

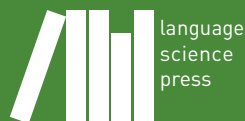
The Negative Existential Cycle

Edited by

Arja Hamari

Ljuba Veselinova

Studies in Diversity Linguistics ??



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Chapter 1

Negation in Tacana (Amazonian Bolivia): synchronic description and diachronic reconstruction

Antoine Guillaume

French National Centre for Scientific Research

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1 Introduction

Tacana is one of the five extant languages of the small Takanan family from the Amazonian lowlands of Bolivia and Peru (together with Araona, Cavineña, Ese Ejja, and Reyesano). The language is critically endangered, being only spoken by a few dozens of elderly people, and basically undescribed, except in the form of a tagmemic grammar (Ottaviano1965Ottaviano1967).

This paper is the first study of negation in this language. It is mostly based on a corpus of firsthand data (texts and elicitations) from the Tumupasa dialect that I collected during four months of fieldwork conducted on four field trips between 2009 and 2013. The data are complemented by second hand materials published by the Summer Institute of Linguistics, consisting of a number of texts (Ottaviano1980) and sentences that illustrate dictionary entries (Ottaviano1989). Ultimately, some data from the mid-XIXth century are also presented in the section on diachrony (LafoneQuevedo1902). Note that no controlled elicitation with native speakers was conducted specifically on the topic of negation, which means that the study relies exclusively on my own interpretation of the available corpus.

The goals of this paper are twofold: (1) to provide a detailed description of a wide range of negation (SN) constructions in Tacana and (2) to attempt a historical reconstruction of some of the negation markers and patterns. One significant



contribution to the field of diachronic typologies of negation is the reconstruction for one of the Standard Negation (hereafter SN) markers of an etymology (stand-alone negation word ‘no’) and type of Jespersen Cycle (from the right of the verb to the left of the verb), which are not commonly reported in general studies on negation. The proposed reconstruction also contributes to the current studies on the interactions between SN and the Negative Existential Cycle (the general theme of the volume) in arguing that the Tacana stand-alone negation word ‘no’ originated in a negative existential predicate. In doing so, the paper adds to the diachronic literature on languages where a negative existential breaks into the verbal domain through a stand-alone negation stage (Croft1991Veselinova2013-tacVeselinova2016).

In the literature, the grammaticalization of stand-alone negation words (also known as “absolute negators,” “pro-sentence words no!,” “negative replies to polarity questions,” “short answers no!,” “negative interjections,” etc.) as SN markers through a reinforcement/strengthening process (Jespersen Cycle) is well documented. The phenomenon is attested, for instance, in languages such as Brazilian Portuguese, Caribbean Spanish dialects, northern Italian dialects, Dutch, Africans, Swedish and Sino-Russian (see, among others, Schwegler1988Auwera2009-tacVeselinova2016). As illustrated, for instance, in Brazilian Portuguese(1), a word meaning ‘no,’ originally used outside of a negative clause (stage 2), ends up replacing the original SN marker inside of the clause (stage 5).

(1) Brazilian Portuguese(evolutionary path based on discussion in Creissels2006)

- stage 1 *Não sei.*
- stage 2 *Não sei, (não!)*
- stage 3 *Não sei não.*
- stage 4 *(Não) sei não.*
- stage 5 *Sei não.*

In all these languages, however, the cycle operates from the left of the verb to the right of the verb, in other words from a preverbal to postverbal SN marker. In Tacana, as I argue here, the same type of etymology and grammaticalization pathway holds, but the direction of the cycle is the opposite. Here, a postverbal SN marker is in the process of being replaced by a negative stand-alone word in preverbal position. This results in the phenomenon called a Jespersen Cycle “in reverse” by AuweraVossen2016 and Vossen2016 according to these authors, it appears to be common in South American languages.

The paper is organized in two main parts. The first part is descriptive, with a short introduction on Tacana clause structure and verbal predication (§2) and

a presentation of six negation constructions: (1) **Standard Negation (SN)**, which applies, by definition, to declarative main clauses with a finite verb predicate (Miestamo2005) (§3) but also, in Tacana, to non-verbal clauses expressing equation, proper inclusion, attribution relations (§4) and (in rare cases) existence or location (§5); (2) **negation of existential/locative adjective predicates**; (3) **negation of declarative clauses with a non-finite predicate** with two subtypes (§6); (4) non-clausal **stand-alone negation** (§7); (5) non-clausal **constituent negation** with two subtypes (§7); and (6) **negation of command (hortative and imperative) clauses** with two subtypes (§8).¹

A summary table of all the constructions is provided in section §9. The second part of the paper is diachronic, engaging in a reconstruction of the declarative clause negation markers and patterns: SN and negation of declarative clauses with a non-finite predicate (§10). A summary and a conclusion are provided in §11.

2 Basic facts on Tacana clause structure and verbal predication

Main clauses in Tacana consist of an obligatory predicate² and optional arguments and/or obliques and/or adjuncts. When overtly expressed, the arguments, whether NPs or pronouns, display a (split)³ ergative case-marking system, as illustrated in (2a), with an ergative marked A NP and absolutive (unmarked) O NP, and (2b), with an absolutive (unmarked) S NP.⁴

(2) Transitive and intransitive declarative main clauses

¹Essentially, two further types of negation are not discussed in the paper: negation of indefinites and quantifiers and negation in dependent clauses.

²Note that the term “predicate” used here does not make reference to any participant of the clause.

³The case system is conditioned by the type of referent: strictly ergative with 1SG/2SG pronouns, optionally ergative with 3SG pronouns and NPs, and neutral with all non-singular pronouns (Guillaume2016-tacGuillaumeXXXX).

⁴The Tacana consonant phonemes are *p*, *b*, *t*, *d* [d], *d'* [ḏṑ/ḏṑ], *dh* [ð], *ts* [tʃ], *ch* [tʃ], *s* [s], *sh* [ʃ], *k*, *kw* [kʷ], *r* [r], *m*, *n*, *j* [h], *w* [w/β] and *y* [j]. The vowel phonemes are *a*, *e*, *i* [i/j] and *u* [u/w]. Stress falls on the 3rd mora (i.e., vowel or semi-vowel [j] or [w]) counting from the left). Note that the illustrative examples include the free translation in local Bolivian Spanish that was given by the native speakers who helped me transcribe and translate the texts. The codes that follow the translation lines (e.g., so007) correspond to the place of the example in my (Toolbox) database. Unless explicitly specified, the examples come from texts.

- The arguments, especially when expressed by NPs, do not have strict ordering restrictions and can appear in any position in the clause depending on their discourse-pragmatic status. Pronominal arguments, on the other hand, tend to occur either in first position in the clause (when contrastive) or second position (when referring to continuing topics).

(3) Dapia =da etse beu se e-tutua. E-jemi-tsua =da etse beu
 there =PTC 1DU PTC fish FUT-spill FUT-take.out-go.up =PTC 1DU PTC
tutua =da etse y-a.
 spill =PTC 1DU FUT-do

There is no difference in (at least propositional) meaning between finite verb constructions and non-finite verb constructions. The reasons motivating the use of one construction or the other is not fully understood yet, although it might have to do with the discourse status of the event or some specific discourse genres.⁵

4

Finally, both types of predicates do not have any impact on the way the arguments are expressed. When negated, however, they require distinct constructions. The construction used to negate finite verbal main clauses is also used to negate a number of non-verbal clauses. It will be called Standard Negation (SN) and discussed first, as it applies to verbal clauses (§3) and non-verbal clauses (§4 and §5). The construction used to negate non-finite verbal main clauses will be discussed in a separate section (§6).

3 Negation of declarative clauses with a finite verb predicate (Standard Negation)

In clauses with a **finite verb predicate**, the lexical verb stem, with or without derivational morphology, directly and obligatorily bears the inflectional morphology (basically TAM and 3rd person indexation), as illustrated in (2a,b) above, in the first clause of (3) and (4a,b), and in Table 1 below, which shows the morphological structure of the predicate. In the examples and the Table, the inflectional affixes are in bold and underlined.

(4) transitive and intransitive main clauses with a finite verbal predicate

- | | | | | |
|----|--|---------------------------|------------------|-------------|
| | A | O | V | |
| a. | Dapia =da | etse beu se | <u>e</u> -tutua. | |
| | there | =PTC 1DU | PTC fish | FUT-spill |
| | 'Ahí ya lo vamos a vaciar los peces.' em044 | | | |
| | 'There we are going spill the fish (on the ground).' | | | |
| | V | | S | |
| b. | Beu =pa | ja-mesia-ti- <u>idha</u> | jida deja, mawi | |
| | PTC =REP | MID-let_go_of-MID-REM.PST | that man | almendrillo |
| | echa=jenetia. | | | |
| | branch=ABL | | | |
| | 'Ya dice se largó del gajo del alamendrillo.' ch083 | | | |
| | 'He let go of himself from the almendrillo branch.' | | | |

Negation of declarative (and interrogative) main clauses containing a finite verb construction is realized through a discontinuous embracing construction

peated, as is the case in two consecutive sentences from the same text in (4). I also found that non-finite verb constructions are used more often in informal style and hardly ever in elicited material.

Here a table is missing.

Table 1: Diagram of finite verb construction

-3	<u>TAM</u>
-2	valency change
-1	compounded/incorporated noun
0	verb root
+1	compounded/incorporated verb
+2	valency change
+3	“adverbial-like”
+4	<u>3rd person indexation</u>
+5	<u>temporal distance -iti-</u>
+6	<u>“back” -iba-</u>
+7	“adverbial-like”
+8	<u>TAM</u>
+9	reiterative -yu

involving two particles: the preverbal independent *aimue* [ajmue] ~ [ajmwe]⁶ and the postverbal enclitic =*mawe* [maʃe] (with a variant =*mue* [mue] ~ [mwe]). The construction is illustrated in (5a) with a transitive clause, and in (5b) with an intransitive clause.

- O A V
- (5) a. *Aimue* ejije=kwana yama e-shanapa-eni-inia=*mawe*.
 NEG jungle=PL 1SG.ERG IPFV-know-WELL-IPFV.SIT.1/2=NEG
 ‘Ya no conozco estos montes bien.’ ch132
 ‘I don’t know these jungles well anymore.’
- S V
- b. *Aimue* =da ema e-siapati-yu=*mue*.
 NEG =PTC 1SG FUT-come_back-ITER=NEG
 ‘Ya no voy a regresar.’ na191
 ‘I’m not going to come back again anymore.’

The preverbal particle *aimue* is phonologically stressed and syntactically free, occurring anywhere before the verb. It is often the first word of the clause, as in (5a,b); see also (7a,b) further below. But this is not an absolute requirement, as in

⁶As will be seen later, *aimue* is a contracted variant of *aimawe* [ajmaʃe] which shows up in some examples of the SN construction when applied to non-verbal clauses.

(6a,b), where it is preceded by several clausal constituents. The exact motivations for placing *aimue* in different positions before the verb remain to be investigated.

- (6) a. Jade, [ye=base=ja] =mu aimue, sai-da
 let's_see this=DEPR=ERG =CONTR NEG well-ASF
 V
y-a-ta-ani=mawe.
 IPFV-affect-3A-IPFV.SIT=NEG
 'A ver, este no lo hace bien.' bu092
 'Let's see, this damned one doesn't do it well.'
 S
 b. [Piada deja] =pa, [mesa, d'aki=neje], aimue sai-da
 one man =REP 3SG.GEN brother_in_law=ASSC NEG well-ASF
 V
 jadusuti-ina=mawe.
 get_along-HAB.PST=NEG
 'Un hombre, dice, que con su cuñado no se llevaba bien.' ch003
 'There were a man and his brother-in-law who did not get along well.'

The postverbal particle =*mawe*, by contrast, is a phonologically unstressed enclitic with a rigid position. It can only attach to the verb. If the verb of the negated clause is followed by one or more clausal constituents, =*mawe* necessarily remains on the verb, as in (7a,b).

- (7) a. ^V **Aimue** e-juseute-ta=^A**mawe**, ^Sbeni=ja.
 NEG FUT-fell-3A=NEG wind=ERG
 ‘No los va tumbar el viento.’ bu072
 ‘The wind will not fell (the trees).’
 b. Bute-ke! ^V **Aimue** =da e-kwinana=^S**mawe**, ^Sdukei.
 go_down-IMP NEG =PTC FUT-go_out=NEG deer
 ‘Bájate! No va salir el venado.’ du018
 ‘Go down! The deer will not go out.’

In my corpus, very few examples of negation of interrogative clauses can be found. The ones that are available, such as (8), suggest nevertheless that they are negated by means of the same pattern as in declarative clauses.

- (8) Jukwajasu =da aimue dasu e-nubi-ani=mawe [yawī tipa=su]?
 why =PTC NEG then IPFV-enter-IPFV.SIT=NEG water bottom=LOC
 ‘¿Porque pues no entra debajo de agua?’
 ‘Why does it (the caiman) not go underneath the water?’ bo080

In the available corpus, *aimue* is never omitted. As for =*mawe*, I found a couple of examples where it is left out, as in (9) and (10), which suggests that =*mawe* might not be obligatory. It is reminded that no controlled elicitation with native speakers was conducted on negation constructions.

- (9) [Ena dume=su] aimue e-nubi-ti-ani.
 stream inside=LOC NEG IPFV-enter-GO-IPFV.SIT
 ‘No entra dentro del agua.’ bo081
 ‘(The caiman) does not enter into the water.’
- (10) Aimue e-kwina-yu.
 NEG PST-arrive-ITER
 ‘No llegó.’ ch037
 ‘He didn’t arrive.’

From the perspective of Miestamo’s (Miestamo2005Miestamo2007) typology of negative constructions, the Tacana negative construction under discussion is symmetric. Apart from the addition of the negative markers, there do not appear to be any obvious morphosyntactic differences, with the same argument-coding system (split ergative case-marking and constituent order flexibility) and same morphological possibilities on the verbal predicate (derivational and inflectional).

4 Negation of non-verbal clauses (1): equation, proper inclusion, attribution

The SN construction is also used for negating non-verbal clauses. The negation of equation, proper inclusion and attribution clauses is discussed in this section. The negation of existential and locative predication is discussed in the next.

In affirmative equation, proper inclusion and attribution clauses, the predicate consists of an NP or an adjective optionally followed by the inflected copula verb *pu* ‘be,’ as illustrated in (11a-d). The S NP is expressed like the S NP of any other intransitive verbal clauses, being optional and, when expressed, not subject to any ordering restrictions.

- (11) a. proper inclusion (with copula)
 S NP COP
 [Tueda edeje] [a'una deja] pu-ina.
 that youngster bear man be-HAB.PST
 'Ese joven era joven (lit. hombre) oso.' au004a
 'That youngster was a bear-man.'
- b. equation (without copula)
 S NP
 [Mike ebakepuna] [kema kwara].
 2SG.GEN daughter 1SG.GEN mother
 'Tu hija es mi madre.' au155
 'Your daughter is my mother.'
- c. attribution (with copula)
 S ADJ COP
 Id'eti =di tuche-da e-pu-eti.
 sun =PTC strong-ASF IPFV-be-IPFV.STAND
 'El sol también estaba fuerte.' lp078
 'The sun was very hot (lit. strong).'
- d. attribution (without copula)
 S ADJ
 Te =mu ai-da beju...
 garden =CONTR grande-ASF PTC
 'Ahora el chaco es grande...' gu054
 'The garden is big...'

When negated, these non-verbal clauses require the SN construction through the discontinuous embracing construction with the predicate-preposed independent *aimue* and the predicate-postposed enclitic =*mawe*, as illustrated in (12). Both have the same properties as when applied to clauses with a finite verb: ordering flexibility for *aimue*, as long as it appears before the predicated NP or predicative adjective; strict position for =*mawe*, directly attached to the copula verb (if present) or to the predicated NP or predicative adjective (if the copula is absent). As can be seen in (12a), the predicate-preposed negation marker can show up in a longer (more conservative) form *aimawe* [ajmaʃe]. As for =*mawe*, I have too few examples of SN applied to non-verbal clauses to know if it displays the shorter variant =*mue* found in SN applied to verbal clauses.

- (12) a. proper inclusion (with copula)
- | | | |
|---|----|-----|
| S | NP | COP |
|---|----|-----|
- [Tueda edeje] **aimawe** [kristianu eni] pu-ina=**mawe**.
 that child NEG person real be-HAB.PST=NEG
 ‘Ese joven no era humano.’ au003
 ‘That youngster was not a real person.’
- b. equation (without copula)
- | | | |
|---|----|--|
| S | NP | |
|---|----|--|
- Aimue** =jia maida [ye deja] [kema y-awe]=**mawe**?
 NEG =DUBIT PTC this man 1SG.GEN NPF-husband=NEG
 ‘¿No es mi marido este hombre?’ (Ottaviano1989)
 ‘Is this man not my husband?’
- c. attribution (with copula)
- | | | |
|---|-----|-----|
| S | ADJ | COP |
|---|-----|-----|
- [Kea tata] =mu **aimue** sai-da pu-ina=**mawe**.
 1SG.GEN father =CONTR NEG well-ASF be-HAB.PST=NEG
 ‘Mi papá no era tan bueno (renegaba / pegaba).’ ps058
 ‘My father wasn’t nice.’
- d. attribution (without copula)
- | | | |
|-----|---|--|
| ADJ | S | |
|-----|---|--|
- Aimue** sai-da=**mawe** [mike e-bakwa].
 NEG well-ASF=NEG 2SG.GEN NPF-child
 ‘No es bueno tu hijo.’ au222
 ‘Your child is not nice.’

Note finally that I do not have examples in the whole corpus where **=mawe** (or *aimawe* ~ *aimue* for that matter) are omitted. More investigations are however needed to confirm whether this is also a possibility, as in clauses with finite verb, especially since I have very few examples of negation of non-verbal clauses in the current dataset.

5 Negation of non-verbal clauses (2): existential/locative predication

There is no clear formal distinction between existential and locative clauses, whether affirmative or negative. In affirmative existential and locative clauses, the predicate is normally one of four posture verbs, either *ani* ‘sit’ (13a-e), *neti* ‘stand’ (14), *sa* ‘lie’ (15) or *bade* ‘hang’ (16); less commonly, the predicate can also

be the (copula) verb *pu* ‘be’ (see below). In this function, the posture verbs are inflected but with severe restrictions, with only a few possible TAM affixes: a prefix *e-/y-* ‘EXIST/LOC,’ the habitual past *-ina* ‘HAB.PST’ and the complex past tense *-iti-a* ‘TDM-PST’. A locative oblique (or, for that matter, another type of oblique) can be present with no rigid position in the clause. With a dative oblique, the same construction yields the semantics of possessive predication, as seen in (13e), with the possessor encoded by the 3SG dative pronoun *mesa*.

(13) positive: posture verb ‘sit’

- | | | | | |
|----|---|--------------------|------------------------------|---------------------------|
| | LOC | V | S | |
| a. | ... | dapia y-ani | | dhududu. |
| | there | EXIST/LOC-sit | | capybara |
| | ‘(En los lagos grandes,) ahí hay capihuara.’ mc004 | | | |
| | ‘There (in the big lakes,) there are capybaras (lit. sitting).’ | | | |
| | LOC | LOC | | V |
| b. | Chue | [enabaki maje=su] | | y-ani. |
| | there | stream | border=LOC | EXIST/LOC-sit |
| | ‘Allá está (mi mamá) en la banda del arroyo.’ | | | |
| | ‘(My mother) is there (lit. sitting) on the other side of the river.’ au164 | | | |
| | S | | V | LOC |
| c. | [Beinte familia] | ani-ina | Napashi=su | [da mara=su]. |
| | twenty | family | sit-HAB.PST | Napashi=LOC that time=LOC |
| | ‘Veinte familia había en Napashi en ese año.’ na003 | | | |
| | ‘There were twenty families (lit. sitting) in Napashi at that time.’ | | | |
| | S | | V | COMIT |
| d. | [Piada deja] | ani-ina | [mesa ewane=sa kwara=neje]. | |
| | one | man | sit-HAB.PST 3SG.GEN wife=GEN | mother=ASSC |
| | ‘Había un hombre que vivía junto a su suegra.’ gu003 | | | |
| | ‘There was a man who was living with his mother-in-law.’ | | | |
| | S | | DAT | V |
| e. | Ebakwa=chidi | mesa | | y-ani. |
| | child=DIM | | 3SG.DAT | EXIST/LOC-sit |
| | ‘Tenía dice su hijito.’ ye020 | | | |
| | ‘He had a small child.’ [lit. a small child was sitting to him] | | | |

(14) positive: posture verb ‘stand’

- S V LOC
Dukei=base **e-neti** **ena=su** e-id'i-ti-neti.
deer=DEPR EXIST/LOC-stand stream=LOC IPFV-drink-MID-IPFV.STAND
'Ahí está el venado dentro del agua está tomando.' hv027
'There is a deer /the deer is standing in the water and drinking (standing).'
- (15) positive: posture verb 'lie'
LOCS V
Ue dukei **e-sa**.
here deer EXIST/LOC-lie
'Aquí hay un venado echado.' du051
'Here, there is a deer (lying).' (lit. here a deer lies)
- (16) positive: posture verb 'hang'
V LOC
[Piada semana] =pa beu **e-bade** [rara dume=su].
one week =REP PTC EXIST/LOC-hang hole inside=LOC
'Así dice (el tigre) estuvo una semana dentro de la cueva.' bu056
'(The jaguar) was (hanging) inside of the hole during a whole week.'

Instead of a posture verb, the predicate of an existential and locative clause can apparently also be the verb *pu* 'be,' discussed in its copula use in the preceding section. This is suggested by a couple of examples found in the corpus, such as those in (17a) (existential) and (17b) (locative).

- (17) positive: verb ‘be’
- | | |
|--|-----------------------|
| S | V |
| a. Juishu | beju pu-iti-a. |
| judgment | PTC be-TDM-PST |
| ‘Había juicio.’ (in064_ott; Ottaviano1980) | |
| ‘There was a judgment.’ | |
| S | LOC V |
| b. Tueda escuela=su | pu-ina. |
| 3sg | school=LOC be-HAB.PST |
| ‘El estaba en la escuela.’ na205 | |
| ‘He was in the school.’ | |

When negated, existential and locative clauses display two possible patterns. The first, illustrated in (18) and very scarcely attested in the corpus, is through the same discontinuous embracing SN construction with the preverbal independent

aimue and the postverbal enclitic =*mawe*. This first pattern is illustrated with the posture verb *ani* ‘sit’ in (18a) and (18b) and with the copula verb *pu* ‘be’ in (18c). Note that due to a lack of sufficient examples, I am unable to say if *aimue* and/or =*mawe* display the variants they have in SN when applied to other clause types (*aimawe* [ajmaʃe], =*mue* [mue] ~ [mwe]).

- S V
- (18) a. [Da tiempo] **aimue** sapato ani-ina=**mawe**.
 that time NEG shoe sit-HAB.PST=NEG
 ‘En ese tiempo no había zapato.’ ci024
 ‘At that time, there were no shoes.’
- V S
- b. **Aimue** ani-iti-a=**mawe** Rurrenabaque.
 NEG sit-TDM-PST=NEG Rurrenabaque
 ‘(En los tiempos antiguos), no había Rurrenabaque.’ tu002_ott
 ‘(In the old days) Rurrenabaque did not exist.’
- LOC S V
- c. Upia =mu =da **aimue** ejude ekene pu-iti-a=**mawe**.
 here =CONTR =PTC NEG village first be-TDM-PST=NEG
 ‘Aquí no había nada/pueblo / no era pueblo todavía.’ hi020
 ‘Here at first there was no village.’

The second pattern, illustrated in (19a-e) and found in many examples in the corpus, consists of *aimawe* [ajmaʃe] or variant *aimue* [ajmue] ~ [ajmwe] used alone with a predicative function, with or without the inflected copula verb *pu* ‘be.’ In this use, I analyze *aimawe/aimue* as a lexical negative existential/locative adjective in an attributive clause construction, as described in §4. In the examples provided below, one can see negation of existence in (19a), (19b) and (19c), negation of location in (19d) and negation of possession in (19e) (possessor encoded by the 3SG dative pronoun *mesa*).

- ADJ COP S
- (19) a. [Biawa tiempo] =mu =da **aimue** pu-iti-a ejude=kwana.
 old time =CONTR =PTC nonexistent be-TDM-PST village=PL
 ‘En tiempos antiguos no habían pueblos.’ tu001_ott
 ‘In the old days, there were no villages.’ [lit. villages were nonexistent]

- S ADJ
- b. Kwati =mu **aimue** =tsu'u.
 firewood =CONTR nonexistent =STILL
 'La leña todavía no hay.' ci104
 'There is no firewood yet.' [lit. firewood was nonexistent]
 ADJ S ADJ
- c. **Aimue** beu se. **Aimue** beu.
 nonexistent PTC fish nonexistent PTC
 'Ya no hay pescado, ya no hay.' em075
 'There no fish. There were no (fish).' [lit. fish were nonexistent]
 S ADJ LOC
- d. Ema =mu **aimawe** beu [kema tawi-jude=su].
 1SG =CONTR nonexistent PTC 1SG.GEN sleep-PLACE=LOC
 '(Me buscaron ya) yo no estaba en mi cama.' du101
 '(They searched for me but) I wasn't in my bed.' [lit. I was
 nonexistent in my bed]
 ADJ DAT S
- e. **Aimue** mesa aicha...
 nonexistent 3SG.DAT meat
 'No tenía carne...' ye006
 'He didn't have meat.' [lit. the meat was nonexistent to him]

6 Negation of declarative non-finite verbal main clauses

We now turn to the negation of main clauses with a non-finite verbal predicate. As noted in §3, main clauses with a non-finite verbal predicate express the same propositional content as those with a finite verbal predicate, but here the predicate has a different structure. The lexical verb stem, with or without derivational morphology, does not directly bear the inflectional morphology. The inflectional affixes (the same ones used in finite verb constructions and listed in Table 1 (i.e., TAM and 3rd person indexation)) are either carried by a generic auxiliary (light verb), which in this construction is specifically used for this (inflection-carrying) purpose or, more commonly, altogether absent.

The examples in (20a,b), based on the same transitive and intransitive verb stems *tutua* 'spill' and *ja-mesia-ti* 'let go of oneself' used in finite verb constructions in (4a,b), illustrate non-finite verb constructions with inflections carried by a generic auxiliary.

- (20) transitive and intransitive declarative main clauses with a non-finite verb and an overt auxiliary

- | | | | |
|--|---------------------------|---------------------------|------------------|
| | V | A | AUX |
| | | | [tuʔtwa] |
| a. E-jemi-tsua | =da etse, beu | tutua =da etse | y-a. |
| | FUT-remove-go_up =PTC 1DU | PTC spill =PTC 1DU FUT-do | |
| ‘Lo vamos a alzar (la trampa para peces) entre los dos y lo vamos a vaciar.’ em045 | | | |
| ‘We are going to lift (the fish trap) up and spill them (the fishes) (on the ground).’ | | | |
| | V | S | AUX |
| | | | [haʔmesjati] |
| b. Beu, | ja-mesia-ti | ema | pu- <u>ana</u> . |
| | PTC MID-let_go_of-MID 1SG | be-REC.PST | |
| ‘Ya me largué.’ lp033 | | | |
| ‘Then I let go of myself.’ | | | |

As one can see, there are two auxiliaries, the use of which depends on the transitivity of the predicate: *a* ‘do’ when the predicate is transitive (20a) and *pu* ‘be’ when the predicate is intransitive (20b). The auxiliaries are etymologically related, respectively, to the independent transitive lexical verbs *a* ‘affect, make, do (tr.), say (tr.)’, illustrated in (21a), and the intransitive verb *pu* ‘be/exist, be located, do (itr.), say (itr.)’, which can serve, among other things, as the copula predicate in equation, proper inclusion and attribution clauses (§4) and (less commonly) the predicate of existential/locative clauses (§5), as illustrated in (21b) (repeated).

- (21) a. Upia mike ete, ekwanaju y-a.
 here 2SG.GEN house 1PL.EXCL FUT-do
 ‘Aquí te lo vamos a hacer tu casa.’ au313
 ‘Here we are going to build your house.’
- b. Tueda escuela=su pu-ina.
 3SG school=LOC be-HAB.PST
 ‘Él estaba en la escuela.’ na205
 ‘He was in the school.’

In the non-finite verb constructions, the auxiliary must follow the lexical verb, whether contiguously or not; in (20a,b), for instance, the auxiliary is not contiguous with the lexical verb, being separated from it by a pronoun in both examples, and also by a particle in (20a). As for the lexical verb in this construction,

whether the auxiliary is present or not, it receives a specific intonation contour, with a non-phonological prosodic glottal stop [ʔ] in 1st syllable coda position (see phonological inventory in footnote 4) and apparently a different stress pattern.⁷

As stated above, the inflection-carrying auxiliary is not compulsory, and in fact it is left out most of the time; in this situation, the TAM and identity of 3rd person subjects have to be recovered from the context. This is illustrated with the transitive and intransitive verb stems *nubi-ame* ‘make enter’ in (22a) and *pue-yu* ‘come again/back’ in (22b).

- (22) transitive and intransitive declarative main clauses with a non-finite verb and no overt auxiliary

O	A	V	
			[nuʔbjame]
a. Beu etseju	gringo=ja	beu, cuarto=su	nubi-ame.
PTC 1DU.EXCL	gringo=ERG	PTC room=LOC	enter-CAUS
‘Ya a nosotros el gringo al cuarto nos metió e hizo entrar.’ tm057			
‘The gringo made us enter into the room.’			
S		V	
			[pweʔju]
b. Pero, [mesa	emetse]	=mu, ekene	pue-yu.
but	3SG.GEN owner	=CONTR first	come-ITER
‘Pero su dueño primero se vino.’ ha017			
‘But his owner came first.’			

At the level of the clause, predicates with a non-finite verb and predicates with a finite verb do not require different clausal constructions: the argument-coding system remains the same, with an identical split ergative case-marking system and the same constituent order flexibility.

However, when it comes to negation, clauses with a non-finite verbal predicate are negated differently from clauses with a finite verbal predicate; the SN construction is not used for their negation. Here, two additional negation constructions are available, both of which only involve a single negation marker, which occurs before the verb. The form of the marker is what distinguishes the constructions, with all other properties being identical. In the first construction, the negation marker is the independent morpheme *aimue* (as in SN) while in the second it is the proclitic *mué=* (segmentally identical to one of the variants of *=mawe* in SN). Unlike in SN, here the lexical verb (or the inflection-carrying

⁷See footnote 4 for on the stress system in Tacana.

auxiliary, if expressed) is never followed or accompanied by a second negation marker.

The negative construction with *aimue* is illustrated in (23a,b) with an overt auxiliary and (24a–c) with no overt auxiliary. In both cases, examples of both transitive and intransitive clauses are provided.

- (23) negative clauses with *aimue* and auxiliary
- | | | |
|----|--|---------------------------------------|
| | V | AUX |
| a. | Biame | <i>aimue</i> =da dia a-ta-ina. |
| | on_the_contrary NEG | =PTC eat do-3A-HAB.PAST |
| | 'Pero no lo comió.' qu004 | |
| | 'But (the jaguar) would not eat it.' | |
| | V | AUX |
| b. | <i>Aimue</i> beu, kwinana-yu pu-idha. | |
| | NEG | PTC emerge-ITER be-REM.PST |
| | 'Ya no salió más.' qu033 | |
| | 'He didn't leave again.' | |

- (24) Negative clauses with *aimue* without auxiliary
- | | | | |
|----|--|------------------------|--------------------|
| | A | O | V |
| a. | <i>Aimue</i> yama | d'aki | ba. |
| | NEG | 1SG.ERG brother_in_law | see |
| | 'No le he visto al cuñado.' ch028 | | |
| | 'I didn't see my brother-in-law.' | | |
| | S | V | |
| b. | <i>Aimue</i> , ema kwinana-puda. | | |
| | NEG | 1SG go_out-FAST | |
| | 'No he salido rápido.' ch152 | | |
| | 'I didn't go out fast.' | | |
| | | V | |
| c. | <i>Enekita</i> =pa <i>aimue</i> beu ja-tibi-ti. | | |
| | really | =REP NEG | PTC MID-detach-MID |
| | 'En verdad dice que no se soltó.' ch082 | | |
| | 'Really, (the vine) didn't break.' | | |

The behavior of *aimue* here is the same as that of *aimue* in SN, being phonologically stressed and free to occur in any position as long as it is before the predicate.

The negative construction with *mué=* is illustrated in (25) with an overt auxiliary and (26a–c), with no overt auxiliary.

- (25) negative clause with **mué**= and auxiliary
V AUX O
Mué=pa teje-ti-yu a-ta-idha [jida mesa ewane] beu.
NEG=REP find-GO-ITER do-3A-REM.PST that 3SG.GEN wife PTC
‘Dice que no lo ha ido hallar ese su mujer.’ os043
‘He didn’t find his wife.’
- (26) negative clauses with **mué**= without auxiliary
A V
[mwéshánapa]
a. Yama =mu **mué=shanapa [...]** [mesa
1SG.ERG =CONTR NEG=know 3SG.GEN child
ebakwa] manu-iti-a.
die-TDM-PST
‘Yo no me he dado cuenta que ha muerto su hijo.’ su130
‘I didn’t realize that his child had died.’
O V
[mwéemahéutsu]
b. **Mué=ema jeutsu.**
NEG=1SG respond
‘No me contestó.’ ch033
‘He did not answer me.’
V
[mwé:manu]
c. ... rusu-ta-idha doctor=ja. **Mué=manu.**
sew-3A-REM.PST doctor=ERG NEG=die
‘Se lo costuró el doctor (el cuero de su cabeza). No ha muerto.’
ti041-42
‘The doctor stitched (the scalp of his head). He hasn’t died.’

As one can see from these examples, *mué=*, like *aimue*, does not have a specific position as long as it occurs before the predicate. It can attach to the predicate, as in (26a,c) or to any preverbal host, as in (25) and (26b); not that in (25), *mué=* attaches to a second position clitic, the reportative *=pa*. The two markers *mué=* and *aimue* only differ in their prosodic status, *mué=* being prosodically dependent while *aimue* has prosodic independence. Note that phonological words formed

by *mué=* and its following host have a peculiar stress pattern where stress falls on *mué=*, as can be seen in the phonetic transcriptions in (26b–c).⁸

From a functional perspective, it is not fully clear what motivates the use of *aimue* versus *mué=*, although it is likely that they differ in encoding different degrees of emphasis; if so, the longer form, *aimue*, is the more emphatic of the two.

From the perspective of Miestamo’s (Miestamo2005Miestamo2007) typology of negative constructions, negation of clauses with non-finite verbs, like the SN, is symmetrical, as it does not result in any obvious morphosyntactic differences. The argument-coding system and the morphological possibilities on the verbal predicate remain the same. The only difference that was noted is, in relation to the lexical verb, the absence of the prosodic glottal stop [ʔ] in 1st syllable coda position, which is otherwise characteristic of the lexical verb in affirmative non-finite verb constructions.

7 Non-clausal negation

In this section, I describe two types of non-clausal negation: stand-alone negation and constituent negation. **Stand-alone negation** is realized by way of *aimawe* or *mawe*, whether negation consists in answering a polar question, as in (27), or rectifying a false statement, as in (28) and (29).

(27) response to a polar question

Authority: Corregidor=ja =mi, e-kisaba-me-ta-ani apa =mi
 judge=ERG =2SG IPFV-ask-CAUS-3A-IPFV.SIT if =2SG
 acompaña a-kwa, misha, Semana_Santa
 accompany do-POT church_service Holy_Week
 misha=su, awa **mawe**?
 church_service=LOC Q no
 ‘El corregidor te hace preguntar si puedes acompañar les a la
 misa de Semana Santa o no?’ su026
 ‘The corregidor asks whether or not you could accompany
 them to the Holy Week Mass.’

⁸As already mentioned in footnote 4, the rule in Tacanan is that stress falls on the 3rd mora (i.e., vowel or semi-vowel [j] or [w]) counting from the left. Evidence that the normal rule does not apply here can be seen in (26c), where one should obtain [mwemánu] and not [mwé:manu].

Sub-prefect: **Mawe!** Aimue =da ema e-puti=mawe.

no NEG =PTC 1SG FUT-go=NEG

‘No, no voy a ir.’ su028

‘(Do you want to go to Mass with us?)’ No! I won’t go!’

- (28) rectification of a false statement

Mother: Manuame-pe-ta-kwa tse ekwana.

kill-COMPL-3A-POT MAYBE 1PL

‘(Tu padre) nos puede matar a todos!’ au064

‘(Your father) can kill us all!’

Son: **Aimawe!** Ema ebiasu tuche-da.

no 1SG a_lot strong-ASF

‘No, yo tengo más fuerza que él.’ au066

No (he can’t kill us)! (Because) I’m stronger (than him).’

- (29) rectification of a false statement

Jaguar: Jiawe mida yama e-dia.

now 2SG 1SG.ERG FUT-eat

‘Ahora te voy a comer.’ bu028

‘Now I’m going to eat you.’

Fox: **Mawe** tiyu! Be =tsu ema dia-ji!

no uncle IMP.NEG =YET 1SG eat-IMP.NEG

‘No tío, no me comes todavía!’ bu029

‘No, Uncle! Don’t eat me yet!’

Constituent negation is realized by way of the enclitic =*mawe* or its variant =*mue*, which is attached to the constituent to be negated. It is attested as a derivation process with nouns (privative negation), as in (30), and adjectives (adjectival antonym negation), as in (31).

- (30) privative negation

a. Pero pisa=**mue** =da ema.

but gun=PRIV =PTC 1SG

‘No tengo arma.’ co046

‘I don’t have a gun (lit. I am without a gun / gun-less).’

b. Dapia lugar=su kristianu=kwana escuela=**mawe**.

there place=LOC person=PL school=PRIV

‘En este lugar, no tiene escuela la gente.’ na073

‘There, in that place, the people don’t have schools.’ (Lit. are without a school / school-less).

- (31) adjectival antonym negation
 S ADJ S ADJ
 Tueda sai-da=**mawe**, ema =mu sai-da=kita.
 3SG nice-ASF=NEG 1SG =CONTR nice-ASF=INTENS
 ‘He is bad (lit. not nice) and I am nice.’

8 Negation of hortative and imperatives clauses

Finally, to close the synchronic description of negation strategies in Tacana, we here provide a brief description of negation in commands. The first type is **hortative clauses** (1st and 3rd person imperative), which in the affirmative polarity are headed by a finite verb marked by a prefix *pa-* instead of TAM inflectional affixes, as illustrated in (32a). When negated, hortative clauses require a **preverbal independent particle *be***, which is simply added to the positive construction without further morphosyntactic modifications (same 3rd person indexation, same hortative prefix, same argument-marking and constituent order flexibility).

- (32) a. positive
 O V A V
 Tueda **pa**-dia-ta señora=ja, **pa**-id’i-ta.
 that HORT-eat-3A wife=ERG HORT-drink-3A
 ‘¡Ese (caldo de gallina) que coma la señora! ¡Que tome!’ pa044
 ‘Let the woman eat this (chicken soup)! Let her drink it!’
 b. negative
 A V O
 Tueda =mu **be** **pa**-dia-ta [jida aicha]!
 3SG =CONTR NEG HORT-eat-3A that meat
 ‘¡Que el no coma esa carne!’ n2.0138 (elicited)
 ‘Don’t let him eat that meat!’

The second type of command clauses is 2nd person imperative clauses, which in affirmative polarity are head by a finite verb marked by the **suffix *-ke***, as in (33a). When negated, the same **preverbal independent particle *be*** must be used. However, the head verb cannot carry *-ke* anymore, which is now replaced by a **suffix *-ji***, as in (33b). With regards to the other morphosyntactic properties of the clause, they are the same as in the affirmative.

- (33) a. positive
 “Dia-**ke** =tsu empanada, kupari!” ema a-ta-idha.
 eat-IMP =YET empanada compadre 1SG do-3A-REM.PST
 “¡Come todavía empanada, compadre!” me dijo (mi comadre).’ su057
 “‘Eat some more ‘empanada,’ compadre!’ (my comadre) said to me.’
- b. negative
 Mawe tiyu. **Be** =tsu ema dia-ji!
 NEG uncle IMP.NEG =YET 1SG eat-IMP.NEG
 ‘No tío, ¡No me comes todavía!’ bu029
 ‘No, uncle, don’t eat me yet!’

9 Summary of negation constructions

The following table summarizes all the negation constructions described above. In the schematized constructions, for practical reasons, the most commonly attested variants are given (*aimue* and *=mawe* in most cases).

10 Reconstructing the origin of negation markers and constructions

The goal of this section is to identify, on the basis of internal reconstruction, possible etymologies and evolutionary pathways for the rise of the different negative makers involved in the **negation of declarative (interrogative) clausal constructions**: the SN construction (§3–5) and the construction (with its two subtypes) used to negate clauses with a non-finite verbal predicate (§6), repeated in Table 3.

The negative markers in these constructions are all formally very similar and therefore likely to be historically related; such is not the case with the negative markers involved in negation of command clauses (*be*, *-ji*), the reconstruction of which will not be attempted in this paper.⁹ The markers all consist of either *mawe* ~ *mue* used on its own or in combination with a preposed element *ai*, forming *aimawe* ~ *aimue*. Note that *ai* can be used independently of *mawe* ~ *mue*, as an indefinite noun “person/thing, someone/something” (34), suggesting that *aimawe* ~ *aimue* may be an erswhile univerbation of this indefinite pronoun and *mawe* (as in English ‘nothing,’ for example).

⁹One might speculate that *be* is related to *mawe*, which manifests reduced variants such as the clitics *=mue* and *mué=* that come closer to the form of *be*. I will leave this issue for further investigation.

Table 2: Summary of negation constructions in Tacana

Type	Construction	Sym- metri- cal	Construc- tion type
<u>Clausal</u>			
declarative finite verbal main clauses	[... <i>aimue</i> ... V-INFL(= <i>mawe</i>) ...]	yes	1
non-verbal clauses:			
equation, inclusion	[... <i>aimue</i> ... NP ... (be-INFL)= <i>mawe</i> ...]	yes	
attribution	[... <i>aimue</i> ... ADJ ... (be-INFL)= <i>mawe</i> ...]	yes	
existential/locative	[... <i>aimue</i> ... VPOST-INFL= <i>mawe</i> ...]	yes	
	[... <i>aimue</i> ... be-INFL= <i>mawe</i> ...]	yes	
<u>Clausal</u>			
non-verbal clauses: existential/locative	[... <i>aimue</i> ... (be-INFL) ...]	no	2
<u>Clausal</u>			
declarative non-finite verbal main clauses	[... <i>aimue</i> ... V ... (be/do-INFL) ...]	(yes)	3
	[... <i>mué</i> = ... V ... (be/do-INFL) ...]	(yes)	
<u>Non-clausal</u>			
stand-alone	[<i>aimawe</i>]	—	4
	[<i>mawe</i>]	—	
<u>Non-clausal</u>			
constituent negation:			
privative	[N= <i>mawe</i>]	yes	5
adjectival antonym	[ADJ= <i>mawe</i>]	yes	
<u>Clausal</u>			
hortative	[... <i>be</i> ... HORT-V ...]	yes	6
prohibitive	[... <i>be</i> ... V- <i>ji</i> ...]	no	

Table 3: Summary of negation constructions for verbal main clauses in Tacana

Type of negated constituent	Construction	Symmetrical
clauses with finite verbal predicate or with non-verbal predicates	... <i>aimue</i> ...predicate(= <i>mawe</i>) ...	yes
clauses with non-finite verbal predicate	... <i>aimue</i> ...V ... (be/do-INFL) <i>mué</i> = ...V ... (be/do-INFL) ...	yes yes

- (34) Enekita beu =pa ai=kwana ja-ba-ti-ana.
 really PTC =REP thing=PL MID-see-MID-REC.PST
 ‘En verdad dice se alistó sus cosas (para el viaje).’ co080
 ‘Really, he prepared his things (for the trip).’

Depending on the construction, the negation markers *mawe* or *aimue* have different degrees of grammatical or phonological freedom (e.g., *mawe* can be a clitic); they can occupy different positions in the clause (e.g., preposed or postposed to the negated constituent); they can be used alone or in combination with each other (forming an embracing negation construction); and possibly, in the case of the embracing construction, one marker can be optional.

If one looks for possible internal cognates, it is notable that *mawe* and/or *aimue* are also used in many other negative constructions described earlier in this chapter, such as the second existential/locative negation construction (§5), stand-alone negation (§7) and constituent negation (§7).

On the basis of these preliminary observations, we will now proceed to reconstruct at least parts of the history of the two negative constructions. We start with the SN construction in §10.1 and then move on to the reconstruction of negation of clauses with a non-finite verb in §10.2.

10.1 Evolutionary pathway: SN construction

The embracing preposed marker *aimue* and postposed marker =*mawe* that are used in SN have quite distinct grammatical and phonological properties, which suggest that =*mawe* is historically older than *aimue*. Evidence for the likely older status of =*mawe* is to be found in its shorter form (*mawe* ~ *mue*), phonological dependence (clitic status) and rigid position. These properties are all diagnostics of an advanced grammaticalization stage and they can be contrasted with

the distinct properties of *aimue*, with its longer form (*aimawe* ~ *aimue*), phonological independence and free position (before the predicate).

One can therefore hypothesize that originally SN was expressed by a single marker, the postposed marker =*mawe*, and that the preposed marker *aimue* was introduced later for reinforcement. If we search for a likely etymology for this newly introduced marker *aimue*, the negative stand-alone word *aimawe* ‘no!’ (27), (28) and (29) – (28) is repeated in (35) below – and the negative existential/locative adjective *aimue* ‘nonexistent’ (19) – (19a) is repeated in (36) below – immediately come to mind, and there is little doubt that the three negation forms (new SN marker, stand-alone negation word and negative existential/locative adjective) are all historically related.

(35) Stand-alone negative *aimawe*

- Mother: Manuame-pe-ta-kwa tse ekwana.
 kill-COMPL-3A-POT MAYBE 1PL
 ‘¡(Tu padre) nos puede matar a toditos!’ au064
 ‘(Your father) can kill us all!’
- Son: **Aimawe!** Ema ebiasu tuche-da.
 no 1SG a_lot strong-ASF
 ‘No, yo tengo más fuerza que él.’ au066
 ‘No (he can’t kill us)! (Because) I’m stronger (than him).’

(36) Negative existential/locative adjective in an attributive construction

- [Biawa tiempo] =mu =da **aimue** pu-iti-a ejude=kwana.
 old time =CONTR =PTC nonexistent be-TDM-PST village=PL
 ‘En tiempos antiguos no habían pueblos.’ tu001_ott
 ‘In the old days, there were no villages.’ [lit. villages were nonexistent]

With regards to the evolution of their use, the hypothesis pursued here is that the negative existential/locative adjective is older, that it later extended its use as a stand-alone negation word, and that this use made it possible to develop a new SN marker. In other words, the immediate etymology of the SN marker *aimue* is a stand-alone negation word, *aimue*, which itself can be traced back to a negative existential/locative predicative adjective *aimue*. According to this scenario, which is schematized in Table 4 with the verb ‘go’ as an illustration in English, the evolutionary trajectory followed by the Tacana stand-alone *aimue* would be similar to that of the Brazilian Portuguese stand-alone negator *não* illustrated in (1). A clause-external stand-alone negator, originally used to reinforce a

clause-internal negator (stage 2), is reanalyzed as a second clause-internal negator, forming an embracing negation construction (stage 3). Over time, the original clause-internal negator becomes optional (stage 4) and ends up disappearing altogether (stage 5), with the result that it is replaced by the new reinforcing (external stand-alone) negator.

shading
is not
allowed

Table 4: Evolutionary pathway of Tacana stand-alone negation *aimue* into the marking of SN

stage 1	predicate= <i>mawe</i>	‘I will not go’	hypothesized
stage 2	(<i>aimue</i>), predicate= <i>mawe</i>	‘(No,) I will not go’	hypothesized
stage 3	<i>aimue</i> (.)predicate= <i>mawe</i>	‘No(.) I will not go’	synchronic use
stage 4	<i>aimue</i> predicate(= <i>mawe</i>)	‘No I will (not) go’	(synchronic use)
stage 5	<i>aimue</i> predicate	‘No I will go’ (= I will not go’)	hypothesized

An alternative hypothesis would be that the immediate etymology for the new SN marker is not the stand-alone use of the negator *aimue* but its use as a negative existential/locative adjective. In the context of SN, this hypothesis is much less plausible, due to the lack of a conceivable source construction and evolutionary scenario. Had the direct etymology been the negative existential/locative adjective, the only source construction available in Tacana that I can think of is where *aimue* negates the existence of a nominal referent, as illustrated in (36) (‘there were no villages’ / ‘villages did not exist’).

¹⁰ However, negating an event by way of this construction (e.g. ‘there is no going for me’ / ‘my going is not’) would require important structural changes in the verb form (for instance, the lack of finite morphology) and argument structure (for instance, a different case frame for the core arguments) which are absent in the negation of finite verb constructions. Moreover, the verb to be negated by way of a negative existential/locative adjective should display affirmative polarity; this is not the case, since the verb is marked by the enclitic negator =*mawe*.

As proposed above, it is of course very likely that the SN negator *aimue* and the negative existential/locative adjective *aimue* are historically related, but the link is probably an indirect one, involving an intermediary stand-alone negation stage; cross-linguistically, the move from negated existential predicate to stand-alone negation is a well-attested pathway (Croft1991Veselinova2013-tacVeselinova2016),

¹⁰ According to Veselinova2016 “the use of negative existentials with nominalized verb forms is cross-linguistically the most widespread pathway whereby they can be shown to expand into the domain of verbal negation.”

and when there is synchronic polysemy between the two, the evidence generally points to the negated existential predicate being the source, not the other way around (Croft1991).

Reconstructing the diachronic development of *=mawe* in the SN construction (stage 1) is a more complex task, for which it will be necessary to resort to comparative data from other Takanan languages. That is beyond the scope of the current paper, and so here I will restrict myself to the observation that the most likely internal cognate is the negative enclitic *=mawe* used alone in constituent negation (privative derivation and adjectival antonym negation; §7).

10.2 Evolutionary pathway: negation of clauses with a non-finite verb

We now move to the discussion of the possible diachrony of the negation construction of clauses with a non-finite verb. As a reminder, here negation is realized by way of a single negation marker which is preposed to the lexical verb and which can be one of two morphemes, *aimue* or *mué=*, giving the following two constructions: [*... aimue ...V ...*(be/do-INFL) *...*] and [*... mué= ...V ...*(be/do-INFLECTIONS) *...*].

Following the same line of reasoning as above (i.e., taking into account the respective grammatical and phonological properties of *aimue* and *mué=*), it is reasonable to believe that *mué=* is older than *aimue*. This assumption is grounded in the observation that *mué=* displays a shorter form and less phonological independence (being a clitic) than *aimue*; note that in terms of their syntactic distribution, both are free to occur anywhere before the lexical verb. The hypothesis is also corroborated by philological evidence found in a Christian catechism in Tacana from the mid-19th century, which only displays a negation construction that corresponds to that with *mué=*. In the material available, which goes back about 150 years, we see that all the instances of negation of verbal main clauses¹¹ are realized by way of a preverbal marker *mawe* (spelled *mave*) that precedes a non-finite verb, as in the three examples in (37), and which looks basically similar to our synchronic construction [*... mué= ...V ...*(be/do-INFL) *...*].

(37) Old Tacana (mid-19th century)

S NEG V AUX

- a. Quejutcua mara mi mave confesa pu?
 how_many year 2SG NEG confess be

‘How many years have you not confessed?’ (LafoneQuevedo1902)

¹¹ Note that in the affirmative polarity, the catechism shows examples of clauses with both finite and non-finite verbs.

- A NEG V
- b. Jucujasu ni mi **mave** ichegua.
 why MAYBE 2SG NEG kill
 ‘¿Y por qué no lo mataste?’ (LafoneQuevedo1902)
 ‘Why didn’t you kill it?’
 NEG V
- c. **Mave chanapa** cuaja miada ema e-ba-nia.
 NEG know why 2SG.ERG 1SG IPFV-see-IPFV.SIT1/2
 ‘No sé porqué me miráis.’ (LafoneQuevedo1902)
 ‘I don’t know why you are looking at me.’

On the basis of these synchronic observations and the historical data, it is possible to suggest that the negation pattern with *mué=* corresponds to the original construction and that the negation pattern with *aimue* is a more recent development.

Turning to the reconstruction of the development paths, since both patterns only differ in the formal and prosodic properties of their negation marker, it can be suggested that they arose in a similar way but at different times in the past. In terms of likely etymologies for *aimue* and *mué=*, the same candidates are available as those for the *aimue* and *=mawe* negators in SN: the negative stand-alone word *aimue* ‘no!’ (35) and negative existential/locative predicative adjective *aimue* (36), to which we can add the second negative stand-alone word *mawe* ‘no!’, illustrated in (38) (repeated from (27)).

- (38) **Mawe!** Aimue =da ema e-puti=mawe.
 no NEG =PTC 1SG FUT-go=NEG
 ‘No, no voy a ir.’ su028
 (‘Do you want to go to Mass with us?’) ‘No! I won’t go!’

Although *mawe*, unlike *aimue*, is not attested as a negative existential/locative predicative adjective in present-day Tacana, it is plausible that it could have been used in such a way in the past, and that this function fell into disuse.

Although a scenario similar to that proposed for the reconstruction of SN—a Jespersen Cycle reinforcement process by way of a stand-alone negator replacing a former negator in a clause with a non-finite verb—is not completely inconceivable, here there is no evidence available which would support it. That is, there is no possibility of having the two negative markers *aimue* and *mué=* co-occurring in the same construction.

An alternative scenario that seems more probable would be one which possibly involved as the source construction for both patterns (that with *aimue* and

that with *mué=*) not a clause with a non-finite verb, but a **negative existential/locative predicative adjective** of the clause type illustrated in (36) ('there were no villages' / 'villages did not exist'). As commented in footnote 11, this evolutionary pathway is cross-linguistically very common. From this perspective, one could imagine that the transitive and intransitive SN constructions (e.g., in (24a) 'I didn't see my brother-in-law' and (24b) 'I didn't go out fast') come from the reanalysis of clauses with a **nominalized verb as the S argument of a negative existential/locative predicate**. These are translatable literally as 'there is no seeing of my brother-in-law by me' for (24a) and 'there is no fast going out for me' for (24b), respectively. An argument in favor of this hypothesis is that here, unlike in the SN construction with finite verbs, the verb does show some similarities with nominal referents in negative existential predicate constructions, in particular by being obligatorily non-finite and in an affirmative form. Moreover, the verb to be negated by way of a negative existential/locative adjective displays affirmative polarity.

Yet, there are several unresolved issues with this hypothesis; in particular, there are many divergent properties between the hypothetical negative existential predicate source construction and the target negative construction with a non-finite verb, which would remain to be explained. One such property is argument coding. In the negation construction with a non-finite verb, the argument coding is identical to that of basic declarative affirmative clauses (the same split ergative case-marking system). If the negation construction with a non-finite verb had originated in an existential predicate, one would expect a different coding pattern, one which should reflect how the arguments can be coded in nominal predicate construction. Notably, one would expect the S and the A of the SN construction to be marked like an experiencer argument in a nominal predicate construction, with dative(+purpose) case marking, as in (39a,b); note that (39a) is repeated from (19e).

- | | | | | |
|------|---|--------------------|--------------------|--------------|
| | ADJ | DAT | S | |
| (39) | a. <i>Aimue</i> | <i>mesa</i> | <i>aicha</i> ... | |
| | nonexistent | 3SG.DAT | meat | |
| | 'No tenía carne...' ye006 | | | |
| | 'He didn't have meat.' [lit. the meat was nonexistent to him] | | | |
| | b. <i>Aimue</i> | <i>beju dhidha</i> | <i>kema=puji</i> . | |
| | nonexistent | PTC | night | 1SG.DAT=PURP |
| | 'Ya no había noche para mi.' du023 | | | |
| | 'The was no night for me (because I could see at night as well as during the day).' du023 | | | |

Another problematic property concerns the form and morphosyntactic characteristics of the auxiliaries that can be optionally used in both affirmative and negative clauses with a non-finite verb (to carry the inflectional affixes), namely *a* when it is transitive (e.g., (20a)) and *pu* when the SN clause is intransitive (e.g., (20b)). First, in negative existential predicates, the transitive auxiliary *a*—or better said, its etymological source *a* ‘affect, make, do (tr.), say (tr.)’—cannot be used. Second, even though in negative existential predicates the intransitive auxiliary *pu*—or better said, its etymological source *pu* ‘be/exist, be located, do (itr.), say (itr.)’—can be used, as illustrated in (40), it must be followed by the negator =*mawe* in addition to *aimue*, a construction which can be analyzed as the embracing SN of clauses with finite verb constructions [\cdots *aimue* \cdots V-INFLECTIONS(=*mawe*) \cdots].

- (40) Upia =mu =da aimue ejude ekene pu-iti-a=*mawe*.
 here =CONTR =PTC nonexistent village first be-PFV-PST=NEG
 ‘Aquí no había nada/pueblo / no era pueblo todavía.’ hi020
 ‘Here (at that time) there was no village at the beginning.’

Additional work is needed to investigate further whether this second scenario is supported by the data or if other hypotheses need to be sought.

11 Summary and conclusion

This paper presented for the first time a synchronic and diachronic study of negation markers and patterns in Tacana as applying to clauses (declarative/interrogative and commands) and constituents. The diachronic part focused on two major negation construction: SN and negation of clauses with non-finite verbs.

Starting with SN, I argued that its embracing pattern likely arose out of a Jespersen Cycle process in which a stand-alone negator ‘no,’ originally used outside of a negative clause for pragmatic reinforcement, is in the process of replacing the original postverbal SN marker inside of the clause. Taking into account the actual polysemy between this stand-alone word and the negative existential/locative predicative adjective ‘nonexistent,’ I proposed to ultimately trace the origin of the new SN marker back to a negative existential predicate, thereby adding Tacana negation to the list of cases where the Jespersen and negative existential cycles intertwine.

The reconstructed grammaticalization path is also interesting from a diachronic typological perspective because it goes from the right of the verb to the left of

the verb, unlike the more familiar direction from the left of the verb to the right of the verb. As such, the Tacana pattern corresponds to what **Auweravossen2016** and **Vossen2016** call a Jespersen Cycle “in reverse”.

Continuing with the second construction, negation of clauses with non-finite verbs, it was proposed that they both directly arose, albeit at different times, out of a negative existential predicate construction where the original function of *aimue* and *mué=* was to negate the existence of a nominalized (non-finite) verb. However, if this hypothesis is correct, how the original intransitive negative existential predicate construction came to display all the synchronic properties of negated clauses with non-finite verbs, which are the same as in the SN construction (split-ergative case marking and alternation of transitivity-sensitive auxiliaries), remains largely unexplained and calls for further research.

Chapter 2

Croft's Cycle in Mandarin and Cantonese throughout history and across varieties

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One of the oldest problems in Chinese linguistics is negation and currently there is no consensus on a theory for the distribution of negators. This article explores this issue from the perspective of Croft's Negative Existential Cycle (NEC) based on diachronic evidence and synchronic comparative data from four varieties of Chinese. The results show that the NEC is attested in Chinese throughout its history and across all varieties, and that different varieties can be positioned at different stages in the Cycle. The shared historical origin of the Mandarin *méi(yǒu)*, the Hong Kong Cantonese *mou5* and the Gaozhou Cantonese *mau5*, and their involvement in the NEC account for their semantic similarity in producing a non-existence reading as a standard negator. They also provide a new understanding of the nature of these negators and their present-day structural behaviour.

1 Introduction

Negation in Chinese, particularly Mandarin Chinese, has received considerable attention in the last half century. Researchers in the field are keenly interested in solving the puzzle regarding the distribution of two Mandarin negators *bù* 'not' and *méi(yǒu)* 'not (have)'. The mainstream understanding thus far is that *méi(yǒu)* is a special negator for perfective sentences because they refer to terminated or even finished situations, while *bù* is a 'neutral/general' negator that applies to all other conditions as the 'elsewhere' strategy as suggested in LiThompson1981. However, there is little consensus on the reasons for this division of labour in



Mandarin negation. This study offers a diachronic-comparative analysis of Chinese negation from the perspective of Croft1991's Negative Existential Cycle (NEC). I argue that the standard negation in Chinese has a strong connection to its negative existential construction as suggested in Croft1991's (Croft1991) original proposal. Therefore, this analysis serves three purposes. Firstly, it provides a new understanding of the overall architecture of the Chinese negation system, where negators such as *méi(yǒu)* are not perfective negators but negators of existence. This conclusion is inspired by the NEC, which provides a model for the connection between standard negation and existential negation. Secondly, the diachronic study of Chinese negation offers further evidence for the attestation of the NEC as a diachronic model (see the work by Veselinova on Uralic, Slavonic and Polynesian languages). Based on the typological findings reported in Veselinova2014 a system (such as Polynesian) may require as long as two thousand years to complete the entire NEC. For this reason, Chinese is a strong candidate for testing Croft1991's NEC on actual diachronic data owing to the long history and extensive documentation of the Chinese language. Thirdly, this analysis constitutes a comparative study on four Chinese varieties: Beijing Mandarin, Taiwan Mandarin, Hong Kong Cantonese, and Gaozhou Cantonese.¹ The latter is a scarcely documented and un(der)-studied Cantonese variety spoken in Maoming, a south-western county in the Guangdong Province of China. The main objective of this analysis is to determine how the NEC can apply to various Chinese varieties and how different varieties display properties of different stages in the Cycle.²

The article proceeds as follows. §2 presents the key features of Chinese negation and illustrates the relevance of the NEC to Chinese. Then §3 focuses on the situation in Mandarin by first introducing historical evidence that demonstrates the development in the expression of the negative existential from Old Chinese to Pre-modern Mandarin, and then accounts for the emergence of *méi(yǒu)* as the standard negator in present-day Mandarin. In §4, I examine the two Cantonese varieties and discuss the variation observed among the four Chinese varieties as

¹Glottocode from glottolog 3.0: Beijing Mandarin (Sino-Tibetan, Sinitic, [...] Northern Chinese, Mandarinic, Mandarin Chinese, Beijingic) [beij1234]

Taiwan Mandarin (Sino-Tibetan, Sinitic, [...] Northern Chinese, Mandarinic, Mandarin Chinese, Beijingic) [taib1240]

Hong Kong Cantonese (Sino-Tibetan, Sinitic, [...] Yue-Pinghua, Yue Chinese, Yuehai, Cantonese) [xian1255]

²All Mandarin examples have been romanised using Hanyu Pinyin, and all Cantonese examples with Jyutping. Tones are marked on the lexical items that are mentioned in the text and tables, but not in the examples.

well as the key implications of this comparative study. Finally, conclusions are presented in §6.

2 Background and methodology

2.1 The Chinese negation puzzle

This section presents the background of standard negation in the Chinese language. Standard negation is defined here as the construction that applies to the most basic verbal declarative main clause to reverse the truth value of the proposition that the clause expresses (Miestamo2005). The marker used to perform such function is known as a ‘standard negator’, such as ‘not’ in *Lucy does **not** swim*. Modern Mandarin Chinese has two standard negators, *bù* ‘not’ and *méi(yǒu)* ‘not (have)’, and both appear between the subject and the verb. Their distributional properties can be illustrated as follows.

In a simple verbal declarative clause without aspect-marking (henceforth ‘bare sentence’, which is also referred to as a ‘plain sentence’ in Wang1965) such as the clause in example (1a), the default negative form is constructed by inserting *bù* ‘not’ immediately preceding the verb (1b). This reverses the meaning of what the proposition in the affirmative claims. In this case, it denies that the speaker buys books. I will refer to the negative form of bare sentences as the ‘bare negative’, for the absence of overt aspect-marking or any type of adverbial modification.

(1) Mandarin (Mandarinic, Sinitic)

- a. 我買書
wo mai shu
 I buy book
 ‘I buy books.’
- b. 我不買書
wo bu [mai shu]
 I not buy book
 ‘I do not buy books.’

The system becomes more complicated when aspect-marking is present. Examples (2-3) contain the negation pattern in Mandarin when the verb *mǎi* ‘to buy’ is marked with perfective and experiential aspect, respectively. The sentences (2b) and (3b) illustrate the unmarked strategy for negating the affirmative sentences in (2a) and (3a). In short, whenever the affirmative sentence is perfectly

marked either as perfective or experiential, *méiyǒu* is used instead of *bù* (see examples 2d and 3c). One important difference between the negation of perfective sentences and that of experiential sentences is the co-occurrence constraint on the negator and the aspect marker – *méiyǒu* can co-occur with the experiential marker *guo* (3b), but not with the perfective marker *le*, as shown in example (2c).

(2) Mandarin negation and perfective aspect

- a. 我買了書
wo mai-**le** shu
I buy-**PFV** book
'I bought books.'
- b. 我沒有買書
wo **mei-you** mai shu
I **not-have** buy book
'I did not buy books.'
- c. 我沒有買了書
*wo **mei-you** mai-**le** shu
I **not-have** buy-**PFV** book
Intended: 'I did not buy books.'
- d. 我不買了書
*wo **bu** mai-**le** shu
I **not** buy-**PFV** book
Intended: 'I did not buy books.'

(3) Mandarin negation and experiential aspect

- a. 我買過書
wo mai-**guo** shu
I buy-**EXP** book
'I have bought books (before).'
- b. 我沒有買過書
wo **mei-you** mai-**guo** shu
I **not-have** buy-**EXP** book
'I have not bought books (before).'
- c. 我不買過書

**wo bu mai-guo shu*

I not buy-EXP book

Intended: 'I have not bought books (before).'

This is the Chinese negation puzzle, and while this puzzle confirms that both *bù* and *méi(yǒu)* are standard negators in Mandarin, it also raises two issues. Firstly, Mandarin appears to have a neat system wherein the distribution of the negators is conditioned by the presence of aspect markers. Contrasting example (1) with (2-3), *bù* fails to perform its negator function when an affirmative sentence is aspect-marked; the only appropriate negator is *méi(yǒu)*. Huang1988 suggested that *bù* cannot co-occur with perfective markers because *bù* must cliticise onto the verb first, but marking a non-event (an event already negated or denied) as completed or realised would result in semantic anomaly. In other words, the incompatibility is a matter of interpretation that stems from the narrow scope of negation. Ernst1995 proposed that due to the unboundedness requirement of *bù* –meaning that *bù* has an intrinsic requirement to select for an unbounded situation as its complement –it is unacceptable in the presence of perfective markers. In short, a terminated or completed event would be incompatible with *bù*. Lin2003 made a similar suggestion by stating that *bù* requires its complement to be a stative situation that does not require further energy input. Li2007 in turn has adopted a feature-checking approach to account for negation-aspect compatibility. She proposes that both aspect markers and negators possess the same four atomic aspectual features, but different markers have different inherent values for these features, and their compatibility is a result of their feature compatibility.

The second issue concerns the intriguing connection between *méi(yǒu)* 'not (have)' and perfective aspect. As demonstrated in the examples above, *méi(yǒu)* can occur with the experiential marker *guo* (3b) but not with the perfective marker *le* as in example (2c). Wang1965 is the first to propose that *yǒu* 'have' in *méi(yǒu)* and *le* are morphological alternants in complementary distribution, with the former appearing in negative contexts and the latter only in affirmatives. The morphological connection between *yǒu* and *le* has been challenged by LiThompson1981 as well as Li2007 but the assumption that *yǒu* is an aspectual auxiliary (or a perfective auxiliary) has remained widely adopted in subsequent studies on Mandarin negation.

The position that negation has a close relationship with temporality is not new (see Zanuttini2001 and Miestamo2005), and the suggestion that aspect is the temporal system to which negation is connected in Chinese is exceedingly plausible as well, because aspect is the most prominently and overtly formalised

temporal category in Chinese. Indeed, the same negation-aspect compatibility pattern is also identified in the two Cantonese varieties investigated in this paper – Hong Kong and Gaozhou Cantonese. Examples (4) to (9) adopt the sentences from example (1) and present the corresponding structures in the two Cantonese varieties.

(4) Hong Kong Cantonese

- a. 我買書
ngo mai syu
I buy book
'I buy books.'
- b. 我唔買書
ngo m [mai syu]
I not buy book
'I do not buy books.'

(5) Hong Kong Cantonese negation and perfective aspect

- a. 我買㗎書
ngo mai-zo syu
I buy-**PFV** book
'I bought books.'
- b. 我㗎買書
ngo mou mai syu
I not.have buy book
'I did not buy books.'
- c. 我㗎買㗎書
**ngo mou mai-zo syu*
I not.have buy-**PFV** book
Intended: 'I did not buy books.'
- d. 我唔買㗎書
**ngo m mai-zo syu*
I not buy-**PFV** book
Intended: 'I did not buy books.'

(6) Hong Kong Cantonese negation and experiential aspect

- a. 我買過書
ngo mai-gwo syu
 I buy-EXP book
 'I have bought books (before).'
- b. 我冇買過書
ngo mou mai-gwo syu
 I not.have buy-EXP book
 'I have not bought books (before).'
- c. 我唔買過書
**ngo m mai-gwo syu*
 I not buy-EXP book
 Intended: 'I have not bought books (before).'

(7) Gaozhou Cantonese

- a. 我買書
ngo mai syu
 I buy book
 'I buy books.'
- b. 我茅買書
ngo mau [mai syu]
 I not buy book
 'I do not buy books.'

(8) Gaozhou Cantonese negation and perfective aspect

- a. 我買嘅書
ngo mai-de syu
 I buy-PFV book
 'I bought books.'
- b. 我茅買書
ngo mau mai syu
 I not buy book
 'I did not buy books.'
- c. 我茅買嘅書
**ngo mau mai-de syu*
 I not buy-PFV book
 ('I did not buy books.')

(9) Gaozhou Cantonese negation and experiential aspect

- a. 我買過書
ngo mai-gwo syu
 I buy-EXP book
 ‘I have bought books (before).’
- b. 我茅買過書
ngo mau mai-gwo syu
 I not buy-EXP book
 ‘I have not bought books (before).’

The crucial difference between Gaozhou Cantonese and the other three varieties is that Gaozhou Cantonese has only one standard negator, *mau5* ‘not’. One might naturally assume that the aspectual sensitivity in negation has emerged with the presence of more than one standard negator. In other words, it is possible to interpret the aspectual sensitivity as a division of labour between the negators. The pattern in Gaozhou Cantonese (see examples 7-9) falsifies that assumption, and argues for a new understanding of the Chinese negation puzzle for a deeper-rooted motivation for this shared ‘specialisation’ of perfective negation among Mandarin *méi(yǒu)*, Hong Kong Cantonese *mou5*, and Gaozhou Cantonese *mau5*. The aim of this paper is to introduce a new perspective on this old puzzle by examining the nature of negators such as *méi(yǒu)* throughout history and across four Chinese varieties, based on Croft1991’s diachronic model of the Negative Existential Cycle. For the sake of an in-depth discussion on negators such as *méi(yǒu)*, the present analysis does not address the issues of *bù* and the compatibility between negation and imperfective aspect.

2.2 Methodology

The current study adopts a diachronic-comparative approach to examine Chinese negation. Two types of data are examined: acceptability judgments elicited from online questionnaires as well as a survey of historical corpora. Results from the online acceptability questionnaires provide the foundation for a synchronic cross-linguistic comparison between the four varieties of Chinese: Beijing Mandarin, Taiwan Mandarin, Hong Kong Cantonese and Gaozhou Cantonese. A total of 130 participants have been consulted.³ The results from the acceptability judg-

³The questionnaires were completed in 2016. A total of 130 speakers of Chinese participated: 42 speakers of Beijing Mandarin, 24 of Taiwan Mandarin, 52 of Hong Kong Cantonese and 19 of Gaozhou Cantonese. All participants were native speakers of the respective variety and were

ment questionnaires reveal the NEC stage in which each variety belongs to.

All data obtained from the online questionnaires are annotated on a four-level grammaticality scale. The levels are completely acceptable (✓), slightly marginal (?), very marginal (??), and completely unacceptable (*). This scale was created by first presenting the speakers of each variety a set of sentences and then requesting them to rate how acceptable those sentences were on a scale of 1 to 5, where 1 was completely unacceptable and 5 was completely acceptable. The set of sentences contained nine control sentences; five were well-formed structures, and four were ill-formed. The range of average scores that each group of speakers gave for these control sentences set the threshold for completely acceptable (✓) sentences and completely unacceptable (*) sentences, respectively, whereas the median between these two boundaries defined the division point between slightly marginal (?) -sentences and very marginal (??) -sentences. This procedure generated a unique set of grammaticality ranges for each variety and they are presented in Table 1. The average of the ranges was 4.5-5.0 for (✓), 3.0-4.4 for (?), 1.6-2.9 for (??), and 1.0-1.5 for (*).

Table 1: Data from online questionnaire

	✓	?	??	*
BM	4.7-5.0	3.0-4.6	1.4-2.9	1.0-1.3
TM	4.5-5.0	3.0-4.4	1.6-2.9	1.0-1.5
HKC	4.4-5.0	3.0-4.3	1.6-2.9	1.0-1.5
GZC	4.4-5.0	3.2-4.3	2.0-3.1	1.0-1.9

The other data source consists of historical texts that are accessed from two Chinese text corpora – **chant** and the Chinese Text Project. The historical data will provide evidence of the development of the Chinese negative existential expression and the connection between the negative existential and standard negation in various Chinese varieties.

aged from 20 to 40 (except for Gaozhou Cantonese, which involves a few speakers in their 60s). All had lived in the relevant area for at least ten years and most of them have not resided elsewhere.

3 The Negative-Existential Cycle in Mandarin Chinese

In Croft1991's (Croft1991) article, Mandarin Chinese appears as one of the 33 languages that have displayed signs of the NEC. According to the classification proposed by Croft1991 Mandarin Chinese represents the transition Type B~C⁴, as he stated that:

in Mandarin Chinese it appears that the negative-existential *méi* is already beginning to employ the positive existential *yǒu* analogically, and moreover is proceeding to use *méi* plus *yǒu* as a verbal negator (i.e. resembling type C) in some contexts without any phonological fusion taking place (Croft1991)

As a diachronic model, Croft1991's NEC postulates a negation system that initially treats the existential predicate as a normal verb, as in Type A where the negator and the positive existential predicate are considered to be obligatory in a negative existential construction. The system then develops a special treatment for the negation of the existential predicate, the most prominent method of doing so is to lexicalise the negative form of the existential predicate, which is what occurs in Type B. As the negative existential has its own special realisation, the existential predicate becomes redundant in negative contexts and only appears in affirmative contexts. The NEC is driven by the presence or absence of the analogy between the existential predicate and the normal verb until the system reaches Type C. During this stage, the negative existential can expand to other domains of the grammar, when it can negate (most) normal verbs and serve as a standard negator and even as the general negator of the language. However, at the stage of Type C, the negative existential is polysemous in that it acts as both the negative existential predicate in negative existential contexts and the standard negator elsewhere, which explains the redundancy of the existential predicate in negative contexts as it was before (Croft1991). When the origin of the negator as a negative existential predicate is no longer apparent, the existential predicate is once again considered equal to other verbs. This syntactic analogy results in the negator and the existential predicate being obligatory once again,

⁴More precisely, Croft1991 argued that Mandarin should have progressed "directly from Type A to Type C without an intervening Type B (a fused or irregular negative existential)" (Croft1991). As mentioned in his text, the transition from a highly compositional Type A (NEG EX) to the emergence of a special NEG.EX form in Type B is expected to involve phonological fusion. It is argued that this fusion is absent in Mandarin. Croft1991 claimed that phonological fusion, is "inhibited" in isolating languages for some unknown reason (Croft1991). However, I argue later in this chapter that Hong Kong Cantonese serves as a counterexample to Croft1991's claim, a la Law2014

i.e. the system is moving back to Type A, and the transitional phase produces Type C~A. The predictions made by the NEC are summarised in Table 2 below.

Table 2: Stages of the NEC

	Standard tion	nega-	Existential	Negative existen- tial
A	NEG		EX	NEG *(EX)
A~B	NEG		EX	NEG *(EX) and NEG.EX (*EX) with restricted distribution
B	NEG		EX	NEG.EX (*EX)
B~C	NEG NEG.EX in restricted main- stems	and in do-	NEG.EX (*EX)	
C	NEG = NEG.EX		EX	NEG (*EX)
C~A	NEG = NEG.EX		EX	NEG (EX)

The development from Type A to B to C that **Croft1991** proposed has been challenged by the typological data in **Veselinova2016** where she reveals a cross-linguistic tendency to adopt a special strategy for negating the existential. This suggests that Type B is the predominant system. Therefore, it is likely that Type B, not Type A, is the initial stage of the Cycle and the state that linguistic systems gravitates towards. Whether or not Veselinova is correct has no effect on the predictions for each stage described in Table 2 and thus I will still follow those predictions for the remainder of this paper.

Croft1991's classification is supported by data from Beijing and Taiwan Mandarin. These varieties of Mandarin use the verb *yǒu* 'to have' as an existential predicate, as shown in example (10a). The verb *bù* cannot be used to negate an existential construction, which was demonstrated in example (4c). In these examples, *méi* is the only legitimate negator, as in example (10b) where the existential predicate *yǒu* is optional.⁵

⁵The existential predicate here is not the predicate for locative or ascriptive structures, and the negator for these two constructions is *bù* instead of *méi*. Thus, neither *bù* nor *méi* is a stative negator.

(10) Existential construction in Mandarin

- a. 教室裏有鉛筆

jiaoshi li you qianbi

classroom inside have pencil

‘There are pencils in the classroom.’

- b. 教室裏 \boxplus (有) 鉛筆

jiaoshi li mei(you) qianbi

classroom inside not-have pencil

‘There are no pencils in the classroom.’

- c. 教室裏不有鉛筆

**jiaoshi li bu you qianbi*

classroom inside not have pencil

intended: ‘There are no pencils in the classroom.’

The fact that *méi* alone can express negative existence indicates that it is the special form for the negative existential and that both Beijing and Taiwan Mandarin are at least in the Type B stage of the NEC. Furthermore, the acceptability judgment survey results serve as evidence that both *bù* and *méi(yǒu)* can negate bare sentences, as demonstrated in example (11). This contradicts the suggestion raised by the Chinese negation puzzle, which was that *bù* is the default negator for bare sentences – simple verbal declaratives without any aspect-marking.

(11) Bare negatives in Mandarin

- a. State: 我 (不/ \boxplus 有) 害怕老鼠

wo (bu / ?mei-you) haipa laoshu [Beijing Mandarin]

wo (bu / ?mei-you) haipa laoshu [Taiwan Mandarin]

I not / not-have fear rats

‘I do/did not fear rats.’

-
- (i) a. 我不是老師

wo bu shi laoshi

I not be teacher

‘I am not a teacher.’

- b. 老師不在課室 \boxplus

laoshi bu zai keshi-li

teacher not be.at classroom-inside

‘The teacher is not in the classroom.’

- b. Activity: 我 (不/ㄟ) 唱歌
 wo (bu / ?mei) chang ge [Beijing Mandarin]
 wo (bu / ?mei) chang ge [Taiwan Mandarin]
 I not / not.have sing songs
 'I do/did not sing.'
- c. Accomplishment: 我 (不/ㄟ) 寫這封信
 wo (?bu / ?mei) xie zhe feng xin [Beijing Mandarin]
 wo (?bu / mei) xie zhe feng xin [Taiwan Mandarin]
 I not / not.have write this CL letter
 'I do/did not write this letter.'
- d. Achievement: 我 (不/ㄟ) 有 贏比賽
 wo (??bu / ?mei-you) ying bisai [Beijing Mandarin]
 wo (??bu / ?mei-you) ying bisai [Taiwan Mandarin]
 I not / not-have win race
 'I do/did not win the race.'
- e. Semelfactive: 我 (不/ㄟ) 打嗝
 wo (?bu / ?mei) dage [Beijing Mandarin]
 wo (?bu / mei) dage [Taiwan Mandarin]
 I not / not.have hiccup
 'I do/did not hiccup.'

The acceptability of *bù* and *méi(yǒu)* depends on the situation type denoted by the predicate. The two forms are often only distinguished by their semantics because both *bù* and *méi(yǒu)* can negate bare sentences, while *méi(yǒu)* invariably denies the existence of the denoted situation, and *bù* expresses a lack of volition or habituality to actualise the situation. Table 3 provides a brief summary of the survey findings (see Section 2.2 for explanations on the grammaticality annotations).

The results presented in Table 3⁶ reveal that *méi(yǒu)*, the negative existential predicate in example (4b), is also a standard negator in Mandarin, particularly if we discount the incompleteness effect that has surfaced as general marginality in the Beijing Mandarin bare negatives with *méi(yǒu)*.⁷ These results also suggest that neither Beijing Mandarin nor Taiwan Mandarin represent Type C, the

⁶Table 3 reports the average score (and the corresponding level of acceptability) of the tested items for each predicate type. Each type includes two to four test items.

⁷Based on the judgment survey results presented in Table 3, most of the bare sentences that are negated by *méi(yǒu)* are considered slightly marginal (?), which could cast reasonable doubt on the status of *méi(yǒu)* as a standard negator in Mandarin. This can, in fact, be attributed to the

Table 3: Negation of bare declaratives in Mandarin varieties

	Beijing Mandarin		Taiwan Mandarin	
	bù 'not'	méi(yǒu) 'not have'	bù 'not'	méi(yǒu) 'not have'
State [+psych]	✓4.8	?3.4	✓4.9	?4.4
State [-psych]	✓5.0	??2.5	✓5.0	??2.4
Activity	✓4.8	?4.4	✓5.0	?4.3
Accomplishment	?4.1	?4.1	✓4.6	✓4.8
Achievement	??1.6	?4.4	??1.6	?4.4
Semelfactive	?3.9	?4.5	?4.0	✓4.7

stage when the special form for the negative existential has developed into a general negator in the system. Firstly, the special form for the negative existential, *méi(yǒu)* ‘not have’, is not the only standard negator; *bù* ‘not’ is also a generally acceptable option for negating sentences that contain different classes of verbs. Secondly, the distribution of *méi(yǒu)* is not without restriction. Besides the issue of compatibility with different aspectual specification, *méi(yǒu)* has also been deemed unacceptable in bare sentences that contain non-psych stative predicates in both varieties of Mandarin, as shown in example (12).

- (12) Negation and non-psych state: 我 (不/没有) 知道这件事
 wo (bu / ??mei-you) zhidao zhe jian shi [Beijing Mandarin]
 wo (bu / *mei-you) zhidao zhe jian shi [Taiwan Mandarin]
 I not / not-have know this CL event
 ‘I do/did not know about this event.’

To summarise, *méi(yǒu)* ‘not have’ is a standard negator in both varieties of Mandarin but has not developed into a general negator that pervades the entire negation system; in other words, both Beijing and Taiwan Mandarin belong to the transition Type B~C as Croft1991 has suggested. It should therefore be evident by now that the NEC is relevant to the Mandarin varieties as far as *méi(yǒu)*

‘incompleteness effect’ in Chinese sentences without aspect marking or adverbial modification (Tsai2008). As ‘bare sentences’ are, by definition, simple verbal declaratives without aspect marking or any modifiers, the negation of these sentences could generally be judged as slightly marginal. That should not affect our conclusion that *méi(yǒu)* is one of the standard negators in Mandarin, although this phenomenon does credit further investigation.

‘not have’ is concerned. How this link between negation and existence (or more precisely, non-existence) emerged in the Chinese negation system remains unclear; §4 will offer some answers to this question.

4 From negative existential to standard negation

This section will examine eight sets of texts from the Old Chinese period to the Pre-Modern Chinese period. Historical linguists have yet to arrive at an unanimous consensus over the periodisation of the Chinese language among historical linguists, but there are two main criteria for the delineation of periods. They are phonological change and grammatical change. A detailed description of various possible periodisations is included in Appendix A Table A1, but based on the existing proposals, I adopt the periodisation indicated in Table 4 for the present discussion:

Table 4: Periodisation of the Chinese language

Language	Period
Old Chinese, a.k.a. Shanggu Hanyu	Shang to Han dynasty (ca. 1600 BC–AD 220)
Middle Chinese, a.k.a. Zhonggu Hanyu	Wei-Jin period to 10th c. AD (AD 220–960)
Pre-Modern Chinese, a.k.a. Jindai Hanyu	Song to Late Qing period (960–1842)
Modern Chinese, a.k.a. Xiandai Hanyu	Republican era to present (1911–present)

These manuscripts have been selected for their sample of dialogues that offer a more accurate representation of the colloquial use of language.⁸ Table 3 provides

⁸When considering the historical texts, two tacit issues are important. The first is that the language documented in the writings might not reflect the spoken colloquial form. This is a well-known challenge in historical linguistics, and it is particularly true in the study of historical Chinese linguistics because the Chinese logographic writing rarely provides phonological clues for the articulation of the characters. Hence, based on the historical record available, I adopt the traditional assumption that the written language reflects the spoken form to a certain extent, and that the choice of texts which include dialogues may bring the written language even closer to the speech at the time. The second issue concerns the potential regional variation involved across the texts that cover a long time period. Indeed, a major challenge for the

basic information on these selected texts.⁹

Historical investigation of these texts addresses two issues. Firstly, since the contemporary Mandarin varieties both represent Type B-C in the NEC, we will determine whether the present expression of ‘not have’ has undergone any evolution through its history. Secondly, it reveals if there were other forms used to express negative existence in history and why the present form of the negative existential (such as *méi(yǒu)*) became the dominant one and developed further into a standard negator. To keep the discussion more focused, this section concentrates on the development in Mandarin and for that reason, all historical data will be transcribed in Hanyu Pinyin; §5 will extend the scope of this investigation to the Cantonese varieties and explain the cross-linguistic variations across the four Chinese varieties examined in this analysis.

4.1 Evolution of the negative existential

As mentioned above, the verb ‘to have’ is the existential predicate in present-day Chinese (its form is *yǒu* in Beijing and Taiwan Mandarin, and *jau5* in the Cantonese varieties). Indeed, this verb has expressed existence since the Old Chinese period, as in (13):

(13) ‘Have’ as an existential predicate

- a. 天下有不順者，[黃]帝從而征之
tianxia you bu shun zhe, Huangdi conger zheng zhi
 world have not obedient person Huangdi then fight PRO
 ‘Where there are disobedient populations, Huangdi would fight them.’ (《史記·五帝本紀》 *Shiji* 109–91 BC)
- b. 鄭人有賣鄭於秦
Zheng ren you mai Zheng yu Qin
 Zheng people have sell Zheng to Qin
 ‘There are people in Zheng who betray the country for Qin.’ (《史

present study, and for the research of historical linguistics in general, is to identify the exact regional variety represented in the texts. One problem is that the author of some texts remains unknown or there may be more than one. A case in point is *The Analects*, which is the collection of dialogues between Confucius and his students that was posthumously compiled by his followers, and it therefore has multiple authors whose identities are undetermined. Nonetheless, following TaiChan1999 I assume that each period has a koine that is determined primarily by the location of the capital city of the time. Appendix B Table B1 presents the approximations of the regional variety that the respective text might represent.

⁹see Appendix B Table B1 for the number of words in each text.

記·秦本紀》*Shiji* 109–91 BC)

- c. 有參軍見鼠白日行，以手板批殺之

you canjun jian shu bairi xing, yi shouban pi sha zhi
have officer see rat day walk with board hit kill PRO

‘There was an officer who saw a rat walking in daytime, so he hit and killed it with a board.’ (《世新語》*A New Account of the Tales of the World* AD 420–581)

The first two examples originate from two different chapters of an Old Chinese history text, *Shiji*. In (13a), the verb ‘to have’ predicates over the nominal complement, *bú shùn zhě* ‘disobedient population’, and together they mean that disobedient people exist with a reference to the locative subject *tiānxià*, ‘the world’. This clause is therefore an existential construction that means ‘there exists disobedient population in the world’ (or literally ‘the world exists disobedient populations’). Example (13b) presents a similar case where ‘have’ is the predicate that means ‘to exist’ and it connects the entity that exists –people who betray the country, *Zhèng*, for another country, *Qín* –with the locative reference point, the *Zheng population*. Consequently, the meaning expressed is that within the population of Zheng, there are people who betray their own country for another, Qin. The third example is extracted from a later text, *A New Account of the Tales of the World*, which is a collection of short stories completed during the Southern-Northern period (AD 420–581). The example contains the verb ‘have’ to express the existence of an officer who saw a rat during the daytime. This sentence has no locative reference, unlike the two previous examples. In fact, its structure is reminiscent of the specific indefinite structure in contemporary Chinese. Examples (14–15) below provide the translations of the first clause in example (13c) in modern Mandarin and Hong Kong Cantonese.

- (14) Modern Mandarin: 有一個士兵看見一☐老鼠大白天在街上跑來跑去
[*you yi ge shibing*] *kanjian yi zhi laoshu dabaitian zai jie*
have one CL officer see one CL rat big.morning be.at street
shang pao-lai-pao-qu
up run-come-run-go
‘An officer saw a rat running on the street in broad daylight.’

- (15) Hong Kong Cantonese: 有個士兵見到有☐老鼠日光日白☐條街度走黎走去

[*jau go sibing*] gin-dou jau zek lousyu jat-gwong-jat-baak hai tiu
 have CL officer see-CPL have CL rat sun-light-sun-white be.at CL
gaai dou zau-lai-zau-hui
 street LOC run-come-run-go
 ‘An officer saw a rat running on the street in broad daylight.’

These three examples in (13) show that ‘have’ has been an existential predicate since the earliest records.

As the verb ‘to have’ is an existential predicate, I will approach the issue of how the negation of existence was expressed by first identifying all the negative markers that can accompany the verb ‘to have’ and determine their respective developments. Historical records have revealed that at least twelve negative markers were available throughout the history of the Chinese language (ChappellPeyraube2016), but not all of them can appear with the existential predicate. Table 5 below reveals the possibility of various negator-existential predicate (NEG+yǒu ‘have’) pairings in terms of annotations, * = unattested, % = rarely attested, ✓ = commonly attested. Table B2 in Appendix B lists the exact number of occurrences for each [NEG+yǒu] pairing per text.

Table 5: [NEG + yǒu] pairings

[NEG + yǒu]		[NEG + yǒu]	
勿 wù	%	微 wēi	✓
毋 wú	%	蔑 miè	*
弗 fú	*	莫 mò	✓
匪 fěi	%	不 bù	✓
非 fēi	✓	無 wú	✓
未 wèi	✓	𠂇 méi	✓

Based on the selected texts, 弗 *fú* and 蔑 *miè* never co-occurred with the existential predicate. Three others also rarely occurred with the existential predicate, namely 勿 *wù*, 匪 *fěi* and 毋 *wú*. The first two only appeared with the existential predicate less than ten times in the eight selected texts, and the last one, 毋 *wú*, only appeared with the existential predicate *yǒu* ‘have’ in one text – *Shiji* with twelve tokens (that is, 7% of the total NEG+HAVE tokens in the text). Excluding these five negative markers, the pattern that emerged is represented in Figure 1.¹⁰

¹⁰In Figures 1 and 2, the numerals next to the Pinyin stand for tones: 1 refers to a high level tone,

2 Croft's Cycle in Mandarin and Cantonese

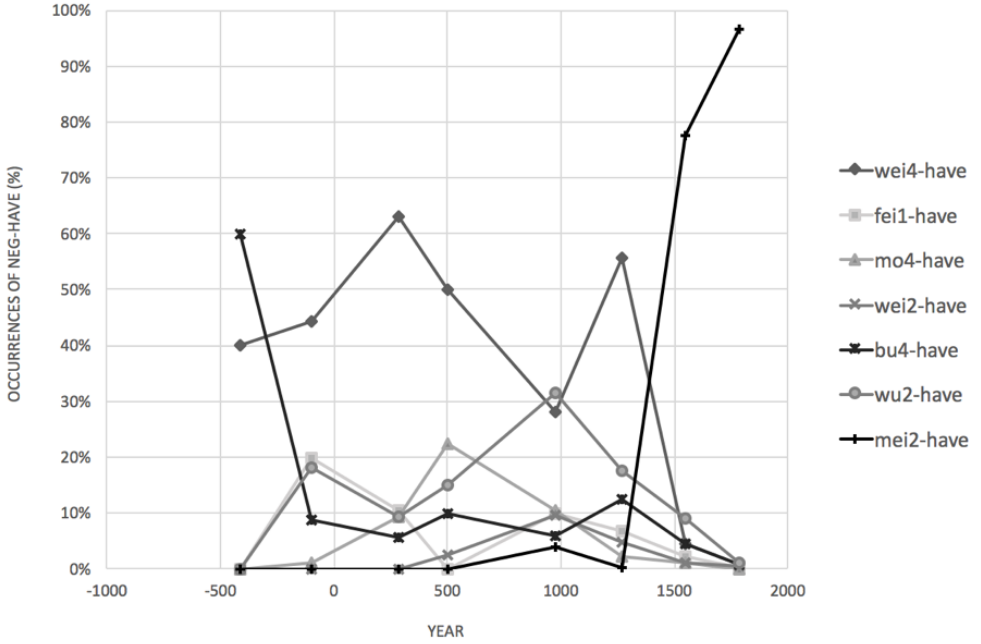


Figure 1: Percentage of NEG+HAVE realisations in historical texts (version 1).

The x-axis in Figure 1 represents the years, with 0 designating the year AD 1. The minus before some years replaces the abbreviation BC. Each line represents one form of realisation of NEG+HAVE and all of them have eight points, each of which marks the result from one of the eight texts selected for this study. The y-axis represents the proportion of each NEG+HAVE combination over the total number of NEG+HAVE occurrences in the text. For instance, 莫有 *mò*-have has occurred ten times in the third text, *Records of the Three Kingdoms* (AD 265–300), out of a total of 106 NEG+HAVE occurrences, hence the percentage shows 9.43% at the third point of the line. In another text produced later in history, a fourth text, *A New Account of the Tales of the World* (AD 420–581), which was produced later, only has nine occurrences of the form *mò*-have, but as there were only 40 tokens of NEG+HAVE in this text, the percentage marked at the fourth point of the same line is 22.5%. The prominent pattern in Figure 1 is that many different NEG+HAVE combinations have been consistently attested across the eight texts, although the

2 to a rising tone, 3 to a dipping tone, and 4 to a falling tone.

number of their occurrences were rather low. The forms *wéi*-have, *mò*-have, and *fēi*-have serve as examples of this. There are four particular NEG+HAVE combinations that have displayed more substantial changes over time: *wèi*-have (未有 *wèi-yǒu*), *bù*-have (不有 *bù-yǒu*), *wú*-have (無有 *wú-yǒu*), and *mei*-have (𠄎有 *méi-yǒu*), with the latter being the focus of this analysis. For clarity, these results are repeated in Figure 2 which uses the same design as Figure 1.

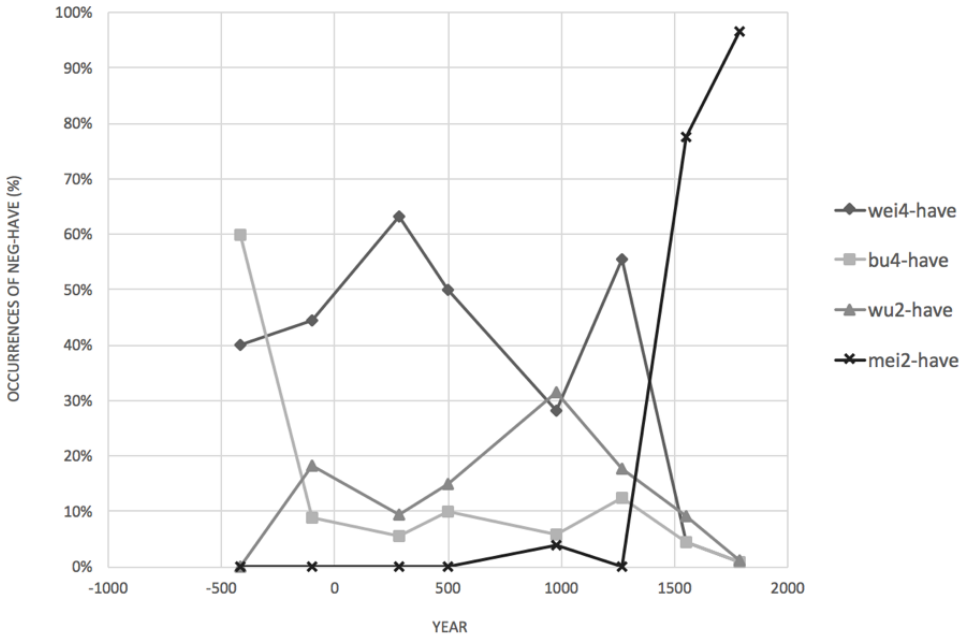


Figure 2: Percentage of NEG+HAVE realisations in historical texts (version 2).

Figure 2 reveals three important findings. Firstly, *bù*-have is the earliest realisation of NEG+HAVE combination in *The Analects* (BC 480–350), but appearances of this form diminished in approximately AD 1300. Secondly, *wú*-have emerged as a competing form of NEG+HAVE against *bù*-have, and its usage constantly increased until around AD 1300. The discovery that *bù* and *wú* have coexisted since the Old Chinese period concurs with the traditional understanding of the M-/P division of negation in Old Chinese (see Hashimoto1985 and Zhang2002 for more details). In brief, the issue of M-/P-negation division concerns the historical observation that Old Chinese had two groups of negators which were distinguish-

able by their initial consonant. One of these groups has an initial nasal, while the other has a plosive. The contemporary Chinese equivalent to this nasal-plosive (also referred to as the M-/P division) is arguably the North-South division of regional varieties. Evidence for this is the 'not' negator. The Northern varieties have a plosive 'not', such as the Beijing Mandarin *bù*, while the Southern varieties have a nasal 'not', such as the Hong Kong Cantonese *m4* and the Gaozhou Cantonese *mau5*; Table 6 presents additional information on the regional M-/P-division (adapted from Hashimoto1985 and Zhang2002).¹¹

Table 6: The M-/P-division in the negator of regional varieties

		'not'	'not have'
N	Ⓕ陽 Shenyang	pu	mei (iou)
N	北京 Beijing	pu	mei (iou)
N	濟南 Jinan	pu	mei (iou); mu (iou)
N	西安 Xian	pu	mo iou; m iou
N	合肥 Hefei	pəʔ	me; mu
S	蘇州 Suzhou	fəʔ	m pʰʔ
S	南昌 Nanchang	pət	mau iu
S	長沙 Changsha	pu	mau tʰ; mau
S	Ⓕ州 Wenzhou	fu	nau < m-
S	福州 Fuzhou	ŋ < m	mə
S	Ⓕ門 Xiamen	m	bo < m-
S	汕頭 Shantou	m	bo < m-
S	梅縣 Meixian	m	mə
S	廣州 Guangzhou	m	mou

Table 6 shows that what is referred to as the M-/P-division may not be as clear cut as it seems, and that instead of a rigid line, this 'division' should be conceived of as a continuum where gradual changes are evident, from the dominant M-form in the south to the non-nasal form in the north. A non-nasal, non-plosive F-form 'not' has also emerged between these two zones, as attested in Suzhou and Wenzhou.

¹¹The phonological representation in Table 6 follows the IPA. The cities are arranged according to their geographical location from north to south, the labels N(orth) and S(outh) are determined by whether they are to the north or south of Chang Jiang (also known as the Yangtze River), which is the traditional means of defining the north-south divide in China.

Zhang2002 suggests that the M-/P division of negation has crucial consequences in the sense that M-negators across the varieties of Chinese follow Croft1991's NEC and associate closely with non-existence, whereas this is not the case for the P-negators. According to Zhang2002's analysis, the Chinese negation system belonged to Type B~C in its earliest oracle bone records, where *wú* acted as both the special form for the negative existential and a verbal negator in some contexts, but as *wú* was not the only verbal negator, the system cannot be classified as Type C. In Later Old Chinese, the system might have evolved into Type A, where *wú* requires the presence of the verb *yǒu* 'have' to express negative existence. By Middle Chinese, the [*wú*-have DP] structure (that is, *wú* negating the existential predication of *yǒu* and its nominal complement) became more common and the use of *wú* and other derived forms such as 毛 *mau* prevailed particularly in the southern varieties. By the late Tang dynasty (ca. tenth century AD), the M-negators dominated the southern part of China, while the P-negators remained popular in the North. The key stages are summarised in Table 6 below.

Zhang2002 proposed that in southern varieties such as Cantonese and Hakka, their 'not' negators were derived from their 'not have' negators which were once the general negator (see also Law2014 which suggested that the Hong Kong Cantonese *mou5* 'not.have' was the product of *mou4* + *jau5* 'not + have'). Another standard negator could have been invented for the sake of keeping the negation of the existential distinct from the negation of normal verbs as suggested by Veselinova2016 I will return to Zhang2002's analysis of the Cantonese negators in §5, but it is important to mention that Zhang2002 has not explained how the Mandarin negation system evolved from the Old Chinese state to its present form, or in other words, how *méiyǒu* emerged as the negative existential predicate and standard negator. It is significant that the sample texts featured in Figure 2 have no recordings of *méi*-have (or *méiyǒu*) until AD 1300, and afterwards, *méiyǒu* has become the predominant form to express the NEG+HAVE. The situation continues at present as well, as contemporary Mandarin has no other acceptable forms of NEG+HAVE. The emergence of *méiyǒu* may seem rather sudden (Figure 2), but it is reasonable to postulate that this sudden appearance of *méiyǒu* found in the texts only marked the beginning of the documentation of more colloquial speech and it is not the actual point where the strategy emerged. The late thirteenth century to the beginning of the fourteenth century marks the end of a long history of Han rule and the beginning of 'foreign' rule – the Yuan dynasty (AD 1271–1368). This was a period when the Mongolians ruled the entire nation. The issue at hand is to determine how *méiyǒu* became the predominant form for NEG+HAVE, and how that resulted in its development into a standard negator in

present-day Mandarin varieties.

4.2 Emergence of *méi(yǒu)* as a negative existential and standard negator

Based on the historical texts (beyond the eight selected texts) in the **chant** and Chinese Text Project, 𠄎 *méi/mò* first appeared during the Pre-Qin era where it had three related meanings: to sink or submerge, to die, and the end of something, as illustrated in examples (16), (17), and (18), respectively. It is important to note that although these three readings of 𠄎 *méi/mò* are archaic, they continue to be found in present-day Chinese, such as, in Mandarin and Cantonese. When this lexical item is used to express its three meanings in Beijing and Taiwan Mandarin, its phonological realisation is *mò* (*mut6* in Hong Kong Cantonese). Whereas, when it functions as a standard negator, it is realised as *méi*. This function is not found in Cantonese but if it were, the phonological form would still be *mut6*. For ease of exposition, I follow the pronunciation in contemporary Mandarin when glossing the lexical uses of this word as *mò* and its negation uses as *méi* in the examples and in the text. An important point to note, however, is that in terms of sound change, *méi* did not develop from *mò* (Schuessler2007).

(16) *Mò* 'to sink or submerge'

- a. 不臨深泉, 何以知𠄎溺之患
bu lin shen quan, heyi zhi mo-ni-zhi huan
 not come deep stream how know **submerge**-drown-gen danger
 'If one does not come close to a deep stream, how can one
 understands the danger of drowning?' (《孔子家語》 *Kongzi Jiayu*
 206 BC–AD 220)
- b. 可以步行水上不𠄎
keyi buxing shui shang bu mo
 can walk water above not **sink**
 '[He] can walk on water and won't sink.' (《抱朴子》 *Baopuzi* AD
 300–343)
- c. 日月出𠄎其中
ri yue chu mo qi zhong
 sun moon out **sink** PRO within
 'The sun and moon appear there.' (《藝文類聚》 *Yiwen Leiju* AD 624)

The main verb of the subordinate clause that denotes the action of sinking in

example (16b) is *mò*. The following example, (16c), is a quote from a later text, *Yiwen Leiju* – an encyclopedia compiled during the Tang dynasty (AD 624AD). This quote illustrates how the meaning ‘to sink/submerge’ has been extended to non-human entities, such as the sun and the moon (for instance, the sunset is depicted as the sun sinking or submerging). Crucially, *mò* appears with *nì* ‘drown’ in (16a) and together they mean that someone sank and drowned, which reflects the natural link between sinking and death: sinking or submerging leads to drowning, with results in death.

Indeed, *mò* also denotes ‘to be dead’ in the examples below:

(17) *Mò* ‘to be dead’

- a. 父在，觀其志；父_☐，觀其行
fu zai, guan qi zhi; fu mò, guan qi xing
 father live observe his will father **die** observe his conduct
 ‘While one’s father lives, observe his aspiration; when one’s father dies, observe his conduct.’ (《論語》 *The Analects* BC 480–350)
- b. 二親既_☐，所居齋寢
er qin ji mò, suo ju zhai qin
 two parents already **die** PRO dwell alone sleep
 ‘With the death of the parents, [he] lived alone in [his] place (for mourning).’ (《_☐氏家訓》 *Yanshi Jiaxun* AD 420–581)
- c. 生有顯功，_☐有美名
sheng you xian gong, mò you mei ming
 live have remarkable feat **dead** have good name
 ‘[He] had remarkable achievements when he lived, and a good name after he died.’ (《藝文類聚》 *Yiwen Leiju* AD 624)

Example (17a) is a clear case in point. The parallelism of the two sentences is deliberately used to highlight the contrast in content. The first clause in the first sentence is ‘when father lives’, and in the second sentence, the first clause expresses the opposite, ‘when father dies’, and the meaning of ‘to die’ is encoded by *mò*. At a glance, example (17c) appears to present a case of *mò yǒu* (also known as *méiyǒu*), where *yǒu* is the possessive predicate and _☐ *méi/mò* is the negator, but this would be a misinterpretation. Similar to example (17a), this sentence contains two clauses with parallel structure, expressing a contrastive meaning: the first clause states that the person in question (although pro-dropped) attains remarkable achievements when he lives, and the second clause contrasts that by stating what he possesses when he dies. In both clauses, the verb *yǒu* ‘have’

means 'to possess/own', and 𣎵 *méi/mò* in the second clause means 'dead' (hence it is glossed as *mò*, not *méi*), the opposite of *shēng* 'live' in the first clause.

The third meaning of *mò* is 'the end of something', and this meaning, which existed at the same time as the other two, is an extension of the notion of death which we have seen in example (17). Just as the meaning of 'to sink/submerge' has been metaphorically extended to the sun (as in, the sunset) the concept of death being the end of the life can likewise be extended to non-human entities. The concept of death can be 'the end' in general and this is illustrated by the examples in (18) below.

(18) *Mò* 'the end of something'

- a. 於夏十月, 火既𣎵矣

yu xia shi yue, huo ji mo yi
in Summer tenth month fire already **exhaust** PRT

'In Summer, October, when the fire has died down' (《孔子家語》
Kongzi Jiayu 206BC–AD 220)

- b. 恐𣎵世不復見如此人

kong mo shi bu fu jian ruci ren
fear **end** world not again see such person

'Fear that it won't be possible to find such person till end of the
world' (《世𣎵新語》 *A New Account of the Tales of the World* AD
420–581)

- c. 立言不𣎵

li yan bu mo
establish word not **end/extinguish**

'The words [one] established do not perish.' (《藝文類聚》 *Yiwen*
Leiju AD 624)

When *mò* denotes 'the end of something', it can be used as a verb (such as 'to end') or an adjective (such as 'final'). The former is illustrated by examples (18a) and (18c), and the latter by (18b). Once the meaning of *mò* has been semantically 'stretched' to mean 'death,' or even 'the end,' both of which practically indicate that the entity in question ceases to exist, *mò* has become a natural candidate to express non-existence in general. Indeed, by the late thirteenth century, the negative existential function of 𣎵 *méi* emerged (19), as did its use as a verbal negator (20). Xu2003 presents an alternative position that the emergence of *méi* could be phonologically-driven. According to Xu2003 sound change occurred approximately during the tenth century AD making *wú* (*mou4* in Hong Kong

Cantonese, which resembles the Middle Chinese realisation more closely) and *mò* almost indistinguishable phonetically. As a result, by the Song dynasty (AD 960–1279), *mò* and *wù* tended to be used interchangeably, and by around the fifteenth century, *méi/mò* has completely replaced *wú* as the negative existential (see PanW2002 and Xu2003). In fact, the semantic bleaching and sound change accounts fit rather well in terms of timing and the empirical evidence, and it is likely that both factors contributed and motivated the rise of *méi/mò* as the new negative existential predicate. This special form for the negative existential later developed into a standard negator in contemporary Mandarin varieties, confirming the NEC prediction. Schuessler2007 mentions that two possible pathways have been proposed. On the one hand, Norman1988 suggests that *méi* (which was pronounced *muət* in Middle Chinese) could be a variant of 勿 *wú* or 未 *wèi*, and that this variant was later fused with or influenced by 有 *yǒu* ‘have’. On the other hand, Pulleyblank1973 proposes that the etymology of ‘not have’ originated from ‘submerge’. It began from the reconstructed form **ma*, continued to 末 *mò* ‘the end of something’ and to 亡 *wáng* (*mong4* in Hong Kong Cantonese) ‘to die or be dead’, then to 無 *wú* (Hong Kong Cantonese *mou4*) ‘not or nothing’ or 莫 *mò* ‘not or don’t’, and finally to 𠵿 *mò/méi* as ‘not have’. A thorough examination of which of the two factors played a more significant role in the historical development would, however, go beyond the scope of the present study.

(19) *Méi* as a negative existential

a. 一向都𠵿分𠵿

yixiang dou méi fenbie
along all MEI difference

‘There’s no difference all along.’ (《朱子語類》 *Zhuzi Yulei* AD 1270)

b. 將船𠵿至𠵿人𠵿處

jiang chuan cheng zhi méi renyan chu
make boat punt till MEI people.smoke place

‘[He] punted the boat to a place without people.’ (《西𠵿記》 *Journey to the West* AD 1520–1580)

c. 𠵿人照顧

mei ren zhaogu
MEI people take.care

‘There is no one to look after him.’ or ‘He has no one to look after him.’ (《儒林外史》 *The Scholars* AD 1750)

- (20)
- Méi*
- as verbal negator: 都
- _{ㄉㄨ}
- 理會了

dou *mei* lihui le

all MEI take.notice le

‘[they] all didn’t take notice.’ (《朱子語類》 *Zhuzi Yulei* AD 1270)

The negative existential predication and general verbal negation functions of *méi* emerged almost simultaneously. This is made evident by a text from the Song dynasty, *Zhuzi Yulei*, which is a collection of philosophical dialogues between *Zhu* and his students compiled in AD 1270. Example (19a) is extracted from this same text and is an instance of *méi* denoting the non-existence of an entity, *fēnbié* ‘difference’, although the locative reference that we have seen in the Old Chinese examples of *yǒu* ‘have’ (13a–13b) is absent. Example (20), on the other hand, shows *méi* as a verbal negator because it denies that the event of ‘taking notice’ has occurred. It is important to note that the negative existential predicate and verbal negator *méiyǒu* did not occur in the texts before the fourteenth century. In other words, the functions of *méi* as the negative existential predicate and as the verbal negator long predate the appearance of *méiyǒu*. It was not until the Ming dynasty (AD 1368–1644) that the *méi*-*yǒu* ‘not-have’ combination first appeared as a negative existential expression as shown in (21). By the eighteenth century, *méiyǒu* ‘not have’ combination began to function as a verbal negator. The first documented case of this was found in *Dream of the Red Chamber* (AD 1748), which is featured in example (22).

- (21)
- Méiyǒu*
- as a negative existential

- a. 連宿處也
- _{ㄉㄨ}
- 有了

lian shu chu ye [*mei* you] le

even sleep place also [MEI have] LE

‘There isn’t even a place to stay now.’ or ‘[We] don’t have a place to stay.’ (《西_{ㄒㄩ}記》 *Journey to the West* AD1520–1580)

- b. 此處
- _{ㄘㄧ}
- _{ㄘㄩ}
- 有什
- _{ㄕㄨ}
- _{ㄌㄢˊ}
- 蘭麝、明月、洲渚之類

ci chu bing [*mei* you] shenme lanshe mingyue zhou

this place really [MEI have] what fragrant.herbs bright.moon is

chu zhi lei

let that kind

‘There isn’t herbs, moon, islet or the likes [elements for poetry] here.’
(《紅樓夢》 *Dream of the Red Chamber* AD 1748)

- (22) *Méiyǒu* as verbal negator: 還_有走到跟前
 hai [**mei-you** zou-dao] genqian
 still [**not-have** walk-CPL] in.front
 ‘still have not walked to the front.’ (《紅樓夢》 *Dream of the Red Chamber* AD 1748)

A world-renowned novel from the Ming dynasty, *Journey to the West*, contained many tokens of *méiyǒu* that expressed negative existence such as the one in example (21a). But example (21a) also reveals the ambiguity involved in the expression. As subject pro-drop has been very common in Chinese, instances such as (21a) can be interpreted as ‘someone does not even have a place to stay’ or that ‘this place or there does not even have a place for people to stay’. If it is the former (when the subject is a human), then (21a) is a possessive structure and *méiyǒu* means ‘not possess’, but if the latter is true (when the sentence has a locative subject), then it is an existential construction, and *méiyǒu* means ‘not exist’, as it does in the sentence in (21b). The ambiguity is significant to the development of *méiyǒu* from a negative existential predicate to a verbal negator (and a standard negator). As *yǒu* ‘have’ can be an existential predicate and a possessive predicate, it might have provided a stepping stone for *méi* to evolve from a negative existential predicate to a standard negator. Indeed, the verb *yǒu* ‘have’ has been polysemous in expressing existence and possession ever since the Old Chinese period; its existential sense has been discussed in Section 4.1 and the examples below illustrate *yǒu* ‘have’ as a possessive predicate.

- (23) ‘Have’ as possessive predicate
- a. 秦王有虎狼之心
 Qin wang you hu lang zhi xin
 Qin emperor have tiger wolf GEN heart
 ‘The Emperor of Qin is full of ambition and calculation.’ (lit. ‘The Emperor of Qin has a heart like the tiger or wolf.’) (《史記·項羽本紀》 *Shiji* 109–91 BC)
 - b. 庾子躬有廢疾，甚知名
 Yu Zigong you feiji, shen zhiming
 Yu Zigong have disability quite well-known
 ‘Yu Zigong has physical disability which is quite well-known.’ (《世說新語》 *A New Account of the Tales of the World* AD 420–581)

(23a) is an example of Old Chinese, where *yǒu* ‘have’ is the main verb that predicates over the nominal complement, *hǔ láng zhī xīn* ‘ambition’ (literally,

‘the heart of the tiger or wolf’), and the subject *Qín wáng*, ‘King of Qin’, is the possessor. Likewise, in (23b), the subject (*Yǔ Zīgōng*) possesses a physical disability, and the verb *yǒu* denotes ‘to possess’.

To summarise, the development of Chinese negation began with a highly diverse situation where more than ten negative markers actively existed in the language, and among those negative markers, at least three were productive strategies to express negative existence:

Table 7: Old Chinese negative existential expressions

<i>wú</i>	can stand alone as a special form of the negative existential (Zhang2002)
<i>bù</i>	can negate the existential predicate <i>yǒu</i> ‘have’ to express negative existence
<i>wú</i>	can combine with the existential predicate <i>yǒu</i> ‘have’ to express negative existence

Following Croft1991’s NEC classification, Old Chinese displayed signs of the Type A system with the second strategy (*bù-yǒu*), the Type B system with the first strategy (*wú*), as well as the B~C (or even C~A) system with the third strategy (*wú-yǒu*). In other words, because *wú* was only one of the Chinese verbal negators, it should be considered as Type B~C, but its presence with the existential predicate in negative existential contexts resembles the C~A system, hence the ambiguity. These strategies for the negative existential continued to be competing alternatives in historical records until a ‘novel’ form, *méi*, emerged in the late thirteenth century AD. That form developed through a series of semantic extensions and bleaching from ‘sink’ to ‘dead’, and then became a form to express non-existence and general verbal negation. Therefore, *méi* initially was a special form for the negative existential and also basically a verbal negator (in other words, Type B~C).

While *méi* later became compatible with the existential predicate *yǒu* ‘have’ in negative existential contexts, *méi-yǒu*, similar to *wú-yǒu*, can be ambiguously interpreted as a sign of a B~C or C~A system. The sign of Type B~C is that *méi* and *bù* co-exist as standard negators in contemporary Mandarin, and the sign of Type C~A is that *méi* itself is both a negative existential predicate and a verbal negator. Its compatibility with *yǒu* ‘have’ could indicate that the system is moving on to the compositional Type A. The historical development sketched in this section has important implications for the analysis of contemporary Mandarin

negation. Firstly, the fact that *méi* predates *méiyǒu* in being a negative existential predicate and a verbal negator indicates that *méi* cannot be interpreted as a contracted form of *méiyǒu*. The optional presence of *yǒu* in present-day Mandarin varieties is not simply a matter of phonological fusion or reduction in the fact that *yǒu* can appear with *méi* in negative existential contexts and standard negation indicates that the existential content of *méi* may be bleached. This results in the presence of *yǒu* being acceptable and not semantically redundant; and its optionality shows that the semantic bleaching remains underway. Secondly, the development of *méi* from a negative existential predicate to verbal negation might explain why *yǒu* must be negated by *méi*, while other verbs can be negated by either *méi* or *bù*. The connection between *méi* and *yǒu* rests in their semantic connection, that is, existence. The next section will examine the negation system of two Cantonese varieties (Hong Kong and Gaozhou Cantonese) from the perspective of the NEC. The result will not only highlight the cross-linguistic similarities and differences, but will also account for the ambiguous statuses of *wú-yǒu* and *méi-yǒu*.

5 Variation within Chinese

The connection that Croft1991 identified between the NEC and Mandarin Chinese also exists in the Cantonese varieties of Chinese. The verb ‘to have’ is generally used as the existential predicate in Chinese varieties, but it has varying phonological forms in different varieties. Thus, the verb ‘to have’ is *yǒu* in Mainland and Taiwan Mandarin and *jau5* in Hong Kong and Gaozhou Cantonese. The existential constructions in the Cantonese varieties are illustrated in the examples below:

(24) Hong Kong Cantonese (Yue Chinese, Sinitic)

- a. 課室度有鉛筆
fosat dou jau jyunbat
 classroom place **have** pencil
 ‘There are pencils in the classroom.’
- b. 課室度唔有鉛筆
**fosat dou m jau jyunbat*
 classroom place **not have** pencil
 ‘There aren’t pencils in the classroom.’
- c. 課室度冇(*有)鉛筆

*fosat dou mou (*jau) jyunbat*
 classroom place not.have have pencil
 'There aren't pencils in the classroom.'

(25) Gaozhou Cantonese (Gaoyang Yue Chinese, Sinitic)

- a. 課室具¹²有鉛筆
fosat gui jau jinbat
 classroom that.place have pencil
 'There are pencils in the classroom.'
- b. 課室具茅有鉛筆
fosat gui mau (jau) jinbat
 classroom that.place not have pencil
 'There aren't pencils in the classroom.'

Examples (24a) and (25a) above contain the existential construction in Hong Kong Cantonese and Gaozhou Cantonese in an affirmative context, respectively. Both varieties use the verb *jau5* 'to have' to express the existence of the entity denoted by its complement, which is a pencil, with reference to a location, such as a classroom. This affirmative structure is equivalent to the one found in the Mandarin varieties (12). However, the negative sentences in examples (24b) and (24c) as well as in example (25b) are notably different. Firstly, Hong Kong Cantonese has two standard negators, *m4* 'not' and *mou5* 'not.have'. These largely resemble *bù* and *méi(yǒu)* in Mandarin, but the Mandarin *yǒu* 'have' has the option to follow *méi* but *jau5* in Hong Kong Cantonese cannot co-occur with *mou5*. Examples (24b) and (24c) reveal that the only legitimate negator in Hong Kong Cantonese negative existential constructions is *mou5*, but even there the presence of the existential predicate *jau5* is strictly forbidden. In addition, Gaozhou Cantonese differs from the other three varieties in having only one standard negator *mau5* 'not'. Thus, the counterpart of Gaozhou Cantonese in example (28b) resembles the Mandarin structure except that the negator *mau5* is the only standard negator in the variety. In terms of classifying the Cantonese varieties into the NEC types, as the Hong Kong Cantonese *mou5* 'not.have' can express negative existence on its own, it can be regarded as a special form of negative existential, which means that Hong Kong Cantonese would be categorised at least as Type

¹²The character is merely an approximation for the phonetic realisation of *gui3* because Cantonese generally lacks systematic orthography.

B. Hong Kong Cantonese *mou5* ‘not.have’ resembles Beijing and Taiwan Mandarin in that it can also be used as a standard negator even though this usage is subject to some restrictions, as shown in Table 8¹³ as well as in example (26), which involves a non-psych stative predicate. Therefore, Hong Kong Cantonese should be Type B~C, which is the same classification as the Mandarin varieties.

Table 8: Bare negatives in Hong Kong Cantonese

	Hong Kong <i>m4</i> ‘not’	Cantonese <i>mou5</i> ‘not.have’
State [+psych]	✓ 4.6	?4.2
State [-psych]	✓ 4.6	??2.6
Activity	✓ 4.6	✓ 4.7
Accomplishment	?4.2	✓ 4.5
Achievement	??2.4	✓ 4.7
Semelfactive	?4.3	✓ 5.0

- (26) Negation and a non-psych state: 我 (唔/唔) 知道呢件事

ngo (m/??mou) zidou li gin si

I not/not-have know this CL event

Intended: ‘I do not know about this event.’ ‘I did not know about this event.’

From the perspective of Croft1991’s NEC, the three Chinese varieties that have two standard negators (‘not’ and ‘not have’), namely, Beijing Mandarin, Taiwan Mandarin, and Hong Kong Cantonese, all represent Type B~C. This means that they have a special form for the expression of the negative existential, ‘not have’. Gaozhou Cantonese is different from the four other Chinese varieties examined in this study because it only has one standard negator, *mau5*. Example (27) presents the standard negation in Gaozhou Cantonese, where *mau5* occurs in a preverbal position after the subject, similar to the other varieties. The acceptability of *mau5* with various situation types is illustrated in Table 9.

- (27) 我茅寫己封信

¹³To recap, ‘bare negatives’ refer to the negative form of bare sentences with no overt aspect-marking or any type of adverbial modification.

ngo *mau* se gei fung seon
 I not write this CL letter
 'I don't write this letter.'

Table 9: Bare negatives in Gaozhou Cantonese

	Gaozhou Cantonese <i>mau5</i> 'not'
State [+psych]	✓ 4.6
State [-psych]	✓ 4.7
Activity	✓ 4.6
Accomplishment	✓ 4.5
Achievement	?3.9
Semelfactive	✓ 4.6

I argue that standard negation in Gaozhou Cantonese is an example of Type C~A in the NEC. Gaozhou Cantonese apparently lacks a special form for the negative existential, but at the same time, the presence of the existential predicate *jau5* 'have' is optional in negative existential contexts. This indicates that *mau5* can alone express negative existence and could be developing into a special form for the negative existential. Hence, it is possible to assume that Gaozhou Cantonese is Type A~B. However, according to **Zhang2002** while *wù* declined in use in the North during the Middle Chinese period, it became the predominant form for negative existence in the South and many phonologically derived forms emerged in the southern varieties. **Zhang2002** thus proposes that the M-negators could be the result of combining *wú* –once a standard negator developed from a negative existential –and the existential predicate *yǒu* (in Cantonese, *mou4* and *jau5*). **Zhang2002** cites a great number of Cantonese varieties as examples of this historical development, including, *mou5* in standard Cantonese (Hong Kong Cantonese included) and *mau5* in Xinyi Cantonese. This latter example is crucial precisely because (i) Gaozhou, Xinyi, and Huazhou are the three county-level cities within Maoming, the southwestern county in Guangdong Province, and (ii) the negator, *mau5*, in the Xinyi variety is identical to that in Gaozhou Cantonese.

As far as Hong Kong Cantonese is concerned, **Zhang2002**'s discovery has been supported by **Law2014** where the phonological process involved is suggested to be as follows:

Table 10: Hong Kong Cantonese *mou5* < *mou4* + *jau5*

Law2014 suggests that the marking of *mou5* involved two processes: first, the segmental information in the existential predicate *jau5* is deleted, then its tone (tone 5, the low-rising tone) is re-associated to the left, and replaced the original tone 4 of *mou4*. The result is *mou5*. Therefore, according **Law2014** wherever *mou5* appears, *jau5* is also present in the structure but phonologically silent (see **Yue2001** for an alternative account which argues that *mou5* is a product of *m4* + *jau5*; *m* provides the initial consonant and *jau5* provides the tone, and the vowel is influenced by the consonant). **Law2014**'s (**Law2014**) analysis is supported by the reconstruction results in **Norman1988** and **Schuessler2007**. **Norman1988** notes that many M-negators in Chinese southern dialects are developed from 無 *wù* and new negators are formed by the fusion of *wù* and *yǒu* (Hong Kong Cantonese *mou4* and *jau5* > *mou5*). **Schuessler2007** further suggests that *wù* developed to express negative existence or the meaning of 'not have' in general (including negative possessive) during the Western Zhou period (1027–771 BC), and it later replaced all other forms with similar functions. Hence, 無 *wù* is most probably the source of the negative existential and standard negator *mou5* in contemporary Hong Kong Cantonese.

If **Law2014**'s (**Law2014**) phonological analysis is well-founded and **Zhang2002**'s observation on Xinyi Cantonese *mau5* is also applicable to Gaozhou Cantonese, they would carry two important implications. Firstly, the Gaozhou Cantonese *mau5* is also a standard negator that has developed from the negative existential, similar to the other three varieties –*méi(yǒu)* in Beijing and Taiwan Mandarin, and *mou5* in Hong Kong Cantonese. In that case, Gaozhou Cantonese should not belong to Type A~B, but is a typical example of Type C~A. As *mau5* alone can express negative existence, and acknowledging **Zhang2002**'s account that *mau5* is derived from *mou4* + *jau5* 'not [=not.have] + have', *mau5* itself is an example of a special form of the negative existential that has developed into a verbal negator. Indeed, the Gaozhou Cantonese data support this account: in terms of negation-viewpoint compatibility, *mau5* resembles *méi(yǒu)* and *mou5* in being able to appear with the experiential viewpoint *gwo3*. This would be unexpected if *mau5* 'not' should be patterned with the 'not' negator of the other varieties, such as *bù* and *m4*. The major difference between Gaozhou Cantonese and the other three Chinese varieties is that this derived verbal negator is not only a standard negator but also the general negator in the variety. Once the existential predicate

jau5 can once again appear with this derived negator (such as *mau5*) in negative existential contexts, it would indicate that the negation system in Gaozhou Cantonese has moved to a full cycle, that is, C~A; this is indeed the case as seen in example (25b). The second point concerns the difference between *méi(yǒu)* in the Mandarin varieties and *mou5* in Hong Kong Cantonese. As classified above, Hong Kong Cantonese and the Mandarin varieties all belong to Type B~C, but unlike its Mandarin counterpart, *mou5* cannot occur with *jau5* as illustrated in (24c). This restriction not only applies to negative existential structures (such as when *jau5* is an existential predicate), but occurs across the board –whenever *mou5* is present *jau5* must not, as shown in (28):

(28) Hong Kong Cantonese (Yue Chinese, Sinitic) *jau5* ‘have’

- a. Existential negation: 課室度𠵿 (*有) 鉛筆
*fosat dou mou (*jau) jyunbat*
 classroom place not.have have pencil
 ‘There aren’t pencils in the classroom.’
- b. Possessive negation: 我𠵿 (*有) 鉛筆
*ngo mou (*jau) jyunbat*
 I not have pencil
 ‘I do not have/own pencils’
- c. Standard negation: 我𠵿 (*有) 知道呢件事
*ngo mou (*jau) zidou li gin si*
 I not.have have know this CL event
 ‘I did not know about this event.’

This would be expected if we follow the phonological account proposed by Law2014. The process applies indiscriminately to all syntactic structures precisely because *jau5* is phonologically merged with *mou4*. The Mandarin *méi*, on the other hand, did not undergo the same phonological fusion process. *Méi* developed into a negative existential predicate in Mandarin through a series of semantic change. These were from ‘to sink/submerge’ which leads to the natural result of drowning and death (hence ‘to be dead’) and later extended to mean ‘the end of something’ which could develop from the idea of death being the end of life, the meaning of ‘end of something’ or ‘something being extinguished or perished’ can easily develop into the idea of non-existence, i.e. negative existence. Veselinova2013 identified three major sources in her typological study of negative existentials and these are summarised in Table 11 (adapted from Veselinova2013):

Table 11: Summary of the origins of negative existentials

Sources	Number of languages
(i) Univerbation of standard negator and another word	17 (27%)
(ii) Lexical item with a negative content	25 (39.7%)
(iii) Formally identical with SN (origin unknown)	21 (33.3%)

Following Veselinova2013 the Old Chinese *wù* and the present-day Mandarin *méi* are examples of the second source of negative existentials because they are lexical items with a negative content – *wù* means ‘absent’ and *méi/mò* can mean ‘dead’, and both are common lexical sources for the negative existential in her typological study.¹⁴ In contrast, the evolution of *mou5* and *mau5* in the two Cantonese varieties belong to source (i) where the negative existential was derived from the former standard negator *mou4* (*wú* in Mandarin) and the existential predicate *jau5* ‘have’. The fact that *méi* never contained a ‘have’ element made it possible to appear with the existential predicate *yǒu*. By comparison, since *mou5* itself has evolved from *mou4-jau5*, co-occurrences of *mou5* and *jau5* in present-day Hong Kong Cantonese are blocked due to their structural clash and semantic redundancy. Comparing between the two Cantonese varieties, the possible though optional appearance of *jau5* with *mau5* for negative existence and negative possession indicates that the semantics of *mau5* has been further bleached to the extent that its original meaning as a negative existential has been considerably weakened, whereas the sense of negative existence remains prominent in the *mou5* of Hong Kong Cantonese.

6 Conclusion

To summarise, this paper has based its arguments on historical evidence (from Old Chinese to Modern Mandarin and Cantonese) that Croft1991’s (Croft1991) Negative Existential Cycle, which postulates the connection between negation and the existential predicate as a source for the evolution of general verbal negators, is indeed attested in Chinese history and in various Chinese varieties to date.

¹⁴Veselinova2013 mentioned several common lexical origins for negative existential predicates: ‘lack’, ‘absent’, ‘there is not’, ‘empty’, and ‘dead’.

Thus, according to the NEC classification, Beijing and Taiwan Mandarin as well as Hong Kong Cantonese belong to the transition Type B~C where *méi* and *mou5*, respectively, are special forms of the negative existential which have extended their use to general verbal negation but have not been generalised to the whole grammatical system; *méi* and *mou5* co-exist with *bù* and *m4* as standard negators in Mandarin and Hong Kong Cantonese, respectively. Gaozhou Cantonese, unlike the others, has a general negator *mau5*, which this paper suggests, following Zhang2002 and Law2014 to have derived from *mou4* (once a special form for the negative existential) and the existential predicate *jau5*. Since Gaozhou Cantonese allows the existential predicate *jau5* 'have' to optionally appear with *mau5* even in negative existential contexts, I argue that Gaozhou Cantonese is an example of Type C~A, which means that *mau5* has had its existential content sufficiently bleached that it has become a normal verbal negator, and is therefore compatible with the existential predicate without creating redundancy or clashes. The historical development and the attestation of the NEC in the four Chinese varieties provide solid evidence for the strong connection of *méi* in Mandarin varieties, *mou5* in Hong Kong Cantonese, and *mau5* in Gaozhou Cantonese to the concept of (non-)existence. This connection to non-existence not only explains the interpretations that these negators generate in bare negatives, but also introduces a new understanding of the nature of these negators; they are not perfective negators but negators for non-existence.

Abbreviations

CL	classifier
CPL	completive aspect
EXP	experiential aspect
GEN	genitive
LOC	locative
PFV	perfective aspect
PRO	pronoun
PRT	particle

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Appendix A: Periodisation of the Chinese language

Appendix B: Data on the historical texts selected

Table 12: Basic information on the selected texts

Texts		Year of compilation	Possible location of the koine represented	Total no. of words in text
I	《論語》 The Analects	480-350BC	Luoyang, Henan	12 700
II	《史記》 Shiji	109-91BC	Xi'an, Shaanxi	526 500
III	《三國志》 Records of the Three Kingdoms	AD 265-300	Luoyang, Henan	350 833
IV	《世說新語》 A New Account of the Tales of the World	420-581	Nanjing, Jiangsu; Xi'an, Shaanxi	68 967
V	《太平廣記》 Taiping Guangji	977-978	Kaifeng, Henan	1 782 000
VI	《朱子語類》 Zhuzi Yulei	1270	Kaifeng, Henan	1 973 905
VII	《西廂記》 Journey to the West	1520-1580	Nanjing, Jiangsu; Beijing	589 137
VIII	《紅樓夢》 Dream of the Red Chamber	1784	Beijing	731017

Table 13: Number of occurrences of different [NEG-yǒu] 'NEG-have' in the texts

Texts	勿 wù	毋 wú	弗 fú	匪 fěi	非 fēi	未 wèi	微 wēi	蔑 miè	莫 mò	不 bù	無 wú	𠵿 méi	Total no. of [NEG+yǒu] tokens
I	0	0	0	0	0	2	0	0	0	3	0	0	5
II	0	12	0	1	34	76	0	0	2	15	31	0	171
III	2	0	0	0	11	67	0	0	10	6	10	0	106
IV	0	0	0	0	0	20	1	0	9	4	6	0	40
V	1	0 6 0	1	32	91	31	0	34	19	102	13	324	
VI	2	0	0	0	52	420	37	0	16	94	134	1	756
VII	0	0	0	0	2	4	1	0	1	4	8	69	89
VIII	0	0	0	0	1	7	5	0	0	7	9	801	830

Chapter 3

The negative existential cycle in Ancient Egyptian

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Ancient Egyptian has a very long attested history, which allows us to follow the emergence and evolution of several negative patterns. In spite of the inherent obstacles in a dead language's documentation, my research –focusing on negation in Earlier Egyptian (roughly defined as the language of texts written from 3000 to 1300 BCE) but tracing the relevant forms until Coptic (the last phase of the language, written in the Greek alphabet from the 4th to 14th century CE) –sheds light on a renewal process that appears to belong to the category of the negative existential cycle. This process has long remained misunderstood, but recent progress in the field of linguistic typology regarding linguistic change in the negative domain makes it possible to propose a coherent historical analysis of the data. Starting with a transitional phase (C–A) documented in Old Egyptian, the Egyptian negative existential cycle does not illustrate Croft's model in an ideal way. However, it offers a concrete case for a better understanding of how structural and functional parameters are intertwined in explaining this type of evolution.

1 Introduction

Ancient Egyptian is a dead language whose history is generally divided into the following main phases: Old Egyptian (mid- to late 3rd millennium BCE), Middle Egyptian (ca. 2200–1700 BCE), Late Egyptian (14th–7th cent. BCE), Demotic (7th cent. BCE–5th cent. CE) and Coptic (ca. 4th cent.–ca. 14th cent. CE).¹ My contribution involves data coming from the whole history of the language, but focuses on Old and Middle Egyptian (known as Earlier Egyptian in Egyptological

¹See Loprieno (1995), Loprieno & Müller (2012), and Grossmann & Richter (2014) for a general overview.



linguistics). Negation and negative patterns in Ancient Egyptian have long been one of the thorniest topics in Egyptological linguistics. The reasons for this are twofold. From a philological viewpoint, the very spelling of negative morphemes appears to be problematic. Due to the functional characteristics of hieroglyphic writing, not only the functions but also the forms of negation have been subject to debate. On the other hand, the linguistic approach to Egyptian negation has suffered from a lack of precision in its diachronic dimension. The latter is perfectly understandable, given the state of the art. It is especially noteworthy that the language known as Earlier Egyptian covers a time period spanning from 3000 to 1300 BCE. Such a period may obviously appear to historical linguists as long enough to allow for substantial changes in the language, but for grammarians exploring the enduring history of Egyptian, it has long been considered as a more or less homogeneous unit. A better understanding of the changes happening in the course of this history may be reached with a more fine-grained analysis of the sources. In this context, the evolution of negation represents one of the more fertile fields of investigation. More specifically, the historical attestation of the Egyptian language offers a precious chance to analyse the evolution of a negative system over the long run. Previous studies have already attempted to recognize well-known patterns of change in the Egyptian data. As shown in **vanderAuwera2009** the very notion of the Jespersen cycle was formulated by Gardiner, a famous Egyptologist, as soon as 1904. An attested history of negation in Earlier Egyptian presents us with an ongoing negative existential cycle (NEC). The understanding of the way negation functions in this phase of the language can thus improve greatly, thanks to recent typological research after Croft's pioneering formulation in 1991, especially by Veselinova (2013; 2014; 2016). In a reciprocal way, analysing these historical data may bring to light an interesting case that allows an assessment of the postulated motivations for changes at each step of the cyclical model, as elaborated in previous studies.

This article's contributions thus go as follows: Section 2 is a general description of the Egyptian NEC, presenting new analysis of the data.² Section 3 explores the diachrony of the NEC in a more detailed way, focusing on problems bound with the nature of the documentation, and it highlights the results that can still be gained. Section 4 examines the interplay of functional motivations, such as analogy or emphasis with structural features in changes within the NEC. A tentative conclusion in Section 5 widens the perspective opened by the study of the Egyptian NEC, showing its relevance to the larger understanding of grammaticalization paths involved in the renewal of the verbal system in Older Egp-

²For a general introduction of the NEC, see the introduction of this volume.

tian. At the end of this contribution, a table in Appendix (see ??) presents the main patterns involved in the NEC. It may be useful for the reader to refer to this table in order to better understand the position of each detailed step in the general history.

2 The Ancient Egyptian NEC: A general view

In this section, a descriptive analysis of the Egyptian NEC is given according to the chronological order of an ideal cycle, without taking into account the problems raised by transitional phases and their possible overlap. These difficulties are presented in more detail in Section 3. However, the following idealized sketch of the general evolution may be useful for the reader:

1. The earliest documented stages show a C–A transition. The negator transliterated as *ni* can be shown to have been an earlier negative existential.³
2. In Old Egyptian, this negator can occur with verbal nominalizations, leading to its reanalysis as a clausal negation.
3. The same negator also extends to clauses with different types of stative predicates, showing a convergence with the positive existential predication pattern extending to stative predicates.
4. This negator *ni* begins to occur with various forms of the verb *wnn* ‘to exist’ used as an existential copula.
5. The collocation *ni wn* [neg. ‘exist’] fuses into a new negative existential marker, written *nn*.
6. In several stages, this new negator *nn* spreads again to other contexts, such as those with originally locative adjuncts, leading to reanalysis as a negator plus locative predicate, and to other stative predicates.
7. The new negator *nn* comes to be used with verbal predicates, in particular modal ones.

³The transliteration of Ancient Egyptian used here, as in Egyptological linguistics, represents written signs (be they hieroglyphics, signs in the various cursive writings, or Greek letters in the case of Coptic) and not the sounds of the language. In some cases, the phonemic reality is still a matter of discussion.

8. A new stage of the cycle involves the new negator, itself a fusion of the oldest negation plus an existential verb, and a form of the very same verb *wnn*, leading to the collocation *nn wn*. For reasons that are still unclear, *nn* also began to be written *bn*.
9. The collocation *nn wn* fuses into *mn*, which also extends from existential constructions to constructions with stative predicates and some verbal predicates.

2.1 A reconstructed Type C and a transitional type C–A: The negation *ni* in Proto-Egyptian

Egyptian documentation begins at a point when a transition between a type C and a type A is already happening in the language. However, it is possible to at least partially reconstruct the phase immediately preceding the most ancient historical data. In Proto-Egyptian, as one may call it, ‘there is a special negative existential predicate, which is identical to the verbal negator’. The form of the negator is generally transliterated as *ni*.⁴ Its use as a negative existential left traces in the oldest documentation, although *ni* is not limited to this construction in historical times:

- (1) Old Egyptian (Egyptian [Afro-Asiatic], Egypt)
ni mD#w D#i sw m w#t ppy pn
 NEG.EX opponent oppose|PTCP 3M.SG in way PN DEM
 ‘There is no opponent who would oppose himself in the way of this Pepi.’ (Pyramid Text § 1237bP)⁵
- (2) Early Middle Egyptian (Egyptian [Afro-Asiatic], Egypt)
ni jr-t-n=j r=f
 NEG.EX do|REL-F.SG-ANT=1SG against=3M.SG
 ‘There is nothing that I did against him.’ (Letter to the Dead, Hu bowl 3)

⁴Alternative proposals for the transliteration of the form exist but are not crucial for the historical reconstitution of the Egyptian NEC.

⁵Pyramid Texts are a corpus of ritual texts relating to the survival of the dead king in the hereafter. They are inscribed in royal graves from the end of the Old Kingdom but may represent older stages of the language. The extent of the preservation of archaic features in this corpus is still a matter of debate.

3 The negative existential cycle in Ancient Egyptian

The origin of the negation *ni* is likely to be a verb expressing absence or non-existence in a stative construction (sometimes termed ‘Old Perfect’ in grammars). This is shown by its location at the beginning of the sentence, the very place of the verbal predicate in the construction of the Old Egyptian stative perfect gram that follows VSO order. The use of the form *ni* alone as a predicate appears to be attested in one example belonging to the most ancient documentation in Old Egyptian. It thus occurs in a non-literary papyrus:

- (3) Old Egyptian (Egyptian [Afro-Asiatic], Egypt)
zwnw 1 owt 1 mndm 1 ni wor 2
zunu 1 aut 1 nedjem 1 none/absent war 2
‘zunu-vessel: 1, aut-vessel 1, nedjem-basket 1: lacking, war-vessel: 2’
(Papyrus British Museum 10735)⁶

It is only speculative but not irrelevant to mention the verb *nj* ‘to rebuff’ as a possibly more specific lexical meaning in some proto-stage of the Egyptian language. Graphically, the writing known for this lexeme is interesting, as it shows an arm as a graphemic classifier, possibly a gesture symbolizing refusal, as does the sign of the two open arms that serves to write the negation *ni* itself.⁷

Already in Old Egyptian, the negation *ni* may be followed by various verbal forms whose common feature is to have their origin in nominalizations, while the primary participant is encoded as a possessor, with no distinctions between S, A, P semantic roles. Verbal paradigms known as recent suffixal conjugations generally share a common origin as former nominalizations. Still under discussion are the criteria allowing consideration of the various relevant constructions as involving grammaticalized verbal forms. I shall focus in the present chapter on negative constructions.⁸ Distinct nominal marks are the source for the resulting verbal morphology, as far as it is possible to reconstruct it. The source construction is of the following type:

- (i) Negative existential *ni* + Action nominalization + Suffix pronoun

⁶This translation reflects the fact that Egyptologists do not know the precise equivalents for these substantives, except that they must refer to a kind of vessel.

⁷See Loprieno (1995: 125) for the interpretation of this logogram as symbolizing a gesture of negation. On the function of unpronounced graphemic classifiers, see Goldwasser & Grinevald (2012).

⁸In a further stage of the renewal of the verbal system, a nominalization showing a <-t> specializes for a passive reading in constructions where the possessor thus appears as P.

Semantically, the path of change belongs to a well-known type that is attested in many distinct language families:

- (ii) There is not my V-ING > I did/do not Verb

Depending on the nominalization involved in these constructions, different TAM readings arise. When the action nominal is unmarked in the source construction, it is mainly past, but it can also be non-past and generic:

- (4) Old Egyptian (Egyptian [Afro-Asiatic], Egypt)

ni m#=j mjtj n zrw pn
NEG see|NMLZ=1SG like of goose this

‘I haven’ t seen the like of this goose ever.’ (lit. ‘There is not my seeing the like of this goose’) (Meir III)

With an ending <-w>, whose function and meaning have been heavily discussed⁹, the same action nominal follows the negation *ni* to form a construction with a modal reading:

- (iii) Negative Existential + Action nominal with <-w> ending + Suffix pronoun

Semantically, the path of change may be assumed to be as follows:

- (iv) There is not any V-ING of me > I shall not Verb

It should be noted that the nominalization involved in the source construction is unmarked for voice, so that both an active and a passive reading may arise:

- (5) Old Egyptian (Egyptian [Afro-Asiatic], Egypt)

ni h#i-w nTr-w r=k m rn=k pw n(j) j#t
NEG go_down|NMLZ-INDEF god-PL to=2SG.M in name=2SG.M DEM of Iat
‘The gods shall not go down to you in this your name of Iat.’ (lit.
‘There is not any going down to you’) (Pyramid Text § 1537bP)

⁹Working on nominalizations as a source for the renewal of the Earlier Egyptian verbal system, I suggest that the Action nominalization marked by this ending <-w> in the same way as other non-finite forms of the verbal root (most notably participles) has other uses whose reading can be related to indefinite semantics, the ending <-w> prototypically indicating class membership. See Oréal (2017).

(6) Old Egyptian (Egyptian [Afro-Asiatic], Egypt)

ni rDi-w wnjs n nsr=Th nTr-w

NEG give|NMLZ-INDEF Wenis to flame-2PL god-PL

‘Wenis shall not be given to your flame, gods!’ (lit. ‘There is not any giving of Wenis to your flame’) (Pyramid Text § 323bW)

There remain uncertainties in glossing some examples in Earlier Egyptian. They are connected to a larger question regarding the grammaticalization pathway of verbal paradigms known as recent suffixal conjugation or *sDm=f*. How long should these forms be considered as still being nominalizations in various constructions? In other words, what are the criteria defining a verbal form having a nominalization as a source? This problem is the subject of an ongoing discussion in the field of Egyptological language studies and it cannot be solved in the present contribution. However, the historical mechanisms involved in the grammaticalization of such constructions belong to a typologically well-known phenomenon.¹⁰ More peculiar is the notion of indefinite marking on an action nominal giving rise to modality after grammaticalization of the form in a construction.¹¹

The extension of the negation *ni* is not restricted to the negation of verbal predicates according to the asymmetry just described. It also extends to stative predicates, such as locative predication, as shown in the following example:

(7) Old Egyptian (Egyptian [Afro-Asiatic], Egypt)

ni Tw jm=sn

NEG 2M.SG among=3PL

‘You are not among them.’ (Pyramid Text 251dW)

Such an evolution involves the relaxing of the referential constraint on the subject/topic present in the former locative-presentative when turning into locative predication:¹²

(v) *ni* + non referential subject (‘there is no man’)

> *ni* + non referential subject + locative predicate (‘there is no man in the

¹⁰See, e.g., Malchukov (2013) on similar problems raised by the process of verbalization in Siberian languages.

¹¹See Oréal (2017) on the pathways that allow such a transfer from nominal to verbal morphology.

¹²See Veselinova (2013: 108) on the typologically frequent structural similarity between these constructions and mere existential constructions.

house')

> ni + referential subject + locative predicate ('the man is not in the house')

This path of change is parallel to the grammaticalization of the initial particle *jw* from locative copula to auxiliary in stative and verbal constructions, as will be illustrated in the next section. The spread of the pattern to a referential subject may indeed not be explained without supposing a convergence with the evolution of the positive existential predication.

2.2 Towards a type A: The verb of existence *wnn* combined with the negation *ni*

In its most ancient attestation, the existential predication assumes the following form, preserved as an archaizing pattern:

(vi) locative particle *jw* + subject

This construction is extremely rare in the documentation and not widely recognized as such in grammars.¹³ Loprieno (1995: 122) cites two occurrences in the Coffin Texts and in a literary text written in Middle Egyptian:

- (8) Middle Egyptian (Egyptian [Afro-Asiatic], Egypt)
jw sSp Dd PN jw knH Dd PN
 LOC light say|IMPFV PN LOC darkness say|IMPFV PN
 'There is light, says PN; there is darkness, says PN.' (Coffin Text IV 29e)

- (9) Middle Egyptian (Egyptian [Afro-Asiatic], Egypt)
jw Sw m oq-jb
 LOC lack in confident
 'There is a lack of close friends.' (Dialogue of a Man with his Ba 123–124)

The latter example is reminiscent of another possible example belonging to the much older corpus of the Pyramid Texts that Allen (2017: 333) translates with an existential reading:¹⁴

¹³See, however, the analysis along similar lines proposed by Helmut Satzinger at a workshop in 2001: <https://homepage.univie.ac.at/helmut.satzinger/Texte/Aspectsjw.pdf>.

¹⁴Although convincing, this analysis cannot exclude a construction involving a zero subject and a stative as predicate (' *jw* Ø *Sw m*, It is deprived of'). In the latter case, there would be no existential construction here but rather a stative predication introduced by *jw*, which in synchrony represents a prototypical use of Earlier Egyptian *jw*.

- (10) Old Egyptian (Egyptian [Afro-Asiatic], Egypt)

jw Sw m mtrw

LOC lack in testimony

‘There was a lack of testimony.’ (Pyramid Text § 317b)

One can perhaps add the following example from a caption in a daily life scene in an Old Kingdom tomb. It might also attest the construction in Old Egyptian, but its meaning is not completely assured:

- (11) Old Egyptian (Egyptian [Afro-Asiatic], Egypt)

jw #pd s#i-w Hr=f

LOC bird satiate|NMLZ-INDEF on=3M.SG

‘There is a bird with which one may be satiated.’ (Tomb of Ti, pl. 116)

However, the role of *jw* in constructions with a ‘locative-presentative’ function, in the sense of Hengeveld (1992), fully confirms its role in the most ancient form of existential predication:

- (12) Middle Egyptian (Egyptian [Afro-Asiatic], Egypt)

jw jt jm=f

LOC barley in=3M.SG

‘There is barley in it.’ (Sinuhe B 84)

Already in Old Egyptian, the ‘*jw* + Subject + Predicate’ constructions are also used as plain intransitive sentences:

- (13) Old Egyptian (Egyptian [Afro-Asiatic], Egypt)

jw #pd pn Dd# wrt

LOC bird this fat|PTCP very

‘This bird is very fat.’ (Tomb of Ibi)

This reading generalizes in Earlier Egyptian. In parallel to this evolution, the existential construction itself is renewed by a construction using a form of the verb of existence *wnn*:

- (14) Old Egyptian (Egyptian [Afro-Asiatic], Egypt)

jn jw wn rm

INTERR LOC exist|PTCP.STAT fish

‘Is there some fish?’ (Tomb of Djau)

The same phenomenon occurs in negative existential statements, where the existential verb *wnn* is introduced in new patterns. Already in Old Egyptian, one thus finds the negation *ni* associated with the same existential verb *wnn* in two distinct constructions:

1. The construction *ni wnt*
2. The construction *ni wn*

Both involve the same form *ni* but with a different status in each case, showing that construction (i) must have emerged before construction (ii), as we shall see now.

(i) The construction *ni wnt*

This construction involves the negation of existence *ni* followed by a nominalization of the verb *wnn* marked by a *-t* ending:¹⁵

- (15) Old Egyptian (Egyptian [Afro-Asiatic], Egypt)

Sw# jwowni wnt Xr=f zS
 be_poor|PTCP heir NEG exist|NMLZ.with=3MSG writing
 ‘Poor is the heir who has no writing.’ (lit. ‘when there exists not a writing with him’) (Pyramid Text § 475aWN)

- (16) Old Egyptian (Egyptian [Afro-Asiatic], Egypt)

ni wnt z#b T#tj nb sr nb jm
 NEG exist|NMLZ senior.vizir any magistrate any there except=1CSG
wp-r=j wo=k
 be_alonePTCP.RESULT=1CSG
 ‘(His majesty let me enter in order to audition alone) no senior vizier or any magistrate being there besides me alone.’ (Inscription of Weni, 10–11)

This construction must have emerged at a time when the negation *ni* still had its stative meaning of non-existence. It is thus prior to construction (ii), which is derived from an intransitive construction where *ni* functions as Standard Negation and no longer as a stative predicate, as will be shown in (ii).

(ii) The construction *ni wn*

The alternative construction *ni wn* is also already attested in an Old Kingdom inscription. It takes the following form:

¹⁵The precise semantics of this ending common to the source of passive forms, infinitives of certain classes of verbs and a ‘not...yet’ construction is still under discussion, but one can safely assume that it is a morphological feature characterizing a nominal form of the verb.

- (17) Old Egyptian (Egyptian [Afro-Asiatic], Egypt)

sT ni wn mw Hr Tsw
CONJ NEG exist|PTCP.STAT water on banks

‘When there is no water on the banks’ (Inscription of Weni 44–45)

There has been some discussion around the nature of the form taken by the existential verb *wnn* in this construction.¹⁶ In order to understand it better, one needs to look at the positive existential construction:

- (18) Middle Egyptian (Egyptian [Afro-Asiatic], Egypt)

jw wn nDs Ddj rn=f
LOC exist|PTCP.STAT man Djedi name=3M.SG

‘There is a man named Djedi.’ (Tale of pWestcar 6, 26)

In locative predication, usually the subject directly follows the initial particle, be it *jw* or another one, like the subordinator *sk* in the following example:

- (19) Old Egyptian (Egyptian [Afro-Asiatic], Egypt)

nHm-w Sb(w)=f m-o=f sk sw wn
take|PTCP-PL food=3M.SG from=3M.SG as 3M.SG exist|PTCP.PRED

‘Those who wanted to take his food away from him as it was there’
(Pyramid Text § 290d–291aT)

What happens in the existential construction is an inversion of the order subject-predicate triggered by information structure. In the existential predication, the subject is not thematic but falls rather under the scope of focus/rheme. In that case, it has to follow the predicate, rather than preceding it. Example (20) makes this contrast in constituent order obvious:

- (20) Middle Egyptian (Egyptian [Afro-Asiatic], Egypt)

jst wn Hmt=f mrt rn=s
now exist|PTCP.STAT wife=3SG.M Meret name=3SG.F

‘Now there was his wife named Meret.’ (Tale of the Eloquent Peasant R 1, 2)

¹⁶See Meltzer (1990). Although *wn* is often analysed as a *sdm-f* form from the verb *wnn*, no such form is ever attested with an actual suffix pronoun (**ni wn-f*). When the meaning is ‘there is none’, the reference to an item that can be deduced from the context is in fact assumed by a zero.

2.3 The emergence and extension of the negation *nn*: A type B in Middle Egyptian

The negation *nn* is the form traditionally acknowledged in grammars as the existential negation in Classical Egyptian, be it literary or documentary:

- (21) Middle Egyptian (Egyptian [Afro-Asiatic], Egypt)
nn hrw-jb
 NEG.EX peaceful
 ‘There is no peaceful one.’ (Dialogue of a Man with his Ba 125–126)
- (22) Middle Egyptian (Egyptian [Afro-Asiatic], Egypt)
nn Hm-t
 NEG.EX servant-F.SG
 ‘There is no servant.’ (Letter UC 32092C r 11)

The very fact that *nn* functions as existential negation, a role formerly played by *ni*, has sometimes been interpreted by philologists as resulting from a graphic confusion in older sources. Such an analysis is prompted by the absence of a diachronic perspective of Earlier Egyptian, instead conceived of as a homogeneous block. The more recent form *nn* is indeed the successor of *ni* as a form dedicated to existential negation, with *ni wn* and *ni wnt* being intermediary, in accordance with the NEC. Its formal relationship with the general negation *ni* prompted several hypotheses, among them a process of morphological fusion between *ni* and a following particle *jn*. According to Loprieno (1995: 127), following a suggestion by Osing (1979), this postulated collocation would attest a kind of Jespersen cycle. However, the attested use of the particle *jn* does not support this historical reconstruction, neither semantically nor syntactically. This particle remains difficult to gloss due to its polyfunctionality, but the crucial point from a historical point of view is that the hypothesized collocation **ni jn* is not attested except for very rare occurrences, which are not likely to represent a source construction for a morphological fusion. On the contrary, the following proposal is based on a well-attested combination. Vergote (1965: 359) already suggested the hypothesis advocated here, namely, that *nn* is the result of the fusion of the negative *ni* with the following existential verb *wnn*:

- (23) *nn* < *ni wn*
 NEG.EX NEG exist|PTCP
 ‘there is no’ ‘there exists not’

This note remained mainly unnoticed. However, in the perspective of a NEC, it makes perfect sense.¹⁷ In Croft's (1991) terms, the process of phonological fusion that gives rise towards the end of the Old Kingdom to the form *nn* dedicated to the negative existential function is characteristic of the transition between a type A and a type B.

The form *nn* does not remain specialized in this function for long. Indeed, the documentation shows a stage where *nn* is already extended to express the meaning 'without' when followed by an infinitive. According to Loprieno et al. (2017: 256–257), the first examples of the negation *nn* where it does not function as a negative existential but as the negation in locative predication date to the late First Intermediate Period and early Middle Kingdom. It is well established in literary Middle Egyptian:

- (24) Middle Egyptian (Egyptian [Afro-Asiatic], Egypt)

nn sj m jb-j
NEG 3F.SG in heart-1SG

'It was not in my heart' (Sinuhe 223–224)

As Loprieno et al. (2017) put it, 'the underlying reason for the change from *n* to *nn*-negations in adverbial sentences is unknown'.¹⁸ However, a path of change similar to what happened already in Old Egyptian with the negation *ni* can be postulated within a diachronic perspective. It involves again the relaxing of the referential constraint on the subject/topic from locative-presentative¹⁹ to locative predication:

Step (1) *nn* + non referential subject ('there is no man')

Step (2) *nn* + non referential subject + locative predicate ('there is no man in the house')

- (25) Middle Egyptian (Egyptian [Afro-Asiatic], Egypt)

nn Xn jm n obo pri m r#=j
NEG.EX word thereof exaggeration come_out|PTCPG.in mouth-1sg

'There is no word of exaggeration in what came out of my mouth.'

(Stela of Sesostriis III at Semnah = Berlin ÄM 1157 l. 16–17)

¹⁷Osing (1979: 311) rejects it on the basis of its poor attestation. However, the collocation of the particle *jn* with the older negation *ni* proposed as a source for *nn* is even much more elusive.

¹⁸An analysis based on pragmatic factors was proposed in Loprieno (1991), but Uljas (2013) points out several aspects that cannot be accounted for according to it.

¹⁹See Veselinova (2013: 108) on the typologically frequent structural similarity between these constructions and mere existential constructions.

Step (3) *nn* + referential subject + locative predicate (‘the man is not in the house’)

The use of *nn* also extends to all kinds of stative predicates (e.g. property predicates) in Middle Egyptian, thus replacing the older *ni* in this function as well:

(26) Middle Egyptian (Egyptian [Afro-Asiatic], Egypt)

nn nn Sri-w

NEG this be_small|PTCP.PFV-PRED

‘This is not small.’ (Sinuhe, Ashmolean Ostrakon 47)

Tenses known as ‘Pseudo-verbal’ constructions are also concerned, but the spread of *nn* to these followed a different chronology.

It is also to be noted that already in its early attestation *nn* is used with the meaning ‘without’ before an infinitive.²⁰

(27) Middle Egyptian (Egyptian [Afro-Asiatic], Egypt)

jri-kw m oq nn Dd=f

do|PTCP-PRED.1SG as enter|PTCP NEG.EX say|INF-3SG.M

‘I was made one who enters without being called.’ (Stela of Wepwawetaa = Munich Gl. WAF 35 line 16)

2.4 Towards a new type C?: The use of *nn* with a verb

As stated in Loprieno et al. (2017: 258), ‘the use of *nn* seems to have begun in utterances expressing strong denials and refusals by the speaker... However, the spread of *nn* in verbal sentences may also have been motivated by the morphological collapse of specific Prospective form(s) within the so-called *sDm-f* formation.’ The following example from the Middle Kingdom may illustrate such an emphatic use:

(28) Middle Egyptian (Egyptian [Afro-Asiatic], Egypt)

nn Sno-tw=Tn m st qsnt

NEG.EX detain|MOD-PASS-2PL in place dire

‘You shall not be detained in a dire place.’ (Stela of Nebipusenwosret = BM EA 101 line 14–15)

As is often the case, the use of the negative existential first extends only to part of the verbal system. Within Middle Egyptian (2200–1700 BCE), *nn* in fact does

²⁰Veselinova (2013: 118) shows that in various languages, this use is a frequent extension of the negative existential.

not become the Standard Negation, but comes to be used in a verbal construction with modal semantics. I will focus here on the beginning of this process of extension to the verbal system that is never fully completed, with part of the verbal system remaining untouched until Coptic. Two historical scenarios appear to compete in the explanation of this process:

1. one involves only the transfer of a whole inherited construction, where *nn* stems out of *ni wn*, as is the case in negative existential constructions, and
2. the other involves a proper expansion of the negative existential *nn* to negate a modal form.

In both cases, there are good reasons to assume that the special paradigm of forms attested in the construction had acquired its modal semantics as a complement of manipulative verbs such as *rDi* ‘to let/allow’.²¹

The first scenario (i) involves the transfer of an inherited construction. One may postulate an evolution according to which the collocation *ni wn* that lies at the source of *nn* by fusion was used before a verbal form functioning as its subject:

- (29) **ni wn jwt-f* > *nn jwt-f*
 NEG exist come|MOD-3SG.M NEG come|MOD-3SG.M
 ‘There is no (possibility) that he shall come > ‘he shall not come

However, there is no trace of a construction **ni wn sDm-f* in the documentation. On the contrary, the *nn sDm-f* construction seems to gradually replace the construction *ni* + Verbal nominalization marked for indefiniteness (mentioned in § 1.1) It appears semantically likely that the need for emphasis prompted a functional renewal, according to which the negative existential as such came to be used with a modal form as subject:

- (30) *nn jwt-f* > *nn jwt-f*
 NEG.EX come|MOD-3SG.M NEG come|MOD-3SG.M
 ‘There is not that he shall come’ > ‘he shall not come’

This second scenario (ii) thus involves the expansion of the negative existential *nn* to replace the older *ni* in negating a modal form that is also distinct from

²¹On the use in main clauses of verb forms whose modal semantics emerge from their primary use in completive clauses, see Evans (2007) and the notion of insubordination, whose applicability to the Egyptian tense sometimes called ‘Subjunctive’ still needs further research.

the older one.²² It remains difficult to decide which of these potential paths of change was followed in the Egyptian case. Less systematically, one also finds the negation *nn* in constructions involving other verbal forms, such as the Anterior *sDm-n-f*, but the reality behind the graphic reading is a matter of debate and this use in any case remains non-standard. It is also important to state that a large part of the Egyptian negative system involves neither locative nor verbal predicates but nominal predication, be it with classifying or identifying semantics.²³ Only towards the end of the period known as Middle Egyptian does the form *nn* also extend to negate nominal predication in the strict sense, taking over another part of the former domain of the negation *ni*.²⁴ In Late Egyptian, *nn* takes the graphic form *bn*. As such, it is attested more largely, while the domain of use of *ni*, which becomes graphically *bw*, is drastically reduced. Thus, *bn* can be said to become the standard negation in Later Egyptian, in association with the morph *jwn#* > Coptic IN. However, at this point in time, *bn* had long ceased to function as a negative existential; thus, no new stage C can be observed. The history of the combination *bn...jwn#* represents another kind of linguistic cycle typical of the renewal of negation that lies beyond the scope of the present contribution.²⁵

2.5 Re-starting a cycle: The rise of *nn wn* and the new type A

As stated by Veselinova (2016:174), in various languages a NEC can be observed to re-start many times without being completed. In Earlier Egyptian, the same process seems to happen when the verb *wnn* appears again in a new construction after the negation *nn*, which used to express the existential negation alone:²⁶

- (31) Middle Egyptian (Egyptian [Afro-Asiatic], Egypt)
nn wn oq-w jm
 NEG exist|PTCP.PRED.M.SG ration-PL there
 ‘(Can I be confident that I did give rations to my household while one writes to me saying) there are no rations there?’ (pBM 10549, vso1-2)

The very same relationship as the one between *ni* and *ni wn* obtains between

²²See Vernus (1990) on this process.

²³On non-verbal predication in Ancient Egyptian, see the rich study by Loprieno et al. (2017), which includes all known stages of its long history.

²⁴See Uljas (2013) on this evolution.

²⁵On this Jespersen cycle, see Winand (1997).

²⁶Previous Egyptological analysis sometimes considers *nn* as a shortened version of *nn wn*, a view that diachronic data do not support without mentioning the neglected possibility of a NEC happening in Earlier Egyptian.

this negative existential construction and the predication involving a thematic subject. The latter respects the usual ‘Subject-Predicate’ order in locative predication:

- (32) Middle Egyptian (Egyptian [Afro-Asiatic], Egypt)
pf# Sm Hno=f nn sw wn
 DEM|M.SG go|PTCP.M.SG with=3M.SG NEG 3M.SG exist|PTCP.PRED.M.SG
 ‘That one with whom one used to go, he does not exist.’ (Dialogue of a Man with his Ba 126-127)

With a rhematic subject, the existential verb comes before the subject:²⁷

- (33) Middle Egyptian (Egyptian [Afro-Asiatic], Egypt)
nn wn m#jr n h#w=j nn Hqr n
 NEG exist|PTCP.PRED.M.SG miserable of surroundings=1SG NEG hungry of
rk=j
 time=1SG
 ‘There was no miserable in my surroundings, no hungry (person) in my time.’ (Imeny, Beni Hassan I, 8, 18-19)

In this example, the older dedicated negative existential *nn* also occurs in parallel with *nn wn*. The coexistence of older and newer forms is not surprising, and it is found in other languages as well.²⁸ The construction also occurs with no subject at all:

- (34) Middle Egyptian (Egyptian [Afro-Asiatic], Egypt)
Hr nb Hr nn wn
 face every QUOT NEG exist|PTCP.PRED.M.SG
 ‘Everyone is saying: there is nothing.’ (Admonitions 6, 3)

The existential negation *nn wn* began to extend to constructions involving a verbal form without ever moving into the domain of standard negation. Already at the beginning of the 12th Dynasty (20th century BCE), one finds the negative existential *nn wn* used in a construction before the Anterior, a verb form marked for anteriority by a suffix *-n*:

- (35) Middle Egyptian (Egyptian [Afro-Asiatic], Egypt)

²⁷For an alternative analysis of the form *wn* as a *sDm-f* form, see, e.g., Uljas (2013).

²⁸See Veselinova (2014).

jw rDi-n=j mw n jb Hbsw n H#jj nn wn
 LOC give-ANT=1SG water to thirsty clothes to naked NEGEX do-ANT=1SG
jr-n=j r rmT
 against people
 ‘I gave water to the thirsty one, clothes to the naked one, on no occasion
 did I act against people.’ (Stela Louvre C 196)

It is also attested before a nominalization with modal prospective semantics:

- (36) Middle Egyptian (Egyptian [Afro-Asiatic], Egypt)

nn wn mwt-k Hr X#st
 NEX.EX die|NMLZ-2SG.M on desert
 ‘You shall not die in the desert.’ (Sinuhe B 197)

- (37) Classical Egyptian (Egyptian [Afro-Asiatic], Egypt)

nn wn HH-j-krnHH
 NEX.EX seek|NMLZ-PASS-2SG.M for eternity
 ‘You shall not be sought in eternity.’ (Harpist song, Theban Tomb 50,
 Text J)

However, this kind of use is rarely attested and did not generalize. It seems to have remained bound to an emphatic context of utterance. Thus, the renewal of the negative existential by way of the existential copula does not necessarily give an impulse to a new NEC, when other structural conditions that favour this evolution are lacking.

The maximal extension of *nn* > *bn* as quasi-Standard Negation and the use of *nn/bn wn* as a usual negative existential construction are likely to have coincided at a point in the history of Ancient Egyptian that is not well documented in the preserved sources (see Section 3.3). However, the consecutive situation in Late Egyptian attests that this stage, corresponding to a new type A in an ideal NEC, was indeed realized as a concrete step in its development.²⁹

2.6 The emergence of *mn*: From A to B in Later Egyptian

Phonological fusion happens again in Later Egyptian, the second typologically defined phase in the history of the Egyptian language. It thus characterizes a

²⁹On the transition between Earlier and Later Egyptian and the discontinuity of sources attesting the various stages in Ancient Egyptian history, see Zöller-Engelhardt (2016).

further transition from a type A to a type B, as was already the case in Earlier Egyptian with the reconstructed emergence of *nn* out of *ni wn*:

Middle Egyptian *nn wn* > Late Egyptian and Demotic *mn* > Coptic *mn*

The following example comes from a documentary source in Late Egyptian, dating approximately from the 12th century BCE:

- (38) Late Egyptian (Egyptian [Afro-Asiatic], Egypt)
Xr jnn mn bHz jmi jni-tw p#-Hotj Hno p#-wt
 PTCL if NEG.EX calf let|IMP bring-PASS DEF-bed and DEF-coffin
 ‘If there is no calf, let the bed and the coffin be brought.’ (Ostrakon Berlin 12630, verso 1)

The coexistence of *bn* and *mn* in two patterns sharing the function of expressing sentential possession within the same phase of the language has been studied in Depuydt (2008). According to this study, the construction involving *mn* is an existential sentence while the one involving *bn* is not. Within Late Egyptian synchrony, this is certainly true. However, it does not imply that *bn* never had the function of a negative existential. It seems more relevant to say that the latter was no longer an existential construction. In the diachronic perspective presented in here, the change in the status of the older construction is only natural and easy to explain, as was already the case in the preceding transition from the reconstructed types B to C in Older Egyptian. One needs only to recognize that twice in the history of Ancient Egyptian, the negative existential (first *ni*, then *nn*) extended its use to negating locative predication, and thus to possessive predication, which follows a well-known locative strategy in this language.

Unlike the former fusion from *ni wn* to *nn*, the fusion from *nn wn* into *mn* has long been recognized as such in the Egyptological literature. The same form remains in use as the negative existential until Coptic, with some variations in form according to the dialect that are not relevant to the general evolution:

- (39) Coptic (Egyptian [Afro-Asiatic], Egypt)
mn-nute nsa-ntok Apollôn
 NEG-god except-2MS Apollo
 ‘There is no god but you, Apollo.’ (Till, KHML II 33, 16-17)

One can assume that the Egyptian NEC stops at this point, since the negation *mn* does not seem to extend to cover the domain of standard negation in Coptic, although it does also spread to some modal constructions, including the prohibitive/vetitive and the negative jussive.³⁰ However, as will be seen in the next

³⁰On this topic, see Grossman & Polis (forthcoming).

section, the whole history of its development from Middle Egyptian onwards is more complex than the presentation of its steps as distinct stages may suggest, and there are reasons to assume that the NEC lost its full force even before its last effects in Late Egyptian and Coptic.

3 The complex diachrony of the Egyptian NEC

This section presents a historical analysis of the Egyptian NEC that focuses on data that make the general picture more complicated than what may seem at first sight. As in other language families, synchronic variation plays a key role at different points in this history, thus making transitional stages more important than stable types. However, the nature of the Egyptian documentation needs to be taken into account in order to assess the meaning of variation within the distinct corpora that constitute it. A methodological preamble in Section 3.1 thus anticipates a presentation of the particular problems connected to the chronology of the attestation of forms and constructions. Section 3.2 sheds light on the fact that the existential negation may not be dedicated to one use, even in the first phase of its emergence. Section 3.3 is devoted to showing some atypical features of the Egyptian NEC.

3.1 Layering and the problem of diglossia in Ancient Egyptian

Before turning to facts regarding the precise chronology of the Egyptian NEC, an analysis of various factors that make it difficult to establish is in order. It is a well-known fact that prolonged variation between older and emergent forms in a given phase of a language may obscure the historical reconstruction of its evolution. The phenomenon of layering plays the same role in Egyptian as in other languages. Beyond negation, it is observed in many domains of the language. In this respect, there is nothing particular to Ancient Egyptian. However, the nature of the documentation makes the situation of the linguist even more difficult. First, it is not always possible to date a document with the precision needed to reconstruct a historical path. Moreover, even in texts that can be dated with some accuracy and belong to the same historical moment, layering plays different roles and can have different effects, according to its register, genre or discourse category. From the end of Middle Kingdom on, the use of the classical language in texts showing various degrees of formality prompted Egyptologists to create the notion of *Egyptien de tradition*.³¹ This label designates a multifaceted reality.

³¹On this situation of diglossia, see Vernus (1996).

Middle Egyptian becomes a literary language of communication in formal register, used much like Latin in the Medieval Period. However, the concrete reality bound with this general definition can vary a lot from one text to another, depending on time but also on various contexts of use. Beyond the extension of the well-known phenomenon of layering, the Egyptian documentation thus shows a preservation of ancient forms in texts dating from times much posterior to their living use in the spoken language. As for negative existential constructions, the conservatism in formal and literary registers may be illustrated through the use of the construction *ni wn*. It is indeed maintained in texts written in *Egyptien de tradition* during the New Kingdom, such as seen in the following example, which shows its use for expressing sentential possession:

- (40) Classical Egyptian (Egyptian [Afro-Asiatic], Egypt)
ni wn st=sn
 NEG exist|PTCP.M.SG place=3PL
 ‘Their place does not exist’ > ‘They have no place’ (Theban Tomb 50, Harpist song B 11)

Diglossia is a complex phenomenon, and the Egyptian case for linguistic variation according to discourse registers or contexts of use is still in need of further research, although promising steps have already been taken.³² However, one may assume that there is no progressive transition between the use of two successive written registers in the larger sense, so that the whole history of Ancient Egyptian as a spoken language remains undocumented. As a consequence, there may be a gap in the attestation of linguistic change between Middle Egyptian *stricto sensu* and Late Egyptian texts. This gap affects different linguistic phenomena in various ways, and its impact on the history of existential negation will be examined in Section 3.3.

3.2 When existential negations take over discourse functions in the negative domain

As mentioned in Section 2.2, the verb of existence *wnn* is combined in two distinct constructions with the negation *ni* in order to renew the existential construction. However, only one of these follows a typical path of change towards a new type B (*ni wn* > *nn*). The construction *ni wnt* follows another path of evolution, taking over a pragmatically marked function in the negative domain. Already in Old Egyptian, the form *wnt* is grammaticalized as a conjunction in a variety of

³²In particular, see works such as Stauder (2014), Werning (2013) and Polis (2017).

completive constructions.³³ As a consequence, in the attested documentation, the former existential verb *wnt* is probably also reanalysed as such in the former negative existential construction (within which I propose that it emerged). Semantically, this reanalysis prompted the use of the construction as a denial operator, as is astutely observed by Uljas (2007: 192–193). Later on, in order to express the negation of existence, a new form of the existential verb *wnn* is even reintroduced as an existential predicate after *ni wnt*:

- (41) Middle Egyptian (Egyptian [Afro-Asiatic], Egypt)
Dr-nttni wnt wn *q#i Xrw r=Tnj o#*
 for NEG complexist|PTCP.PRED.M.SG high voice against=2DU here
 ‘For it is not the case that there is/was someone who raises/raised his voice against both of you here.’ (Letter to the Dead, Naga ed Deir 3500 K4-5)

- (42) Middle Egyptian (Egyptian [Afro-Asiatic], Egypt)
niwnt wn sX# st
 NEG CONJ exist|PTCP.PRED.M.SG remember 3F.SG
 ‘There was no one who would remember it.’ (Berlin 13272)

In a syntactic context of dependence, the older construction may also be used as an alternative to the use of *nn*, new negative existential having taken over the meaning ‘without’ in such position. The use of *ni wnt* as a negative existential still appears in a medical treaty from the First Intermediate Period:

- (43) Middle Egyptian (Egyptian [Afro-Asiatic], Egypt)
ni wnt srf nb jm-s
 NEG-EX heat any in-3F.SG
 ‘There being no heat at all within it.’ (Papyrus Edwin Smith, plate 15, l. 12)

In this subordinate clause, the use of *nn* would have yielded a meaning ‘without’. In the very same text, *nn* is indeed attested with this meaning before an infinitive:

³³See Uljas (2007) on the use of *wnt* as a complementizer in Old Egyptian. The usual hypothesis concerning its etymology sees it as a perfective feminine/neuter singular participle from the verb *wnn* ‘to exist’.

- (44) Middle Egyptian (Egyptian [Afro-Asiatic], Egypt) *pH-wj wgiyt-f*
 end-DU ramus-3M.SG
pw nn jT-t jn-t
 COP without fetch-INF bring-INF
 ‘It means that the ends of his ramus are without movement back and forth.’ (Papyrus Edwin Smith, plate 3, l. 17)

The difference in meaning is slight: while the use of *ni wnt* does not imply anything regarding the expected state of the patient (no heat is a neutral description of what the practitioner might happen to find in his exploration), ‘*nn* + Infinitive’ indicates that the absence of movement is an atypical state.

3.3 Atypical features in the Egyptian NEC and its chronology

Despite the inherent limitations presented in Section 2.1, it remains possible to retrace a somewhat imprecise path of change along steps with a plausible, if partly speculative, chronology. If one considers the *Pyramid Texts* as a corpus preserving at least partially a phase of the language history anterior to other Old Egyptian sources, the Egyptian attested documentation begins at a point of the cycle where it reaches completion: negation of action and negation of existence are the same (type C). Unfortunately but not unexpectedly, the first attested stage in the history of the Egyptian language is already a layered one. But even this transitional phase seems to be typologically precious, since Croft (1991: 18) states that ‘types A and B are far more common than type C’ and that type C–A will be extremely rare. It is thus interesting to be able to observe a transitional phase C–A in Old Egyptian. However, this phase and the consecutive phase A are not prototypical in the sense that they do not fit with the original hypothesis. First, as seen in Section refs:AE1-2, two constructions (*ni wn* and *ni wnt*) are successively created, both using the same existential verb. Only one of these (*ni wn*) follows a path of change predicted in the ideal NEC, giving rise to a new negator (*nn*) that is at first dedicated to the existential negation. There is thus a dead end in the development of the transition from type C to type A.

In Later Egyptian, as stated in the preceding section, no new stage C ever happened, for the negation *bn* had ceased to function as an existential negation long before it reached the status of (quasi-)Standard Negation. Even the actual existence of a new stage A cannot definitively be assumed to have taken place. The use of *bn wn* as existential negation is in fact almost not attested in the documentation.³⁴ The following example is one of the very rare instances:

³⁴Many thanks are due to Stéphane Polis, who kindly searched the Ramses database for attesta-

- (45) Late Egyptian (Egyptian [Afro-Asiatic], Egypt)
is bn wn m-di=k sSw qnw
 INTERR NEG exist|NMLZ PREP=2SG.M scribes many
 ‘Don’ t you have many scribes at your disposal?’ (Papyrus Anastasi 5, 11, 4)

The expected existential negation should here be the form *mn* resulting from the fusion of *bn wn* in a text from this stage in the history of the language. However, it belongs to a corpus of texts traditionally called the Late Egyptian Miscellanies, which may show archaizing features. The same phenomenon may occur in the following literary text, where the graphical alternation between Middle Egyptian *nn* and Late Egyptian *bn wn* witnesses a deliberate play of graphical conventions by the scribe who composed the text:

- (46) Late Egyptian (Egyptian [Afro-Asiatic], Egypt)
nn s# n imj-r# pr-HD bn wn [lacuna] imj-r#
 NEG.EX son to director of the treasury NEG exist|NMLZ director
 ‘There is no son for the director of the treasury, there exists [no heir] for the director.’ (Wisdom of Ani 20, 5-7, O. Gardiner 357)

Thus, it remains possible that the second stage A, which is poorly attested in the preserved documentation, was indeed an actual step in the historical development but remains obscured by the gap in written data between Classical Egyptian and Late Egyptian, as explained in Section 2.1.

4 What motivates type changes within the NEC?

Croft (1991) proposes distinct characterizations for the change from one type to another, according to the transitional phase considered. This is schematically summarized as follows:

1. (i) from type A to type B: fusion
2. (ii) from type B to type C: emphasis
3. (iii) from type C to type A: syntactic analogy

tions of *bn wn* in Late Egyptian.

Thus, each kind of transition would appear to be motivated by a phenomenon belonging to a distinct domain: pragmatics, syntax and morphology. The process of phonological fusion as it is analysed in Croft (1991) appears rather less problematic than the precise role of emphasis and analogy in other transitional phases postulated in the ideal model of the cycle. It only raises a question as to the chronological relationship between the morphological process, according to which the former Standard Negation fuses with the existential verb and the ‘spread’ of the dedicated existential copula to other verbal and non-verbal predication, as seen in Section 2. In the next sections, I shall try to reconsider the qualification of changes (i) and (ii) in light of the Ancient Egyptian data.

4.1 Re-assessing the role of syntactic analogy

Syntactic analogy is supposed to characterize transitions from type C to type A. In the history of Earlier Egyptian, this process seems to happen three times:

(Phase 1) From *ni* to *ni wnt*

(Phase 2) From *ni* to *ni wn*

(Phase 3) From *nn* to *nn wn*

Each time, a form of the existential verb *wnn* is added to the former existential construction. In each case, however, there is no precise analogy to a standard verbal pattern. In phases (2) and (3), it is the stative predication that gives rise to the negative existential construction via a word order change that befits its information structure features. The only syntactic analogy that may be invoked is the one with the positive existential statement, which is itself renewed by adding the existential copula:

- (47) a. *jw S > jw wn S*
 LOC S LOC exist|PTCP.STAT S
 ‘There is S.’
- b. *ni S > ni wn S*
 NEG.EX S NEG exist|PTCP.STAT S
 ‘There is no S.’
- c. *nn S > nn wn S*
 NEG.EX S NEG exist|PTCP.STAT S
 ‘There is no S.’

One may now ask whether the evolution in the positive existential construction is itself motivated by some kind of syntactic analogy. This is not the case, for this construction was shown in Section 2.2 to derive from the stative pattern according to a word order change whereby the indefinite subject, being rhematic, comes to be placed after the existential copula. Its emergence is likely linked to the fact that the former existential pattern had been extended to the stative predication in general, according to a path that can be schematized as follows:

- (48) a. *jw* + indefinite S
 ‘There is bread.’
 b. *jw* + indefinite S + locative predicate
 ‘There is bread in the house.’

This pattern is extended to referential subjects via a bridging use involving a change of scope: the presentative reading is interpreted by the listener as concerning the locative predication as a whole with athetic information structure, much like the scope of French *il y a* can extend over an existential subject or a whole presentative clause:

- (49) *jw* + referential S + locative predicate
 ‘There is your bread in the house.’

One step beyond, the particle *jw* loses its locative semantics and becomes an auxiliary with a grounding discourse function as a textual marker:

- (50) *jw* + referential S + stative predicate
 ‘Your bread is in the house.’

By the same token, a need arises for a renewed expressive mean. The new existential predication introduces the existential verb as a stative predicate, thus making existential semantics explicit again, while displacing the subject to the rhematic position, befitting its informational status:

- (51) *jw* + referential S + *wn* ≠ *jw* + *wn* + indefinite S
 ‘The bread is existing.’ ‘there is bread.’

Only in phase (1) is there a possible (though not directly attested) source construction common to Standard Negation and the new negative existential. The

choice of the nominalization marked with an ending *-t* would parallel the grammaticalization of the so-called *t*-passive form from an action nominal marked for completive aspect following the former negative verb *ni*.³⁵

- (52) a. *ni jri-t* *P*
 NEG do|NMLZ-COMPL P
 ‘There is no action of P’ > ‘P was not done.’
 b. *ni wn-t* *S*
 NEG exist|NMLZ-COMPL S
 ‘There is no completed existence of S’ > ‘there is no S.’

Even in this case, however, the analogy appears to be a superficial description of what happens in the language. From a functional point of view, the introduction of the verb of existence *wnn* in each of the patterns under consideration can be explained as arising from the need for the renewed expression of existence. After the relaxation of the conditions of use bearing on the former existential construction, which has now become a stative construction, existential semantics would otherwise be absent. Thus, it is only from a partial point of view that this change may be qualified as formal and motivated by analogy as such. It cannot be demonstrated based on the preserved documentation, but one can even consider that this functional need for a renewal of expressive means has more to do with pragmatics than with syntax. Along this line of analysis, emphasis thus does not seem to be characteristic only of the transition from a type B to a type C, an evolution that is the subject of the next section.

4.2 Emphasis as a functional motivation for change: NEC as another kind of Jespersen cycle

According to Croft (1991), the communicative need for more emphasis would be the functional input for the change from type B to type C, when the existential negation is extended to negate verbal clauses. Let us look back to the Egyptian case and what the documentation allows us to observe in this regard. This transition is potentially relevant to two distinct phases in the history of the Egyptian language:

1. (i) The reconstructed phase C with *ni* serving both as Standard Negation and as existential negation.

³⁵For data concerning the evolution of passive forms and constructions in Earlier Egyptian, see Stauder (2014b). However, his analysis and the diachronic path of change proposed in this paper differ in more than one respect.

2. (ii) The transitional phase B' to C' (incomplete), during which *nn*/BN gradually extends to negate almost every kind of predication.

These can be further explained as follows:

(i) As seen in the preceding section, it is not clear whether the use of the existential negation *ni* with nominalizations according to an asymmetric negative strategy correlates with a pragmatic need for more emphasis. Since this extension is already completed in the most ancient documented stage of the language, one can only assume that such a need was an input towards change. In a way, the very fact that nominalizations in general play a crucial role in the renewal of the verbal system in the stage prior to Old Egyptian represents an argument against such a pragmatic motivation in the negative domain. However, there is also the possibility that a change in the negative domain, motivated in its incipient stage by a pragmatic need, might have been later extended to the rest of the verbal system. Along this line of historical explanation, the NEC would indeed help us to understand what prompted a more general evolution in the structure of the Egyptian verbal system.

(ii) As was already mentioned in the preceding Section 2, a new type C never obtains in Middle Egyptian or in Late Egyptian, for *bn* no longer functions as a negative existential when its development as a negator reaches its maximal extension and becomes something close to the Standard Negation in the language. Moreover, its pathway of change was even shown to be the same as was the case for *ni* in the preceding evolution from type C to type A: the relaxing of the constraint of indefinite reference on the subject made *nn* capable of expressing the negation in all sorts of stative predications. From there, its spread to the nominal predication appears to fall within the scope of analogy more than anything else. On the other hand, its use with a modal verbal form (sometimes called subjunctive *sDm-f*) also used in positive modal main clauses by insubordination may indeed be considered to derive from a need for emphasis. Such an explanation would account for its gradual replacing of the more ancient modal construction based on the negation *ni* and a nominalization. However, as seen in Section 2, there is a gap in the attestation of the spoken register in Earlier Egyptian that allows for an unattested intermediary step **ni wn* subjunctive *sDm-f*. In that case, the construction using the dedicated negative existential *nn* would be inherited, deriving from a former construction involving the existential verb and the Standard Negation. As a consequence, it would seem questionable to speak of the negative existential extending to Standard Negation.³⁶ However, such a situa-

³⁶In such cases, Veselinova (2014) states that the cycle is not operational.

tion does not exclude emphasis as a motivation for the emergent construction in its incipient stage. An especially interesting point for a better understanding of the NEC might lie in the similar development attested in a modern language, such as Kannada:

Kannada is a good example of diglossia as there are substantive differences between the literary and the spoken language on many levels. With regard to negation, it has to be said that one and the same strategy seems to be used to negate verbs with past time reference in both Literary and Spoken Kannada. Clear differences for the expressions of SN are observed for verb-s/simple verbal sentences with present/future time reference. (Veselinova 2016: 168)

In Late Egyptian, the negation for verbs with past time reference, *bw*, is the direct successor of the negation *ni*. But constructions used to negate sentences with future/modal reference differ in more than one aspect from earlier patterns. It thus confirms that the expansion of the negative existential into the verbal domain may obtain preferably both in the spoken register and in non-past contexts.

5 Conclusion and avenues for further research

From the point of view of Ancient Egyptian grammatical studies, it thus appears that the reconstruction of a NEC allows a solution to problems about negation that had remained pending for a long time. In particular, the coexistence of distinct forms expressing existential negation in Earlier Egyptian can be better understood as the result of layering in documentation that contains more diachronic change than has been generally assessed in philological studies. On the flip side, the Ancient Egyptian data bring to linguistic research on negation an interesting case for an evolution attested over a long period of time. The study of these data confirms that transitional stages tend to be stable, as was already established in Veselinova's pioneering studies on other language families. It also shows ideal stages that are not strictly consecutive: Ancient Egyptian illustrates the fact that overlaps are likely to occur between stages. As for the diachronic dimension, the attested history of Ancient Egyptian would appear to provide a case for the study of a potential NEC without reconstruction. Somewhat disappointingly, Middle Egyptian itself shows just another case of a long period of time where the negative existential is used for a specific sub-domain (modal/future negation, as in Bulgarian and Macedonian, with an inherited construction

rather than an actual instantiation of the NEC, according to Veselinova (2014)). However, the very notion of Standard Negation in a language such as Ancient Egyptian is obscured by the presence of other types of predication as prominent as verbal predication. Taking into account this specific structural feature, it appears that the NEC is almost completed in Late Egyptian (with *bn* serving as quasi-Standard Negation), even if it does not reach a new stage C. Since the negative existential itself had been re-created long before (emergence of *mn*), the ideal type C postulated in Croft (1991) never happened to exist as such. A new cycle was thus re-started before the previous one completed, much in line with other situations studied in Veselinova (2016). As seen in the preceding sections, establishing the precise chronology in the Egyptian case is not easy. However, the extant data appear to suggest a period stretching from 1000 years as the time from a phase A to the next transitional phase C-A.³⁷

Regarding the path of change involving nominalizations and negative existentials, the Egyptian data bring to light a further question as to the historical intricacies of the NEC and the grammaticalization process of new verbal constructions based on nominalizations. Veselinova (2013: 139) argues that ‘negative existentials state the absence of an entity rather than negating its presence’. Consequently, the action, when negated by a negative existential in a given language, is conceptualized and encoded as an entity. This approach requires particular consideration in the Egyptian case. In the phase of its history just before Old Egyptian, it appears most likely that the entire verbal system was renewed according to a process that involved the grammaticalization of constructions with nominalizations. This phenomenon is not restricted to the negative polarity, but extends to positive constructions as well. Thus, a question may be asked as to the relevance of the renewal of negative patterns for the evolution of the whole verbal system. Following Veselinova (2016), the encoding of actions in nominalizations appears functionally correlated with the use of the negative existential as a more emphatic construction in its incipient stage.³⁸ Such a process would suggest that the impetus for the global renewal of verbal predication in pre-Old Egyptian may have come from the new negative pattern using the negative existential in combination with verbal nominalizations.

³⁷ As for the time dimension of the NEC in general, Veselinova (2014: 1327) states that ‘modeling this cycle, as its completion, i.e. the negative existential turning into a full-fledged marker of standard negation, appears to take longer than 2000 years’.

³⁸ See Veselinova (2016: 160) on Turkish.

Abbreviations

ANT	Anterior
C	common gender
COMPL	completive
CONJ	conjunction
COP	copula
DEF	definite
DEM	demonstrative
DU	dual
F	feminine
IMP	imperative
IMPFV	imperfective
INDEF	indefinite
INF	infinitive
INTERR	interrogative
LOC	locative particle
M	masculine
MOD	modal
NEG	negation
NEG.EX	negative existential
NMLZ	nominalization
PASS	passive
PL	plural
PREP	preposition
PTCL	particle
PTCP	participle
QUOT	quotative
REL	relative
RESUL	resultative
SG	singular
STAT	stative

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Appendix

The following table lists the various patterns and stages of the NEC. It is to be understood as a postulated reconstruction based on documentation that does not allow us to establish a precise chronology of changes (for reasons discussed in Section 3.1). Thus, while the order of succession and the approximate time of emergence of the relevant forms and constructions can be assumed with relative confidence, a strict dating remains out of reach and the proposed dates remain suggestive and hypothetical. The asterisk before a type indicates a historical phase that may be assumed to have happened when the gap between the written register and the spoken language was maximal, so that the documentation does not attest its realization. Such periods occur in particular during the transition between two language norms and are designated here as Proto-Middle Egyptian and Proto-Late Egyptian.

3 The negative existential cycle in Ancient Egyptian

Type	Reconstructed chronology	Incipient Use as NegEx	Standard NegEx	Standard or Close-to-standard Negation
*C	Proto-Egyptian (unattested)		<i>ni</i>	<i>ni</i>
A	Old Egyptian (ca. 2500–2200 BCE)		<i>ni wn(t)</i>	<i>ni</i>
*A–B	Proto-Middle Egyptian (unattested)	<i>nn</i>	<i>ni wn(t)</i>	<i>ni</i>
B–C	Early Middle Egyptian (ca. 2200–2000 BCE)		<i>nn</i>	<i>ni nn</i> + Verb (modal)
C–A	Middle Egyptian (ca. 2200–1700 BCE)	<i>nn wn</i>	<i>nn</i>	<i>ni nn</i> + Verb (modal)
*A–B	Proto-Late Egyptian (unattested)	<i>mn</i>	<i>bn wn</i> (= <i>nn wn</i>)	<i>bn</i> (= <i>nn</i>) <i>bw</i> (= <i>ni</i>)
B	Late Egyptian (ca. 1400–700 BCE)		<i>mn bn wn</i> (rare)	<i>bn bw</i>

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