Andrey Nikulin (Brasília), and three anonymous reviewers for all very helpful comments.

## REFERENCES

- Bardagil-Mas, B. (2018). *Case and agreement in Panará* [Doctoral dissertation, University of Groningen].
- Bardagil-Mas, B. (forthc.). Negation in Panará. In M. Miestamo & L. Veselinova (Eds.), *Negation in the languages of the world: Typologically and functionally based descriptions*. Language Science Press.
- Beauchamp, J., Estevam, A. M., & Salanova, A. (2017). *Negation in Jê languages*. Paper presented at a workshop on the Negative Existential Cycle.

- Camargo, N. S. (2015). *Tapayuna (Jê): Aspectos morfossintáticos, históricos e sociolinguísticos* [Doctoral dissertation, Universidade Estadual de Campinas].
- Castro Alves, F. (2004). *O Timbira falado pelos Canele Apãniekrá: Uma contribuição aos estudos da morfossintaxe de uma língua Jê* [Doctoral dissertation, Universidade Estadual de Campinas].
- Castro Alves, F. (2010). Evolution of alignment in Timbira. *International Journal of American Linguistics*, 76(4), 439-475. <https://doi.org/10.1086/658054>
- Costa, L. S. (2015). *Uma descrição gramatical da língua Xikrín do Cateté (família Jê, tronco Macro-Jê)* [Doctoral dissertation, Universidade de Brasília].
- Cotrim, R. G. P. M. (2016). *Uma descrição da morfologia e de aspectos morfossintáticos da língua Akwê-Xerente (Jê Central)* [Doctoral dissertation, Universidade de Brasília].
- Croft, W. (1991). The evolution of negation. *Journal of Linguistics*, 27(1), 1-27. <https://doi.org/10.1017/S0022226700012391>
- D'Angelis, W. (2008). Algumas notas comparativas sobre o dialeto Kaingang paulista. In S. V. Telles & A. Santos de Paula (Eds.), *Topicalizando Macro-Jê* (pp. 29-48). Nectar.
- Dourado, L. G. (2001). *Aspectos morfossintáticos da língua Panará (Jê)* [Doctoral dissertation, Universidade Estadual de Campinas].
- Dryer, M. (2013). Order of negative morpheme and verb. In M. Dryer & M. Haspelmath (Eds.), *The world atlas of language structures online*. Max Planck Institute for Evolutionary Anthropology. <http://wals.info/chapter/143>
- Estevam, A. M. (2011). *Morphosyntaxe du xavante, langue jê du Mato Grosso (Brésil)* [Doctoral dissertation, Université de Paris 7].
- Evans, N., & Watanabe, H. (2016). *Insubordination*. Benjamins.
- Gakran, N. (2015). *Elementos fundamentais da gramática Laklanô* [Doctoral dissertation, Universidade Estadual de Campinas, Campinas].
- Gildea, S., & Castro Alves, F. (2010). Nominative-absolutive: Counter-universal split ergativity in Jê and Cariban. In S. Gildea & F. Queixalós (Eds.), *Ergativity in Amazonia* (pp. 159-199). Benjamins.
- Gildea, S., & Castro Alves, F. (2020). Reconstructing the source of nominative-absolutive alignment in two Amazonian language families. In J. Barðdal, S. Gildea & E. R. Luján (Eds.), *Reconstructing syntax* (pp. 47-107). Brill. [https://doi.org/10.1163/9789004392007\\_003](https://doi.org/10.1163/9789004392007_003)
- Givón, T. (1973). The Time-Axis Phenomenon. *Language*, 49(4), 890-925. <https://doi.org/10.2307/412067>
- Givón, T. (1978). Negation in language. In P. Cole (Ed.), *Syntax and semantics 9* (pp. 69-112). Academic Press.
- Givón, T. (1984). *Syntax: A functional-typological introduction* (Vol. 1). Benjamins.
- Gonçalves, S. A. (2007). *Aspecto no Kaingang* [MA thesis, Universidade Estadual de Campinas].
- Gras, P., & Sansiñena, M. S. (2017). Exclamatives in the functional typology of insubordination: Evidence from complement insubordinate constructions in Spanish. *Journal of Pragmatics*, 115, 21-36. <https://doi.org/10.1016/j.pragma.2017.04.005>
- Hall, J., McLeod, R. A., & Mitchell, V. (2004). *Pequeno dicionário: Xavante-Português, Português-Xavante*. Sociedade Internacional de Linguística.
- Heine, B. (1993). *Auxiliaries: Cognitive forces and grammaticalization*. Oxford University Press.
- Heine, B., & Kuteva, T. (2002). *World lexicon of grammaticalization*. Cambridge University Press.
- Jolkesky, M. P. V. (2010). *Reconstrução fonológica e lexical do Proto-Jê Meridional* [MA thesis, Universidade Estadual de Campinas].
- Krasnoukhova, O., van der Auwera, J., & Norder, S. (under revision). Standard negation: The curious case of South America.

- Kuteva, T., Heine, B., Hong, B., Long, H., Narrog, H., & Rhee, S. (2019). *World lexicon of grammaticalization* (2 ed.). Cambridge University Press.
- Lachnitt, G. (1987). *Romnhitsi'ubumro: a'uwê mreme = waradzu mreme: Dicionário xavante-português*. Missão Salesiana de Mato Grosso.
- Lachnitt, G. (1988). *Damreme'uwa'imramidzé: Estudos sistemáticos e comparativos de gramática Xavante*. Missão Salesiana de Mato Grosso.
- Marchese, L. (1986). *Tense/aspect and the development of auxiliaries in Kru languages*. Summer Institute of Linguistics and University of Texas.
- McLeod, R., & Mitchell, V. (1977). *Aspectos da Língua Xavante*. Summer Institute of Linguistics.
- McLeod, R. & Mitchell, V. (2003). *Aspectos da Língua Xavante*. 4th ed. Sociedade Internacional de Linguística.
- Michael, L. (2014a). Negation in Nanti. In L. Michael & T. Granadillo (Eds.), *Negation in Arawak languages* (pp. 184-215). Brill.
- Michael, L. (2014b). A typological and comparative perspective on negation in Arawak languages. In L. Michael & T. Granadillo (Eds.), *Negation in Arawak languages* (pp. 241-300). Brill.
- Miranda, M. (2015). Negação em Krahô (família Jê) em uma perspectiva comparativa. *Revista Brasileira de Linguística Antropológica*, 7, 245-274.
- Muysken, P., Hammarström, H., Birchall, J., Danielsen, S., Eriksen, L., Galucio, A.V., . . . O'Connor, L. (2014). In L. O'Connor & P. Muysken (Eds.), *The native languages of South America. Origins, development, typology* (pp. 299-322). Cambridge University Press.
- Nikulin, A. (2020). *Proto-Macro-Jê. Um estudo reconstrutivo* [Doctoral dissertation, Universidade de Brasília].
- Nikulin, A., & Salanova, A. P. (2019). Northern Jê verb morphology and the reconstruction of finiteness alternations. *International Journal of American Linguistics*, 85(4), 533-567. <https://doi.org/10.1086/704565>
- Nikulin, A., & Coelho da Silva, M. A. (2020). As línguas Maxakalí e Krenák dentro do tronco Macro-Jê. *Cadernos de Etnolingüística*, 8(1), 1-64.
- Oliveira, C. C. (2005). *The language of the Apinajé people of Central Brazil* [Doctoral dissertation, University of Oregon].
- Oliveira, R. C. (2007). *Morfologia e Sintaxe da língua Xavante* [Doctoral dissertation, Universidade Federal do Rio de Janeiro].
- Pickering, W. A. (2010). *A fonologia xavante: Uma revisitação* [Doctoral dissertation, Universidade Estadual de Campinas].
- Popjes, J., & Popjes, J. (1986). Canela-Krahô. In D. C. Derbyshire & G. K. Pullum (Eds.), *Handbook of Amazonian Languages* (Vol. 1, pp. 128-199). Mouton de Gruyter.
- Quintino, W. (2020). Sobre a negação em Xavante. *Paper presented at a workshop on negation in the Amerindian language*, Campinas.
- Ribeiro, E. R. (2012). *A grammar of Karajá* [Doctoral dissertation, University of Chicago].
- Rodrigues, A. D. (1999). Macro-Jê. In R. M. W. Dixon & A. Aikhenvald (Eds.), *The Amazonian Languages* (pp. 165-206). Cambridge University Press.
- Sá Amado, R. (2004). *Aspectos morfofonológicos do Gavião-Pykobjê* [Doctoral dissertation, Universidade de São Paulo].
- Salanova, A. P. (2007). *Nominalizations and aspect* [Doctoral dissertation, Massachusetts Institute of Technology].
- Santos, J. P. (2008). *Marcas pessoais, concordância de número e alinhamento em Xavante* [MA thesis, Universidade de Brasília].
- Santos, L. C. (1997). *Descrição de aspectos morfossintáticos da língua Suyá/Kisêdjê, família Jê* [Doctoral dissertation, Universidade Federal de Santa Catarina].
- Silva, M. S. R. (2011). *A língua Kaingang da aldeia paulista Icatu: Uma descrição funcional* [Doctoral dissertation, Universidade Estadual Paulista, Júlio de Mesquita Filho].

- Silva, M. A. C., & Nikulin, A. (2021). Uma aproximação à fonologia e morfologia do Malalí. *Cadernos de Etnolingüística*, 9(1), 1-59.
- Sousa Filho, S. M. (2007). *Aspectos morfosintáticos da Língua Akwẽ-Xerente (Jê)* [Doctoral dissertation, Universidade Federal de Goiás].
- Trevisan, R., & Pezzotti, M. (1991). *Dicionário Kayapó-Português e Português-Kayapó*. Belém.
- Valfloriana, M. B. (1918). Ensaio de grammatica Kainjgang. *Revista do Museu Paulista*, 10, 529-563.
- Van der Auwera, J. (2010). On the diachrony of negation. In L. R. Horn (ed.), *The expression of negation* (pp. 73-109). De Gruyter Mouton.
- Van der Auwera, J., & Vossen, F. (2016). Jespersen cycles in the Mayan, Quechuan and Maipurean languages. In van Gelderen, E. (ed.) *Cyclical change continued*. Amsterdam: Benjamins, 189-218.
- Van der Auwera, J., & Krasnoukhova, O. (2019). Zaparoan negation revisited. *Revista Brasileira de Linguística Antropológica*, 11(2), 19-39. <https://doi.org/10.26512/rbla.v11i02.27300>
- Van der Auwera, J., & Krasnoukhova, O. (2020). The typology of negation. In V. Déprez & M. T. Espinal (eds.), *The Oxford handbook of negation* (pp. 91-116). Oxford University Press.
- Van der Auwera, J. (2021). Quirky negative concord: Croatian, Spanish and French *ni*'s. *Jezikoslovje*, 22(2), 195-225. <https://doi.org/10.29162/jez.2021.5>
- Van der Auwera, J., Krasnoukhova, O. & Vossen, F. (2021). Intertwining the negative cycles. In L. Veselinova & A. Hamari (eds.), *The negative existential cycle from a historical-comparative perspective* (pp. 557-596). Language Science Press.
- Van der Voort, H. (2007). Proto-Jabutí: Um primeiro passo na reconstrução da língua ancestral dos Arikapú e Djeoromitxí. *Boletim do Museu Paraense Emílio Goeldi. Ciências Humanas*, 2(2), 133-168. <https://doi.org/10.1590/S1981-81222007000200007>
- Van Gelderen, E. (2021). The negative existential and other cycles: Jespersen, Givón, and the Copula Cycle. In A. Hamari & L. Veselinova (Eds.), *The negative existential cycle from a historical-comparative perspective* (pp. 535-556). Language Science Press.
- Veselinova, L. (2013). Negative existentials: A cross-linguistic study. *Italian Journal of Linguistics*, 25, 107-145.
- Veselinova, L. (2014). The negative existential cycle revisited. *Linguistics*, 52, 1327-89.
- Veselinova, L., & Hamari, A. (2021). (Eds.). *The Negative Existential Cycle from a historical-comparative perspective*. Language Science Press.
- Vossen, F. (2016). *On the typology of the Jespersen cycles* [Doctoral dissertation, University of Antwerp].
- Wiesemann, U. (1972). *Die phonologische und grammatische Struktur der Kaingang-Sprache*. Mouton de Gruyter.
- Wiesemann, U. (2011). *Dicionário Kaingang-Português/Português- Kaingang* (2 ed.). Editora Esperança.

## AUTHOR'S CONTRIBUTION

The authors declared active participation during all stages of manuscript elaboration.

