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## Negation, grammaticalization and language change in North Africa: the case of the negator NEG\_\_\_\_\_\*bu.

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Mena B. Lafkioui. Negation, grammaticalization and language change in North Africa: the case of the negator NEG\_\_\_\_\_\*bu.. Giorgio Francesco Arcodia, Federica Da Milano, Gabriele Iannàccaro & Paolo Zublena. Tilelli. Scritti in onore di Vermondo Brugnatelli, Caissa Italia, pp.113-130, 2013, 9788867290161. hal-01411746

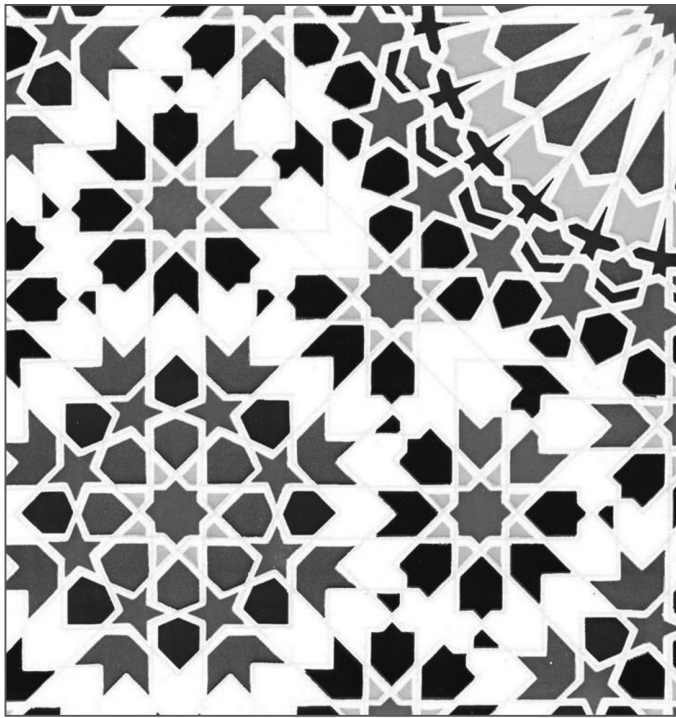
**HAL Id: hal-01411746**

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# Tilelli

*Scritti in onore di Vermondo Brugnatelli*

*a cura di*

Giorgio Francesco Arcodia

Federica Da Milano

Gabriele Iannàccaro

Paolo Zublena



*Il presente volume è stato realizzato con il contributo del  
Dipartimento di Scienze Umane per la Formazione «Riccardo Massa»  
dell'Università degli Studi di Milano-Bicocca.*

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*Tilelli. Scritti in onore di Vermondo Brugnatelli*

La presente edizione italiana è pubblicata secondo accordi con gli autori.

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Prima edizione 2013.

ISBN: 978-88-6729-016-1

Tutti i diritti riservati.

Finito di stampare nel mese di settembre 2013

Andersen S.p.A. - Boca (Novara)

per conto di Caissa Italia S.c.a.r.l.

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Composizione tipografica: Palatino (Hermann Zapf, Linotype 1948), Times New  
Roman (Stanley Morison, Monotype 1931)

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# Negation, grammaticalization and language change in North Africa: the case of the negator *NEG* \_\_\_ \**bu*

## 1. Introduction

The present article examines the grammatical origin of the negator *NEG* \_\_\_ *bu* – and more particularly its enclitic element *bu* – which has been created in Moroccan Arabic in the Oujda region, north-eastern Morocco, by contact with Berber (Tarifit language, northern Morocco, see Figure 1; see also Lafkioui (2013)).<sup>1</sup> As discussed elsewhere (Lafkioui 2013), Moroccan Arabic negation has been subject to certain contact-induced innovation processes, through which the morphological data as well as its syntactic structuring and semantic functioning have been modified by analogy with Berber negation. This study aims at explaining where the negator *NEG* \_\_\_ *bu* originates from by developing mainly two diachronic scenarios. These are (1) the grammaticalization of a verbal form related to *iba* (or variant) meaning ‘there is no’ and presently occurring in Tuareg Berber and (2) the grammaticalization of the nominal head *bu*, attested in Berber as well as in Arabic.

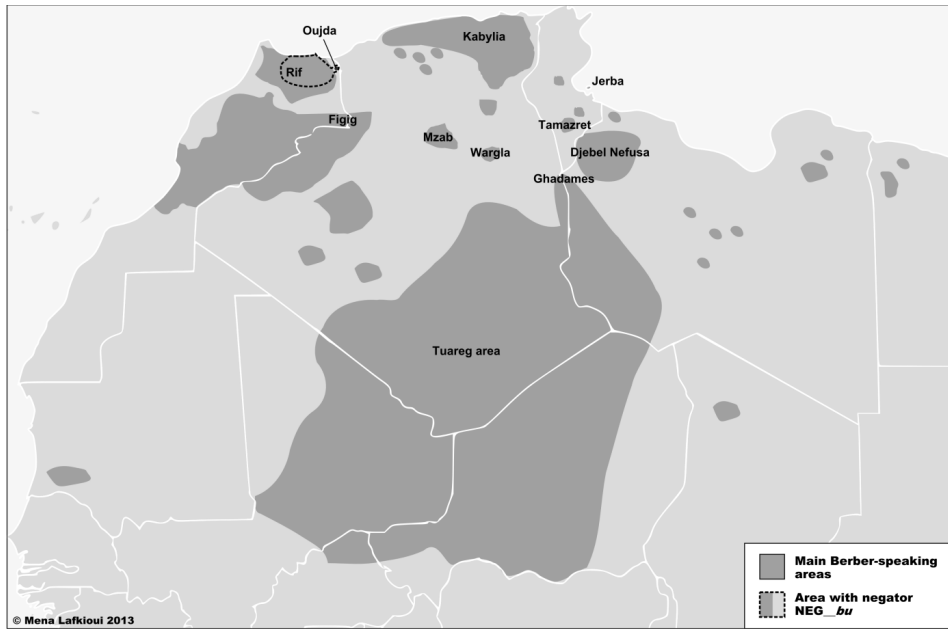
In Section 2, a general comparative analysis of the negation systems of Berber and North African Arabic is given. In Section 3, special focus is put on the contact-induced innovated negation marker *NEG* \_\_\_ *bu* and its synchronic structuring and functioning. Section 4 investigates the two main hypotheses concerning the diachronic development of this negator; that is, verbal or nominal grammaticalization. It also addresses two subsidiary options: one involving the re-analysis of the expressive marker *bu* and another involving reduplication of the proclitic negator. The article ends with a number of conclusions about language variation and evolution with respect to the case addressed and to the typology of negation.<sup>2</sup>

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<sup>1</sup> The zone on the map with a dashed contour line includes the Berber-speaking area of the Rif that distinguishes this phenomenon as well as the Oujda region, in which this phenomenon occurs, even if it is principally Arabic-speaking.

<sup>2</sup> The following abbreviations are used: AOR ‘aorist’, DC ‘direct complement’, DEF ‘definite’, DET ‘determined’, DIST ‘distal’, F ‘feminine’, HEAD ‘head’, IMPERF ‘imperfective’, M ‘masculine’, NEG ‘negation’, NPERF ‘negative perfective’, NVPS ‘non-verbal predicative syntagm’, O ‘object’, PERF ‘perfective’, PL ‘plural’, PRED ‘predicator’, PRES ‘present’, PROX ‘proximal’, PS ‘predicative syntagm’, SG ‘singular’, V ‘verb’, VPS ‘verbal predicative syntagm’. The morphosyntactic analysis and the English translation of most of the examples cited here are mine.

FIGURE 1. GEOGRAPHICAL DISTRIBUTION OF NEGATION WITH MARKER NEG \_\_\_BU



## 2. Negation in Berber and North African Arabic

Negation is one of the main research domains that is subject to contact-induced change in North Africa. An essential feature of this domain is the surfacing of discontinuous negation markers in North African Arabic, an innovation that is largely generalized over North Africa's Arabic speaking zones and that could have been produced by contact with Berber – where these markers are regular and highly developed in many languages. However, the influence might also have taken place in the other direction; that is, Berber might have borrowed enclitic negation marking from Arabic, as this trait also occurs outside Berber speaking areas, mainly in some Egyptian and Levantine varieties. Even so, the case addressed in this article, Moroccan Arabic of Oujda, clearly displays specific borrowing phenomena from Berber into Arabic, as will be demonstrated in this section (see also Lafkioui 2013).

Both North African Arabic and Berber show a negation system that basically draws on a distinction between verbal negation, mainly marked by discontinuous morphemes, and non-verbal negation, characterized by continuous marking procedures (Lafkioui 2013). The major distinctive feature between these two negation systems is that most Berber languages also mark negation by means of verbal stem alternation, in which the negative perfective is more common than the negative imperfective. Furthermore, the presence of preverbal negators generally leads to a syntagmatic position change of the

postverbal affixes (fronting); they precede the verbal head (but follow the negator), usually without changing their respective order, namely [indirect affix + direct affix + spatial affix].

Regarding Berber, the principal variant of the first element of the discontinuous negator is most probably of Berber origin and is derived from *\*wəɾ*, a grammaticalized verbal form composed of the negation element *\*w* or *\*u* and the verbal root *\*r* (expressing modality): *\*wəɾ* = NEG = [NEG *\*w* or NEG *\*u* + V *\*r*].<sup>3</sup> While this part of the negator is obligatory in most languages – with the exception of some cases where only the postverbal element is used, like in western Tarifit (Lafkioui 2007: 234-236)<sup>4</sup> –, the second part that usually follows the syntactic head may be optional – as an intensifier – or required, depending on the negation context. The discontinuous marker is also employed in non-verbal predication, even in a more extended way than in North African Arabic, usually in contexts indexing existential values. However, the Berber languages make use of continuous markers too, which are based on Berber elements as well as on Arabic elements.<sup>5</sup>

As to North African Arabic, verbal predication is primarily negated by means of the discontinuous marker *ma \_\_\_ š* (*ši/šay*) and its optional or conditioned (modal and expressive) variants. The verbal negation structure mainly expresses existential values, whereas the non-verbal negation structure is used for both existential and attributive semantic purposes. The existential negation marker is similar in verbal and non-verbal negation, while attributive negation is mainly marked by the continuous morpheme *maši \_\_\_* or *muš \_\_\_* (or their variants).<sup>6</sup>

### 3. Formal and functional innovations

With respect to the negation system of North African Arabic shown in Section 2, the Moroccan Arabic variety of Oujda (MAO) distinguishes a new discontinuous marker, *ma \_\_\_ bu*, of which the second element is borrowed from Tarifit, which is the only Berber language where this morpheme occurs as such (Lafkioui 1996, 1999: II/Chapter 2, 2007: 234-236, 2011: 62-69, 2013). They do not only have this morphological particularity in common, but also its morphosyntactic combinatorial restrictions and syntactic functioning (structural analogy; see Lafkioui 2013). The hybrid negator *ma \_\_\_ bu* occurs in the

<sup>3</sup> Different hypotheses have been proposed regarding the etymological origin of the two components of the negation operator in Berber, for example Galand (1995), Chaker (1996) and Brugnatelli (2011).

<sup>4</sup> It is, however, in free variation with preverbal negation. For other cases with enclitic negation, see Brugnatelli (1987).

<sup>5</sup> Grammaticalized amalgams are frequent in Berber.

<sup>6</sup> For an overview of North African Arabic, see Caubet (1996) and Lafkioui (2013).



following innovated negation patterns: [*ma* + verbal predicative syntagm + *bu* + noun] and [*ma* + non-verbal predicative syntagm + *bu* + noun]. Moreover, this Moroccan Arabic variety basically shares the same semantic properties with Tarifit; that is, it is also employed for existential descriptive negation. Examples from Tarifit:

(1) *u nna-n bu awar ḥ-as.*  
 NEG PERF-3MPL NEG wordon+3SG  
 ‘They did not say a word about him/her.’

(2) *u ḡā-s bu tamtūt.*  
 NEG at+3SG NEG women  
 ‘He has not got a wife.’

These Berber utterances demonstrate verbal predication (example 1) and non-verbal predication (example 2), both negated by means of the morpheme *u bu*. The second element is compulsory and is necessarily followed by a noun (in its free state) functioning as an object complement.

Data from MAO do not only expose the presence of the innovated morpheme containing the same element *bu*, but also prove that it shares even the structural and functional features with Tarifit (see also Lafkioui 2013):

(3) *ma šra-w bu l-ḥawli had l-eām.*  
 NEG PERF-3PL NEG DEF-sheep PROX DEF-year  
 ‘They did not buy a sheep this year.’

(4) *ma εand-na bu d-dəw f d-dār l-qdīma.*  
 NEG at+1PL NEG DEF-electricity in DEF-house DEF-old  
 ‘We do not have electricity at the old house.’

As in Tarifit, the enclitic element *bu* is associated with a determined subsequent object, regularly marked by the definite article in MAO. The negator *ma bu* is used for basic negation in descriptive contexts. Compared to its major functional contender *ma š*, this marker is much more restricted when it comes to its combinatorial options, its syntagmatic distribution and its functional roles. Since it needs to be combined with a determined object, its structural potential is limited to certain verbal configurations and to prepositional predicative configurations or some other quasi-verbal structures. These limitations are reflected in the distributional order, as the discontinuous marker is required to surround the verbal or non-verbal predicative head. Therefore, its second element does not function as a tool that demarcates the negation scope and may occupy different positions in the syntagm. These structural restrictions are related to functional roles that are of a descriptive

nature, supported by highly referentialized notions conveying existential values. Expressive negation with *ma* \_\_\_ *bu* only occurs when an appropriate intonation backs up the whole structure (see Lafkioui 2013 for more details).

Other examples confirming the structural and functional correspondence between the negation system of MAO and of Tarifit with respect to this contact-induced phenomenon are these Berber equivalents of examples (3) and (4):<sup>7</sup>

- (5) *u ssg̃i-n bu izmər asəggʷas-a.*  
 NEG PERF-3MPL NEG sheep year+PROX  
 ‘They did not buy a sheep this year.’
- (6) *u ġā-nəġ bu tfawt gi taddāt taqđint.*  
 NEG at+1PL NEG electricity in house old  
 ‘We do not have electricity at the old house.’

The adoption of the new negation marker *ma* \_\_\_ *bu* in MAO, by analogy with Tarifit, triggered a restructuring of its existing morphosyntactic patterns by introducing a new general pattern:

New general negation pattern: NEG + PS + <i>bu</i> + DC (DET)
--

This innovated pattern is characterized by its fixed morphosyntactic order in which the determined post-head noun functioning as a direct complement is a prerequisite. It enfolds two sub-patterns, one applying to verbal predication (example 3) and another one related to non-verbal predication (example 4):

New verbal negation pattern: NEG + VPS + <i>bu</i> + DC (DET)
--

New non-verbal negation pattern: NEG + NVPS + <i>bu</i> + DC (DET)
---

I refer to Lafkioui (2013) for further details about this case of «replica grammaticalization» (Heine and Kuteva 2003), which was generated by a borrowing process from Berber. The study also provides abundant evidence of the importance of system-based factors, such as structural adequacy and generalization, for the diffusion of this phenomenon, in addition to certain extra-linguistic parameters.

<sup>7</sup> Besides examples (1) and (2) and numerous records from Lafkioui (1996, 1999: II/Chapter 2, 2007: 234-236, 2011: 62-69).

#### 4. Verbal or nominal grammaticalization?

Regarding the origin of the innovated negator NEG\_\_\_ *bu*, principally two diachronic processes can be envisaged. One relates to the grammaticalization phenomenon of a verbal form connected with *iba* and conveying the idea of ‘there is no’ or ‘to lack’ in Tuareg Berber, whereas the other concerns the grammaticalization of the nominal head *bu*, common in Berber as well as in North African Arabic.

##### 4.1. The verbal grammaticalization option

In Tuareg Berber, there is the impersonal verbal form *iba* (and variants) signifying meanings such as ‘there is no’, ‘to lack’ and even ‘to pass away’ as a euphemism for ‘to die’ (examples 7 and 8), of which derived forms like *āba* and *bo* are used in optative constructions, as in examples (9) and (10):

- (7) *aman ābâ-tān*  
 water PERF-3MSG+3MPL  
 ‘There is no water.’  
 (Prasse 2010: 52; Ahaggar Tuareg, Algeria)
- (8) *ulli-nin ābâ-tānāt*  
 goats+1SG PERF-3MSG+3FPL  
 ‘My goats are lost.’  
 (Sudlow 2009: 10; Burkina Faso Tuareg)
- (9) *āba šī-k*  
 PERF-3MSG father+2MSG  
 ‘I wish your father die!’  
 (Prasse et al. 2003: 2; Niger Tuareg)
- (10) *bo ākrare*  
 NEG PERF-1SG  
 ‘I wish I will not burn (in hell)!’  
 (Prasse et al. 2003: 2; Niger Tuareg)

In fact, *iba* (or a variant) is a particular half-grammaticalized verbal form that only appears for the third person masculine singular but without the prefix *y-* (except with the «intensive imperfective»; Prasse 2010: 52). It is associated with a paradigm of direct complement pronouns which refer to the discourse object that does «not exist». The indirect pronoun series, on the other hand, indicates the person(s) affected by this “inexistence”. This verbal complex type is not exceptional in Berber. A similar grammaticalization mechanism that generates impersonal expressions pointing to “existential” values is also observed in other languages, for instance in Tarifit (northern Morocco). In this

latter language the perfective of the verb *aġ* ('take', 'take away') was grammaticalized as the invariable *tuġa* (originally third person feminine singular) in order to actualize the message in the past (completive):

- (11) *tuġa-yi*            *mlih.*  
       PRED+1SG    fine  
       'I was fine once.'

Consequently, this kind of grammaticalized verbal syntagm serves as predicator, a sort of auxiliary that is essential to accomplishing the predication (see Lafkioui 1999: II/Chapters 4-5 and 2011: 50-55). These amalgams may even be based on a nominal head which also combines with a series of personal suffixes. The quasi-verbal constructions obtained through these transformations are common in Berber; e.g. Kabyle Berber (example 12; northern Algeria) and Tachelhit (example 13; southern Morocco).<sup>8</sup>

- (12) *ulaš-iṭ*  
       PRED+3MSG  
       'There is no she.' > 'She is not there.'

- (13) *manza-k-inn?*  
       PRED+2MSG-DIST  
       'Where are you?' > 'How are you?'

Moreover, texts from the Ayer region (Niger) and from north-eastern Burkina Faso prove the existence of a negation adverb based on *iba*; that is, the grammaticalized form *iba-s* ('no longer'), which derives from the complex *\*iba-as* (*iba* + indirect pronoun):

- (14) *iba-s*    *šanšey*    *kāfe*  
       NEG    IMPERF-1SG coffee  
       'I no longer buy coffee.'  
       (Sudlow 2001: 69; Burkina Faso Tuareg)

In this Berber-speaking area, there are also negative interjections with *iba* or its variants (examples 15 to 17), which can be extended or reduplicated for expressive purposes (examples 18 and 19):

- (15) *ebəw*  
       'No, really!'  
       (Petites sœurs de Jésus 1974: 65; Niger Tuareg)

<sup>8</sup> See Galand (1966) for more information about the pronouns suffixed to this amalgam type.

- (16) *bo*  
 ‘No.’  
 (Prasse et al. 2003: 2; Niger Tuareg)
- (17) *bāw*  
 ‘No.’  
 (Prasse et al. 2003: 2; Niger Tuareg)
- (18) *bebo*  
 ‘No no!’  
 (Prasse et al. 2003: 3; Niger Tuareg)
- (19) *ābo ābo*  
 ‘No no.’  
 (Sudlow 2009: 10; Burkina Faso Tuareg)

Additionally, in Tuareg Berber of Niger, the derived element *bo* functions as a negation particle, as in example (10) above and in the next utterance:

- (20) *bo-tāšwey*  
 NEG+AOR-2SG  
 ‘You should not drink.’  
 (Prasse et al. 2003: 2)

Variants of *iba* that play the role of negation particle, like *bo*, tend to emerge in contexts of modality, such as the optative construction seen in (10) and the prohibitive construction just above (example 20). They occur in what I call “marked negation” constructions, which can be opposed to “basic negation” constructions (e.g. examples 7 and 8) mainly by their specific structural and functional features related to modality (see Lafkioui 2013 for more information about this opposition).

As can be seen, then, Tuareg Berber provides abundant evidence of all kinds of grammaticalized forms that were probably derived from the verbal form *iba* and that mark negation. A possible diachronic grammaticalization itinerary that these variants could have gone through is the following:

Impersonal verbal form <i>iba</i> (and variants; ‘to lack’) ↓ Negation adverb <i>iba-s</i> (and variants; ‘no longer’) ↓ Negation particle <i>bo</i> (and variants; ‘not’, ‘no’)
--

The opposite development scenario, the derivation of the verbal form *iba* ‘there is no’ from a nominal form based on *\*b* (< *iba* ‘loss, lack, death’), might also be tempting; it would explain at least its impersonal nature in Tuareg Berber and its vestigial presence as an enclitic negation marker in Tarifit.

Although the second element of the discontinuous negator NEG\_\_ *bu* in Tarifit (and indirectly also in MAO) looks very similar to the Tuareg negation particle *bo*, it cannot be a product of contact as the two areas are geographically distant from each other (see Figure 1) and there is no historical evidence that could account for contact or for migration of these Berber peoples. A polygenesis scenario also seems unlikely in this case, especially because Tarifit does not provide evidence of a parallel grammaticalization process comparable to that in Tuareg. Accordingly, it is much more reasonable to regard this morpheme as a remnant of an ancient Berber form that originally covered the whole North-African area but today is only still attested in its peripheries. Moreover, it is remarkable to discover that forms analogous to *bu* are shown in all language families of the Afro-Asiatic phylum. Aside from Berber, a negation marker based on *\*b* also occurs in Semitic (e.g. South Arabic/Soqotri and Arabic/Yemeni Arabic, examples 21 and 22, respectively), Chadic (e.g. Hausa, examples 23 to 25), Egyptian (including Ancient Egyptian, Demotic and Coptic, examples 26 and 27), Cushitic (e.g. Ancient Bedawiye/Beja, examples 28 and 29) and Omotic (e.g. example 30):

- (21) *be*  
 ‘without’  
 (Skinner 1996: 12)
- (22) *ʔaba* (< arabe *ʔabā* ‘refuse’)  
 ‘No.’  
 (Behnstedt 1985: map 117)
- (23) *ba\_\_*, *ba\_\_ ba*  
 ‘No.’, ‘not’, ‘there is no’  
 (Newman 2000 [1937]: 357-365; Robinson 1913 [1899]: 21-22; Skinner 1996: 12)
- (24) *bābu* (*ba* + *abu* = ‘no’ + ‘thing’)  
 ‘there is/are no’  
 (Newman 2000 [1937]: 357-365; Skinner 1996: 13)
- (25) *bābù m̄ai*  
 ‘There isn’t any oil.’  
 (Newman 2000 [1937]: 361)

- (26) *bw / bu*  
 ‘No.’, ‘not’  
 (Budge 1978: 213; Lesko and Switalski Lesko 1982: 153; Westendorf 1977 [1965]: 98, 99, 108, 521)
- (27) *bw rh*  
 ‘not know’  
 (Westendorf 1977 [1965]: 108)
- (28) *ba*  
 ‘No.’, ‘not’  
 (Westendorf 1977 [1965]: 84)  
 ‘not have’  
 (Skinner 1996: 12)
- (29) *\*b-(y)-*  
 ‘not be’, ‘not do’  
 (Skinner 1996: 12)
- (30) *\*ba*  
 ‘No.’  
 (Skinner 1996: 12)

Although this formal resemblance may *a priori* suggest a common Afro-Asiatic genealogical basis, there is definitely a need for comparative analysis of the morphosyntactic structures in which these forms appear, a topic on which I am still working and which is outside the realm of this contribution. However, it should be noted that a basic structural similarity between, for instance, Tuareg Berber (examples 7 and 8) and Hausa (example 25) can be observed.

#### 4.2. The nominal grammaticalization option

The second option has to do with the nominal head *bu*, which frequently occurs as a kind of determination auxiliary (“support de détermination” in French) in both North African Arabic (NAA) and Berber. As to NAA, the head *bu* is derived from the Classical Arabic noun *\*abū* (‘father of’, ‘person-or-thing with’, ‘possessor’ < *\*abun* ‘father’), which is frequently used not only to indicate kinship relationships (*kunya*) – which was its original function – but also to express all kinds of membership, belonging, and stable or unstable properties. This means of designating or qualifying entities led to the creation of metonymies and nicknames, which generated specific surnames, anthroponyms

and toponyms. The compounds based on the sequence [*bu* + noun] are referential to a different degree, as is illustrated in the following expressions:<sup>9</sup>

- (31) *bu-rās*  
‘person-or-thing with head’ > ‘big headed one’
- (32) *bu-šūka*  
‘person-or-thing with prickle’ > ‘zucchini’  
(Beaussier 1931: 83)

In Berber, the head *bu* appears to have a double nature. On the one hand, it forms relatively fixed compounds with the subsequent noun (example 33 from Tachelhit and Tarifit) comparable to the NAA compounds – indeed, some of them were even borrowed from NAA as such. On the other hand, the head *bu* is part of a number of variable complexes which take gender, number and annexed state markers. In these complexes, *bu* behaves more like a lexical constituent than a grammatical one. This complex type seems more productive than the type with a fully grammaticalized *bu* (first compound type), particularly when it is constructed on the basis of the Berber lexicon (examples 34 to 37):

- (33) *bu-taggant*  
‘person-or-thing from forest’ > ‘boar’
- (34) *bu-yilās*  
‘he with tongue’ > ‘(the) talkative man’
- (35) *m-yilās*  
‘she with tongue’ > ‘(the) talkative woman’
- (36) *a(y)t-yilās*  
‘they (male) with tongue’ > ‘(the) talkative men’
- (37) *su(y)t-yilās*  
‘they (female) with tongue’ > ‘(the) talkative women’

In the case of compounds with an advanced degree of grammaticalization, Berber makes use of the prefix *id* (or variants) for plural formation:

$[bu + \text{nominal}] = \text{singular}$ $\Downarrow$ $\{id + [bu + \text{nominal}]\} = \text{plural}$
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<sup>9</sup> There are also compounds that have lost the referential link. Depending on the compound type in question (more or less grammaticalized) and on the region of North Africa, the nominal head *bu* has a female counterpart in NAA – the head *mm-* (or variants).



With respect to this morphological rule, the plural form of the compound illustrated in (33) is:

- (38) *id-bu-taggant*  
 ‘PL+ person-or-thing with + forest’ > ‘boars’

Remarkably, the pre-nominal modifier *id* also appears as a plural marker in Berber compounds based on the head *aw*, which is a variant of the pan-Berber nominal head *u* ‘son of’; both *aw* and *u* may have *ayt* ‘sons of’ as the corresponding plural form.<sup>10</sup> Fixed compounds with *aw* are mostly attested in anthroponyms and toponyms. An example is *id-aw-tanan* ‘PL + person-or-thing from + Tanan’ > ‘Idawtanan’ = Berber tribe in southern Morocco) in Tachelhit. Although this form is already plural, it may be combined with the plural form *ayt* to give *ayt-id-aw-tanan(n)*, when it is fully grammaticalized as a singular noun. Regardless of the origin of the *bu*-head, these data account for at least a parallelism between *bu* and the Berber determination heads *aw* and *u*.

Another record that confirms the existence of an indigenous Berber *bu* comes from Kabyle Berber (Algeria). In this language, *bu* also operates as a nominal head changing cardinal numbers into ordinal ones, a phenomenon that is usually rendered by its allomorph *wi* (Dallet 1982: 5 > *bu-s* = *wi-s*):

- (39) *bu-s-ħəmsa* (= *wi-s-ħəmsa*)  
 ‘(the) fifth’

As the origin of the nominal head *bu* in Berber is still not established and is beyond the scope of this study, I prefer to consider it, for the time being, simply as a North African phenomenon.

The hypothesis I propose in this subsection is that, in Tarifit Berber, the syntagm [head *bu* + nominal] could have been reanalyzed as a negation syntagm constituted of [negation marker *bu* + nominal] by analogy with the following diachronic patterns:

1. Noun *ši*, *šay* (and variants; ‘thing’) from Arabic > [nominal head *ši*, *šay* + nominal] > [enclitic negation marker *ši*, *šay* + nominal] > enclitic negation marker *ši*, *šay* (and variants)

Example of *ši* as a nominal head in Moroccan Arabic:

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<sup>10</sup> Even though Tuareg Berber usually has *kəl/kel* as a plural of *aw/əgg/əgg* in tribal and family names, the correspondence *aw* ~ *ayt* is also attested. Examples are *āw-adəm* ‘son of Adam’ = ‘human’ ~ *āyt-adəm* ‘humans’ (Prasse et al. 2003: 811) and *āw-səmmos* ‘animal of 5’ > ‘5-year old animal’ ~ *āyt-səmmos* ‘5-year old animals’ (Prasse et al. 2003: 809).

- (40) *gāl ši hadra*  
 PERF-3MS HEAD words  
 ‘He said some words.’

2. [nominal head *ša, kra* (and variants; ‘any’) from Berber + nominal] > [enclitic negation marker *ša* (and variants) + nominal] > enclitic negation marker *ša* (and variants)

Examples of *ša* as a nominal head in Tarifit:

- (41) *ša ut-yəggi*  
 HEAD NEG 3MSG+NPERF-3MSG  
 ‘Anything he has not done.’ > ‘It is not worth a thing what he has done.’
- (42) *ša wat-yənni*  
 HEAD NEG 3MSG+NPERF-3MSG  
 ‘Anything he has not said.’ > ‘It is not worth a thing what he has said.’

Given that the negator NEG\_\_ *bu* requires a subsequent (determined) object (see Section 3) in Berber and MAO, it is reasonable to suggest that the whole syntagm [head *bu* + nominal] could have been reanalyzed. However, it is also possible that the reanalysis process, triggered by analogy, merely concerned the head *bu*. The corresponding reanalysis patterns would then be as follows, respectively:

1. Noun *ši, šay* (and variants; ‘thing’) from Arabic > nominal head *ši, šay* > enclitic negation marker *ši, šay* (and variants)
2. Nominal head *ša, kra* (and variants; ‘any’) from Berber > enclitic negation marker *ša* (and variants)

#### 4.3. Some other options

In order to get a better understanding of the phenomena related to the origin of the negator NEG\_\_ *bu*, in this subsection I will discuss two other possible development scenarios.

##### 4.3.1. Reanalysis of the expressive marker *bu*

Berber presents an expressive marker *bu*, which might be related to the nominal head *bu*, and which regularly signifies the notion of caution (‘Beware of!’). In Tayert Berber (Niger), this element was even incorporated into the nominal expression *bu-yäll-e*, which literally means ‘Beware my daughter!’ and which subsequently was lexicalized as ‘lullaby’ (Prasse et al. 2003: 2). The notion of warning is rendered by the identical exclamative interjection *bu* in the Berber of

Jerba (Tunisia), where it is attested in the following infantile doggerel, for instance (Brugnatelli 2001):

- (43) *A bú! A bú! A bú!*  
 Beware! Beware! Beware!  
*a táyla téngugú*  
 Oh the palm tree shakes,  
*a Méseud én Rugú*  
 O Massoud of Rugu (place name).

The item *bu* (or local variants) also appears in Berber as a verbal prefix for expressive purposes, such as in the following example:

- (44) *zzəl* ‘to lie down’ + *bu* > *bu-zzəl* ‘to sprawl’ (Kabyle Berber, Tarifit)

From these verbal forms, all sorts of verbal nouns are derived, for example:

- (45) *a-bu-zzəl* ‘the act of lying sprawled around’, ‘lying around’ ‘laziness’ (Kabyle Berber, Tarifit)

It is not inconceivable to regard the enclitic negator *bu* as the final outcome of a diachronic process in which the expressive homophone *bu* (or variant) was first reanalyzed as an emphasis marker before being converted into a negation intensifier and, subsequently, into a basic negation marker that has lost its expressive charge. Support for this scenario comes from the fact that pragmatic motives involving “emphasis” and, hence, expressiveness are mostly behind the development of enclitic negation strengtheners (Dahl 1979; Jespersen 1917; Meillet 1912). Accounts that corroborate this are the following Romance examples:

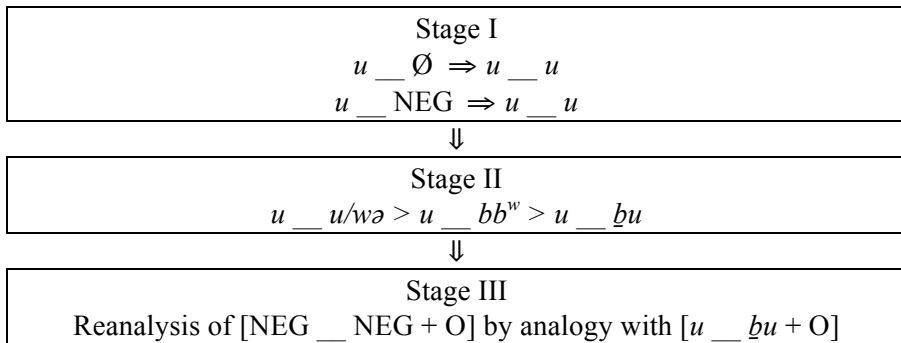
- (46) *Du diable si je le savais.*  
 ‘(From) the devil if I knew!’ > ‘I did not know it at all!’ (= ‘Buggered if I know!’)
- (47) *Col cazzo che ci vado.*  
 ‘With cock that I will go!’ > ‘I will absolutely not go!’ (= ‘Like fuck I’ll go!’; ‘As if I would go!’)

In the example from spoken French (46), it is the interjection *du diable* (‘from the devil’) or *au diable* (‘by the devil’) that was grammaticalized into a sentence-initial negation marker signifying an energetic negation (‘not at all’) as

well as the notion of surprise or doubt.<sup>11</sup> It perfectly exemplifies what I call *marked negation* (Lafkioui 2013). This negator is in competition with other marked negation forms and in opposition to the basic negation forms like the post-verbal *\_\_ pas* ('not'), which is the most common negator in present colloquial French. A similar diachronic process is observed in spoken Italian (example 47), where interjections based on the configuration [*col* ('with') + expressive noun] are turned into sentence-initial negators in order to mark «negazione particolarmente forte», as Sanga (1984: 16) puts it.

#### 4.3.2. Reduplication of the proclitic negation marker

A final possible explanation for the origin of the enclitic negator *bu* is that of a reduplication of the proclitic *u* as a negation intensifier by analogy with other Berber discontinuous negation markers (Stage I). This diachronic stage could have been followed by a number of phonetic transformations to which the proclitic *u* could have been subject and which could have resulted in *bu* (Stage II), as depicted in the next diagram:



Regarding the phonetic modifications of Stage II, the alternation [*ww* ~ *bb<sup>w</sup>*] is a well known pan-Berber feature.

In stage III, the enclitic constituent of the negators with a proclitic marker other than *u* could have been reanalyzed by analogy with *u*    *bu* for system-internal reasons like generalization of the specific morphosyntactic pattern [NEG + PS + NEG + O], which is restricted to referential descriptive negation, so as to enhance the formal and functional coherence of the restructured negation system (see section 3 and Lafkioui 2013).

Reduplication as a grammatical device for generating negation patterns is not uncommon (see e.g. Ramat 2006), as is shown in the following examples of genealogically diverse languages:

<sup>11</sup> In Tayert Berber (Niger), the interjection *ebu* also indexes the act of surprise (Prasse et al. 2003: 2).

- (48) *eu não quero não.*  
 1SG NEG PRES-1SG NEG  
 ‘I don’t want to.’ (Romance, Brazilian Portuguese; Schwegler 1991: 209)
- (49) *ʔal sabēb-i la?*  
 NEG fault+1SG NEG  
 ‘(It’s) not my fault.’ (Semitic, South Arabic; Simeone-Senelle 1997)

While the proclitic and enclitic negator are homomorphic in Brazilian Portuguese (example 48), the reduplication case of South Arabic comes with metathesis (example 49). Homomorphic clause-final negation doubling is also attested in Flemish (example 50), a Germanic variety spoken in Belgium. Flemish also offers an example of triple negation structures (example 51), a feature which occurs uncommonly world-wide (van der Auwera 2009):

- (50) *ik zie het niet altijd niet.*  
 1SG PRES-1SG it NEG always NEG  
 ‘I do not see it always.’ (Flemish of East Flanders; Lafkioui, personal data)
- (51) *pas op dat ge niet en valt nie.*  
 fit on that you NEG NEG fall NEG  
 ‘Take care that you don’t fall.’ (Brabantic Flemish; Pauwels 1958: 454)

## 5. Conclusion

From a historical-comparative perspective, the language change phenomena discussed in this article have been motivated mainly by system-internal properties, both formal and functional ones. The different possible reanalysis and grammaticalization mechanisms that were essential to these transformations and that caused a restructuring of the negation system are addressed in detail in the sections above.

From a typological perspective, at least one feature is worth highlighting. Berber, and in particular Tuareg Berber, accounts for an uncommon phenomenon, mostly attested in data from African languages, whereby a negator is developed from a verbal element meaning ‘to lack’ (Dahl 2010, Givón 1973, Marchese 1986). Tuareg Berber perfectly exemplifies this phenomenon by presenting all the grammaticalization stages of the transformation process concerned: impersonal verbal form *iba* (‘to lack’) > negation adverb *iba-s* (‘no longer’) > negation particle *bo* (‘not’, ‘no’).

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