

Anti-Agreement in Amazigh (Berber) as Genitive Constructions*

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SUMMARY

In this paper we provide a new account that derives from genitive constructions Anti-Agreement in Amazigh (Berber), also known as the participle in traditional Amazigh linguistics. we argue that the genitive is used as an avoidance strategy so that T loaded with EPP and Case features not be selected as otherwise a T would require a transfer of a Case and EPP/person feature to from C to T, which would leave the clefted subject without a Case causing the derivation to crash.

RESUME

Dans cet article, nous proposons une analyse originale dérivant l'anti-accord (anti-agreement) en Amazigh, connu sous le nom de participe en linguistique traditionnelle, à partir des constructions génitives. Nous soutenons que le génitif est utilisé comme une stratégie d'évitement de sorte que la catégorie T portant les traits EPP et de Cas ne soit pas sélectionné par la catégorie C. Cette stratégie est nécessaire car un T immédiatement dominé par C obligerait ce dernier à lui transférer, ce qui laisserait le sujet disloqué à gauche sujet sans Cas et ceci ferait échouer la dérivation.

1 INTRODUCTION

The objective of the present paper is to bring a new and original morphosyntactic perspective on the phenomenon known as the participle in traditional Amazigh linguistics and as Anti-Agreement

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(AA henceforth) in generative linguistics.¹ The aim is not to provide an analysis that is dependent on a theoretical framework along the most recent principles although most of the discussion is grounded in minimalist terms building on Derivation by Phase and the Minimalist Program. Rather, focus will be put on the analogy we draw between participial and genitive constructions, arguing that the former is in fact derived from the latter. Reshaping and refining the analysis along the most recent principles in Generative Grammar will be the next step once the analogical ground between genitive and participial constructions we are concerned with are laid out.

The topic called AA has drawn a lot of attention from linguists across languages since Ouhalla's (1993) article where the term AA was suggested for the first time. The phenomenon of AA refers to situations where there is lack of agreement between the subject and the verb. In Amazigh, it occurs in three types of sentences all of which involve an A-bar subject extraction as illustrated with the Kabyle examples below, namely *wh*-questions as in (1a);² relativized subject as in (1b) and clefted subject as in (1c).³

- (1) a. Anta i y-ldi-n tawwurt?
 who.F.PL. COMP PREF-opened-SUFF door
 Who opened the door?
- b. Taqcict-nni i y-ldi-n tawwurt truḥ
 girl.F.SG COMP PREF-opened-SUFF door left
 The girl who opened the door has left.
- c. D nekk i y-ldi-n tabburt
 COP me COMP PREF-open-SUFF door
 It is me who opened the door.

In all the examples above the participial form *y-ldi-n* (or its phonological variant *i-ldi-n*⁴) is invariable with respect to person, number, and gender.⁵ The participial form is characterized by the discontinuous morpheme *y—n*. It contrasts with the regular verb inflection which agrees with the subject in person, number and gender. The originality of the present study lies in the view that the participial form is derived from a genitive construction, which explains its nonverbal status verbal. A similar conclusion that Anti-Agreement is nominal has also been achieved by Ouhalla (2005) via a different route. We further argue in Section 3 that the reason why a genitive construction is used instead of the expected verb inflection is due to nominative Case conflict.

The genitive analysis of participles advocated here comes from a number of semantically and morphologically interrelated facts which we summarize as follows. First both of genitive

¹ The term Amazigh is here substituted for the more widespread word Berber, which is derogatory. Amazigh is used as a generic term to refer indifferently to varieties of this language family. The names of the varieties are specified when necessary.

² The transliteration system adopted in this article stands in conformity with the standardized system adopted for Kabyle in the academic sphere.

³ Unless otherwise specified, the examples provided are from Kabyle.

⁴ Generally speaking, the initial morpheme 3 masculine singular is realized as *y* when preceded or followed by a vowel and as *i* elsewhere. Where this difference is irrelevant, I use the variant *y—n* to refer to the participial pattern.

⁵ The extent of AA differs cross dialectally. In Tashelhiyt the participle agrees in number but not in gender and person while in Tuareg there is agreement in both number and gender but not in person.

constructions and participles contain the genitive particle *n* and are introduced by means of the complementizer *I* as illustrated in (2b) and (2c), to be compared with the participial form in (2a) below. Second, the participial construction in (2a) has the meaning paraphrased as (2d). Finally, the sentence in (2e) which involves a participle has a genitive meaning.

- (2) a. D nekk i y-ldi-n tabburt
 COP me COMP PREF-open-GEN door
 It is me who opened the door.
- b. Axxam-i-n-u
 house-COMP-GEN-1PSG
 My house.
- c. Axxam n wergaz⁶
 house GEN man
 The man's house.
- d. The opening of the door is mine.
- e. W'-i-la-n axxam-a?
 who-COMP-PART house-DET
 Whose house is it?

The analogy drawn between the element *i* in genitive constructions as in (2b) and the one involved in the participle as in (2a) has already been pointed to by other linguists in the past (see Galand 2013: 62). A number of facts suggest such an analogy between these two constructions. First, in both situations a coreference is established between two elements via the same complementizer *i* referred to as a relator in traditional Amazigh linguistics. In the genitive construction (2b), the complementizer establishes a coindexation relation between the genitive object *axxam* ‘house’ and the possessive suffix *-u*. In the participial construction in (2a) on the other hand, the complementizer *i* establishes a deictic relation between the A-bar extracted subject *nekk* ‘I’ and the verb. On the other hand, both constructions involve the particle *n* which at first sight does seem to relate to the genitive meaning. In (2c), the particle *n* appears as a free morpheme as opposed to its affixal position in (2a) and (2b). This, I believe, is what blurs the genitive origin and identity of the suffix *n*, resulting in its escaping the attention of most scholars who investigated this topic. As accurately pointed out by Baier (2018), previous analyses on AA tend to ignore the role and status of the suffix *-n* while focusing only on the 3rd person prefix or default marker, thus reducing the status of the suffix *n* to a mere element part of the discontinuous morpheme *y—n*. The rest of the discussion proceeds as follows. In Section 2, I introduce more data on AA from various Amazigh languages and genitive constructions. In Section 3, I articulate the analysis showing that the form known as the participle has in fact a genitive structure, which provides the only possibility to have a genitive subject that is coreferential with the clefted subject without creating a Case conflict.

2 DATA ON ANTI-AGREEMENT AND GENITIVE CONSTRUCTIONS

In this section, we introduce data on Anti-Agreement and genitive constructions from a few varieties of Amazigh and look into interdialectal differences. For instance, while AA is total in Kabyle, i.e. affecting all of person, number and gender, there are other varieties such Tuareg, where

⁶ “n wergaz” is pronounced “bbwergaz” due to assimilation.

AA is partial in that it affects only person but not gender and number. Other varieties such as Tachelhiyt, AA affects person and gender but not number. All this data points to the fact that person AA is always mandatory, not subject to interdialectal variation unlike number and gender, which are. Data on full AA from Kabyle are presented in § 2.1 Data on partial AA agreement from Tuareg and Tashelhiyt are presented in § 2.2 and 2.3, respectively. In § 2.4 and 2.5 we introduce more data regarding, respectively, a special class of verbs called verbs of quality in the literature, and negative sentences. Both verbs of quality and negative sentences present some peculiarities relevant to anti-agreement. In § 2.6, we introduce data on genitive constructions.

2.1 FULL ANTI-AGREEMENT: DATA FROM KABYLE

As mentioned earlier, there are three types of situations involving extracted subjects with Anti-Agreement effect, which include (i) *wh*-questions, (ii) relative sentences and (iii) cleft sentences. These situations are illustrated in (3a), (3b) and (3c), respectively, repeated from (1a-c) above.

- (3) a. Anta i y-ldi-n tawwurt?
 who.F.PL. COMP PREF-opened-SUFF door
 Who opened the door?
- b. Taqict-nni i y-ldi-n tawwurt tṛuḥ
 girl.F.SG-DEIC COMP PREF-opened-SUFF door left
 The girl who opened the door has left.
- c. D nekk i y-ldi-n tabburt
 COP me COMP SUFF-open-PREF door
 It is me who opened the door.

In all the examples above, the verb form used displays the same morphology $y-n$, known as the participial form, which does not agree with the extracted subject. The latter is feminine plural in (3a), feminine singular in (3b) and 1 singular in (3c). Although the examples given above are in the perfective aspect, the participial morphology $y-n$ is independent of aspect as shown with the examples (4a), in the aorist aspect, and (4b) in the imperfective, both examples are adapted from (3c) above.

- (4) a. D nekk ara y-ldi-n tabburt (aorist aspect = future)
 COP me COMP SUFF-open-AORIST door
 It is me who will open the door.
- b. D nekk a y-leddi-n tabburt (imperfective = present)
 COP me COMP SUFF-open-IMPREF door
 It is me who opens/is opening the door.

As we can see from the examples above, only the verb stem is affected by aspectual change, while the participial morphology $y-n$ remains the same.

It has been widely acknowledged in the linguistic literature on Amazigh that the participial form is derived from 3rd person by means of the morpheme n suffixation as illustrated in (6) with the verb *ldi* ‘to open’.⁷

⁷ See Galand 2006 for an overview of this debate in traditional linguistics.

- (5) a. Verb form 3rd M.SG
y-ldi
SUFF-open
- b. Participial form
y-ldi-n
PREF-open-SUFF

The morpheme *y-* associated with the form (5a) indicates 3rd person, masculine and singular. In (5b), the morpheme *y-* associated with the participial form is a default subject morpheme that is unmarked for person, gender and number. The contrast between the participial form and the verb inflection paradigm is illustrated below, using the sentence *ldi tawwurt* ‘open the door’ in the perfective.

(6)

	Pronoun	verb inflection	Participial inflexion
SG	1	Nekk ldi-γ tawwurt	D nekk i y-ldi-n tawwurt
	M. 2	Kecc t-ldi-d tawwurt	D kecc i y-ldi-n tawwurt
	F. 2	Kem t-ldi-d tawwurt	D kemi y-ldi-n tawwurt
	M. 3	Netta y-ldi tawwurt	D netta i y-ldi-n tawwurt
	F. 3	Nettat t-ldi tawwurt	D nettat i y-ldi-n tawwurt
PL	M. 1	Nekkwni n-ldi tawwurt	D nekkwni i y-ldi-n tawwurt
	F. 1	Nekkwenti n-ldi tawwurt	D Nekkwenti i y-ldi-n
	M. 2	Kenwi t-ldi-m tabraat	D kenwi i y-ldi-n
	F. 2	Kennemti t-ldi-mt tawwurt	D kennemti i y-ldi-n
	M. 3	Nitni ldi-n tawwurt	D nitni i y-ldi-n
	F. 3	Nitenti ldi-nt tawwurt	D nitenti i y-ldi-n

2.2 PARTIAL ANTI-AGREEMENT: DATA FROM TUAREG

Unlike the situation in Kabyle, Anti-Agreement Effect in Tamashaq affects person only in the singular form and both person and gender in the plural. This situation is illustrated with the relative sentences’ examples below, where the participle used is derived from the verb *əktəb* ‘to write’.

- (7) a. **Käy** wa **y-əktäb-än** tirot
you.M.SG. COMP PART letter
It is you who wrote the letter.
- b. **Käm** ta **t-əktäb-än** tirot
you.F.SG. COMP PART letter
It is you who wrote the letter.
- c. **ənta** wa **y-əktäb-än** tirot
he COMP PART letter
It is he who wrote the letter.
- d. **əntat** ta **t-əktäb-än** tirot
she COMP PART letter
It is she who wrote the letter.

- e. **Kāwāné** win **əktāb-n-en** tirot
 you.M.PL. COMP PART letter
 It is you who wrote the letter.
- f. **Kāmāté** tin **əktāb-n-en** tirot
 you.F.PL. COMP PART letter
 It is you who wrote the letter.
- g. **əntāné** win **əktāb-n-en** tirot
 they.M.PL. COMP PART letter
 It is you who wrote the letter.
- h. **əntānaté** tin **əktāb-n-en** tirot
 they.F.PL. COMP PART letter
 It is you who wrote the letter.

M. Aghali Zakara (p. c.)

In the examples given in (7) the participle has the following forms:

(8)

	Singular	Plural
Mas	y- əktāb-än	əktāb-nen
Fem	t- əktāb-ät	əktāb-nen

The participial forms above are derived from the verb *əktāb* ‘to restart’. We can recognize the participle marking *y—n* in the masculine singular, which is the same as the one described for the Kabyle variety above. This contrasts with the feminine form which displays a prefix *t-* and a suffix *-t*. This contrast between the feminine and the masculine suggests that the suffix *-n* is an old masculine marker and I have already elaborated on this idea in my previous work (Achab 2005b). Among the arguments mentioned is the fact that this opposition between *n* as a masculine marker and *t* as a feminine marker is also found in the number nouns *yiwen* (one, masculine) and *yiwet* (one, feminine) in Kabyle or their variants *yan/yat* in Tuareg and Tashelhiyt. We also find this opposition with the independent pronouns *nttan* (he) and *nttat* (she) in Tuareg and Tashelhiyt. Unlike these two varieties, the masculine has become unmarked in Kabyle where the opposition *netta/nettat* shows that the suffix *n* has dropped. We return to the discussion regarding the participial morpheme *n* in (Sections 2.6 and 3). In the Tuareg participial forms above, the vowel *ä* that precedes the suffix *-n* is epenthetic, a common phonological phenomenon in the language. Unlike the singular, the plural forms do not contrast with respect to gender. Moreover, the Tuareg forms do not display the prefix *y-* in the plural, unlike the Kabyle forms, which make them (Tuareg forms) look more like the verb inflection as regards the prefix position as illustrated below, ignoring the vowel *e* in the plural which is purely epenthetic.

(9)		Verb	Participle
SG	1	—	
	2	t—	
	3M	y/i—	y—n
	3F.	t—	t—t
PL	1	n—	
	2M.	t—m	—nen
	2F.	t—mt	—nen
	3M.	—n	—nen
	3F.	—nt	—nen

Note in passing that, contrary to the data from Kabyle, the Tuareg data suggests that the morpheme *y-*, is not a person default marker but a 3rd person masculine singular marker as the plural forms display a morphology without a prefix. The Tuareg data also reveals that agreement behaviour is also affected by the choice of the complementizer used. In (8), the complementizer agrees in number and gender. However, when the complementizer used is *a*, which is invariable with respect to number and gender as illustrated in (10),⁸ the participle may not inflect for number and gender, as illustrated with the examples below (from Aghali 1992: 64).⁹ According to Aghali-Zakara (1992: 64), the invariable use of the participle is more standard than its variable use.

- (10) a. aləs a igzämän ikeji (*Masculine Singular*)
 man DET PART.kill-M.SG chicken
 It is the man who killed the chicken.
- b. meddän a igzämän/əgzämnen ikeji (*Masculine Plural*)
 men DET PART.kill-M.SG chicken
 It is the men who killed the chicken.
- c. tañtut a igzämän/təgzämät ikeji (*Feminine Singular*)
 woman DET PART.kill-M.SG/F.SG. chicken
 It is the women who killed the chicken.
- d. šidodän a igzämän/əgzämnen ikeji (*Feminine Plural*)
 women DET PART.kill-M.SG chicken
 It is the men who killed the chicken.

It is noteworthy that the variable complementizer in (7) is nothing more than the invariable complementizer *a* combined with number and gender features as illustrated below.

⁸ Prasse (1972: 188-9) mentions another complementizer *i* used with verbs of quality, which he calls adjectives, when the antecedent is indefinite as in *adrar i-hägrin* ‘a mountain that is high’, which means ‘the high mountain’.

⁹ The feminine plural example, being identical to the masculine plural, was not in Aghali’s original examples, but added by the author.

(11)		Singular	Plural
	Mas	<i>wa</i>	<i>wi</i>
	Fem	<i>ta</i>	<i>ti</i>

The two types of complementizers (i.e. variable and invariable), however, differ in meaning. The invariable type is used for emphasis as illustrated with the examples below (from Aghali-Zakara 1992: 64).

- (12) *tanṭut a igzämän/təgzämät ikeji*
 woman DET PART.kill-M.SG/F.SG. chicken
 It is the woman that killed the chicken.

The variable type on the other hand relativizes the subject. Thus, the same sentence in (8) with the invariable complementizer *a* will have the relative interpretation when the variable complementizer is used instead as illustrated below.

- (13) *tanṭut ta təgzämät ikeji*
 woman DET PART.kill-M.SG/F.SG. chicken
 The woman who killed the chicken.

2.3 PARTIAL ANTI-AGREEMENT: DATA FROM TASHELHIYT

The Tashelhiyt variety offers yet three peculiarities. First, in Tashelhiyt, AA obtains with person and gender, but things are quite different when it comes to number. Unlike the Kabyle situation, agreement in number is possible in Tashelhiyt when the subject is in the plural as shown in (14a) to be contrasted with (14b).

- (14) a. *y-ufa-n-in*
 PART-found-PART-PL Boumalk (2003: 27)
 b. *y-ufa-n*
 PART-found-PART

The second peculiarity of participles in Tachelhiyt is that when there is no agreement in number between the plural subject and the participial form, which is in the singular, the morpheme *y-* may be dropped as shown in (15) below, unlike in the Kabyle and Tuareg situations illustrated above where the morpheme *y-* is mandatory in the singular.

- (15) a. *fulkin-in*
 pretty-PL Boumalk (2003: 27)
 b. *fulkin*
 pretty (SG)

(15a-b) contrast with (14a-b) in that only the latter displays the morpheme *y-*. Less surprising as far as (15a) is concerned because, as we have seen with the Tuareg examples above, 3-person plural

of the verb inflection in Amazigh does not have a prefix morpheme as seen in our discussion of the Tuareg examples above. The absence of the singular morpheme *y-* in (15b) is certainly driven by analogy with the plural form, although lacking the plural suffix *-n*. As will be seen in the next section, this arises the question as to the EPP feature.

The third particularity associated with participles in Tashelhiyt is the absence of the suffix *-n* from the aspectual form in the aorist aspect as illustrated in (16).¹⁰

- (16) tumyarin a ra yeddu
 women.F.PL. DET FUT PART
 It is the women who are going. Boumalk (2003: 26)

The aorist aspectual form of the participle in (16) in Tashelhiyt contrasts with the two other aspectual forms, namely the perfective and the imperfective aspectual forms of the participle which do require the suffix *-n* as shown below.

- (17) a. i-dda-n (perfective) Boumalk (2003: 27)
 b. i-tt-eddu-n (imperfective)

2.4 PARTICIPLES OF VERBS OF QUALITY

There is a special class of intransitive verbs in Kabyle Amazigh, traditionally referred to as verbs of quality which, unlike ordinary verbs, lack the prefix and show up only with a suffix instead. In some dialects such as the Kabyle variety of At Ziyān, initially discussed by Allaoua (1986), the affixes displayed correspond to accusative (object) clitics. In my previous work (Achab 2005a, 2006), I called these verbs accusative verbs as opposed to ordinary verbs which display nominative subject clitics. The contrast between these verbs is illustrated with the table below.¹¹

¹⁰ The aspectual form traditionally called aorist includes a temporal future value.

¹¹ For a discussion of this class of verbs called verbs of quality see Achab (2005a), Galand (1980, 1990) and Allaoua (1986, 1993). The verbs showing with a prefix are called nominative verbs by Achab (2005a, 2006/2012).

(18)	Verbs of quality (accusative)	Nominative verbs	
	1	meqqr-γ	ldi-γ
	2 M.	meqqr-ḍ	t-ldi-ḍ
	2 F.	meqqr-ḍ	t-ldi-ḍ
	3 M.	meqqr	y-ldi
	3 F.	meqqr	t-ldi
	1	meqqr-it	n-ldi
	2 M.	meqqr-it	t-ldi-m
	2 F.	meqqr-it	ldi-mt
	3 M.	meqqr-it	ldi-n
	3 F.	meqqr-it	ldi-nt

Likewise, the participial form of verbs of quality such as the one above lacks the prefix –y (or its feminine variant t-) and displays only the suffix –n. The rest of the rules are the same as described above for each of the varieties considered. We return to the morphology of the participial form in the next section.

2.5 ANTI-AGREEMENT AND NEGATION

The negative participial form reveals two essential properties. First, AA is always total even in varieties such as the Tuareg where AA is only partial. Second, it reveals that the suffix n is a clitic which can be substituted for the suffixed morpheme y. This situation is illustrated with the Kabyle examples below, keeping in mind that negation in Kabyle is indicated by the discontinues morpheme *ur...ara*.

- (19) a. Anta ur n-ldi ara tawwurt?
 who.F.PL. NEG PREF-opened NEG door
 Who did not open the door?
- b. Taqcict-nni ur n-ldi ara tawwurt tṛuḥ
 girl.F.SG-DEIC NEG PREF-opened NEG door left
 The girl who opened the door has left.
- c. D nekk ur n-ldi ara tabburt
 COP me NEG PREF-opened NEG door
 It is me who did not open the door.

The form of the negative participle is *n-ldi* in (19) contrasts with the form *y-ldi-n* seen previously. The same situation obtains in the Tuareg variety when negation is used as illustrated below (from M. Aghali-Zakara 1992: 57).

- (20) a. Barar wa wer n-əles əššayəl-net (*Masculine Singular*)
 Boy DET NEG PART.restart work his.3M.SG
 The boy who did not restart his work.

- | | | | | | | |
|----|--|-----|-----|--------------|------------------|------------------------------|
| b. | Ibararen | win | wer | n-əles | əššayəl-näsän | (<i>Masculine Plural</i>) |
| | Boys | DET | NEG | PART.restart | work-their.3M.PL | |
| | The boys who did not restart their work. | | | | | |
| c. | Tabarat | ta | wer | n-əles | əššayəl-net | (<i>Feminine Singular</i>) |
| | Girl | DET | NEG | PART.restart | work-her.3F.SG | |
| | The who did not restart her work. | | | | | |
| d. | Tibararen | tin | wer | n-əles | əššayəl-näsnät | (<i>Feminine Plural</i>) |
| | Girls | DET | NEG | PART.restart | work-their.3F.PL | |
| | The girls did not restart their work. | | | | | |

Another interesting fact in addition to those mentioned above is observed in Tachawit, another Amazigh variety spoken in the Aures (North-East of Algeria) where the suffix *n*, although prefixed, does not suppress the suffix morpheme *y-*, but adjoins to it, as shown below (from Penchoen 1973: 88).

- (21) Ta ud ny-ttuwaswa-š
 DET.F. NEG PART-(passive)irrigate-NEG
 The one that is not irrigable.

However, this property of having *ny* as a cluster is not specific to negation as it also occurs with other particles such as the aorist *ra*. Both the negative particle *ur* and the aorist particles *ad* are known to attract clitics cross-dialectically in Amazigh. Curiously, the data in Tachelhiyt where the aorist particle *rad* is used, the participle suffix *n* drops altogether as seen previously (see example (16) above). We can assume that it was first attracted to the prefix position by the particle *ra* before it is dropped in the language. The question that arises with respect to the form without the suffix – *n* is how the syntactic role associated with such a suffix is fulfilled. This question is addressed in subsequent work for lack of time. In the next section, we are going to investigate the nature of the determiners which introduce the participial form.

2.6 GENITIVE CONSTRUCTIONS AND THE PARTICIPIAL FORM

In this section we further discuss genitive constructions so that we highlight the characteristics they share with participial constructions. The genitive construction paradigm has two forms, known as the short forms, which display the genitive preposition *n* in the singular, and the long forms which do not display such a preposition. These two forms are illustrated below using the noun *axxam* ‘house’ as the genitive object.

(22)		Long forms	Short forms
	SG		
	1	Axxam-i-n-u	Axxam-i-w
	2 M.	Axxam-i-n-k	Axxam-i-k
	3 M.	Axxam-i-n-m	Axxam-i-m
	3 F.	Axxam-i-n-s	Axxam-i-s
	PL		
	1	Axxam-nn-aγ	Axxam-nn-aγ
	2M.	Axxam-nn-wen	Axxam-nn-wen
	2F.	Axxam-nn-went	Axxam-nn-went
	3M.	Axxam-nn-sen	Axxam-nn-sen
	3F.	Axxam-nn-sent	Axxam-nn-sent
		Genitive constructions	

In (26), the long forms in the singular display both the complementizer *i* and the genitive preposition *n*. Conversely, the singular short forms display only the complementizer *i* but not the preposition *n*. The reduplication of the phoneme [n] in the plural paradigms of both long and short forms indicates that the complementizer *i* is assimilated into [n]. In the singular paradigm of the short forms however, the preposition *n* has simply dropped. The survival of the complementizer *i* in the long genitive forms seems to be specific to Kabyle as other varieties shows that it has been assimilated into *n* even in the singular short forms just like the plural. Seen this way, genitive constructions such the ones in (22) and the participial form under investigation both involve the genitive particle and the complementizer *i*. The genitive interpretation of the participial form is straightforward in a sentence such as the one in (23a) will have the meaning in (23b), in English, but also close to the genitive-participial sentence formulated in (23c).

- (23) a. D nekk_i i_i y-ldi-n tabburt (perfective)
 COP me COMP SUFF-open-PERF door
 It is me who opened the door.
 b. The opening of the door is mine.
 c. Wilan axxam-a?
 whose house-DET
 Whose house is it?

is that in both situations the complementizer *i* serves as a relator between the pronoun/noun that precedes it and the pronoun (or clitic) that follows it. In other terms, in (22) there is a coindexation between the genitive object *axxam*, the element *i* and the genitive subject. The same type of coindexation is involved in participial constructions between the A-bar extracted subject, the complementizer *i* and the subject of the participle, despite lack of agreement, as illustrated with the example below.

In both situations, the complementizer *i* is crucial in relating the elements that precedes and follows it. Originally, the complementizer is a deictic element that verbally points to its antecedent.

In Kabyle, the complementizer can be *i*, if the aspect involved corresponds to perfective as in (23a), but it can also be *a*, if the aspect corresponds to the imperfective (24a), or the aorist (24b).

- (24) a. D nekk a y-leddi-n tabburt (imperfective).
 COP me COMP SUFF-IMPER.open door
 It is me who is opening the door.
- b. D nekk a ra y-ldi-n tabburt (aorist)
 COPme COMP aor. SUFF-open-AORIST door
 It is me who will open the door.

In the present study, we do not get into complementizer of the type illustrated in (24) for lack of space and time. Having introduced data on both anti-agreement and genitive constructions, let us now move to the analysis.

3 ANALYSIS

The data introduced above from different varieties of Amazigh suggest that the suffix *n* may also be substituted for the prefix *y-* in negative sentences (see § 2.5). This suggests that these two elements contain a feature of some nominal sort that does the same job. Therefore, the question that arises at this level is the following: what does the morpheme *y-* lacking the person feature, or the morpheme *-n* as in the negative participial sentences in (19), spell-out? According to Ouhalla (2005), [PERSON] is the feature that determines V category while [CLASS] is a nominal feature that determines N or D category. Accordingly, he concludes, participles in Amazigh are not verbs but nominals because they lack the person feature. Ouhalla further proposes that “[T]he presence of these two features on a given functional head F results in establishing a relationship between F and the verb, on the one hand, and F and the subject on the other.” (Ouhalla 2005: 671) I do subscribe here to Ouhalla’s view with the conclusion that the participial form results from removing the person feature from the verb inflection at least in the varieties where agreement shows in gender and number but not in person, in the way illustrated below.

- (25) $y-$ = [3 person, singular, masculine] >> $y-$ = [~~3~~person, singular, masculine]

If we take into consideration the Kabyle data where AA affects also number and gender in addition to person, we get the following picture.

- (26) $y-$ = [3 person, singular, masculine] >> $y-$ = [~~3~~person, singular, masculine]

The structure in (25) illustrates partial AA while (26) illustrates full AA. The question that is worth asking here is why should the feature matrix of the morpheme *y-* get impoverished at all, knowing that there are other varieties of Amazigh, namely eastern, such as Siwi (spoken in the Oasis of Siwa, in Egypt), Izewwaren and Adrar Ineffusen (in Libya) where AA Effect does not happen at all in similar situations as illustrated with the Izewwaren example below (from Galand 2013: 184, who borrowed it from Beguinot 1942: 137), to be compared with the Tachelhiyt example in (28) that displays a participial form.

- (27) tmaṭṭû t éḷli teḳṃû
 woman COMP 3SF.entered
 The woman who came in.

- (28) *ɔntat* *lli* *y-ura-n* *tabrat* (A. Boumalk, pc.)
 she COMP PART letter
 It is she who wrote the letter.

Unlike the participle *y-ura-n* in the Tachelhiyt example in (28), the verb *tekmû* in (27) is inflected for 3f.s. with no participial suffix, whether *-n* or *-t*. This example shows that anti-agreement violation is possible and therefore AAE is not a constraint that holds universally in languages which experience them. It only means that when they are observed, they must be explained. Therefore, the explanation to be provided for AAE should also explain how the example in (27) is correct or why/how the Amazigh variety under consideration has developed such a construction that does not obey AAE. Before we consider the relation between the two constructions in (27) and (28), let us first account for the full AAE illustrated in (26) for Kabyle. To do so, there are two distinct questions that we need to keep in mind. The first question has to do with the identification of the functional counterpart of the person feature which has to be stripped from the participial. The second question is to identify the feature that allows the spelling out of the morpheme *y-*. In other words, although stripped of all its ϕ -features, the morpheme *y-* in (26) must still contain some kind of active syntactic feature of some kind which it spells-out and which is not reflected morphologically. Let consider these two questions in turn, starting with the properties of the person feature.

4 THE ROLE OF [PERSON]

To better identify the role of the person feature, let's first examine situations where there is agreement in person between the subject and the verb as illustrated with the Kabyle non-participial sentences below showing a VSO order (29a), SVO order (29b) and pro with no lexical subject (29c).

- (29) a. *I-ldi* *weqci* *tawwurt*
 3S.M.opened boy FS the door
 The boy opened the door.
 b. *Aqci*/**wqci* *i-ldi* *tawwurt*
 FS.the boy/CS.the boy 3S.M-opened FS.the door
 The boy opened the door.
 c. *I-ldi* *tawwurt*
 3S.M-opened FS the door
 He opened the door.

For the time being, let us assume that the sentences in (29a-c) have the structures illustrated in (30a-c) respectively, to be modified later.

- (30) a. [CP [TP *i-ldi* [VP *weqci* [V *tawwurt*]]]]
 b. [CP *Aqci* [TP *i-ldi* [VP V *tawwurt*]]]
 c. [CP [TP *i-ldi* [VP V *tawwurt*]]]

The lexical postverbal subjects *weqci* in (30a), which shows in the construct state (CS henceforth) agrees with the verb via the the agreement morpheme *i-* which is 3rd m.sg. The preverbal subject

aqcic in (30b), which shows in the free state (FS henceforth) also agrees with the agreement morpheme *i-*. The sentence (30c) does not contain a lexical (or referential) subject; therefore, we assume it to have a *pro* subject, which is nothing less than the reflection of the rich agreement morpheme *i-* on the verb. If we assume that a *pro* is licensed in Spec of T in (30), we should also assume it is licensed in (30a) and in (30b) under the same conditions. Remember that in Amazigh languages the morphology of nouns also contrasts with respect to *state*, in addition to number and gender, as illustrated below with the nouns *aqcic* ‘boy’, and *taqciɕt* ‘girl’:¹²

(31)

	Masculine	Feminine
Free state	<i>aqcic</i>	<i>t-aqcic-t</i>
Construct state	<i>wqcic</i>	<i>t-qcic-t</i>

The FS form is characterized by the presence of the initial vowel *a-*, which drops when the noun is in the CS form. The morpheme *w* showing up in the initial of the CS masculine *wqcic* is an old masculine marker which is no longer perceived as such in the contemporary language as it has almost become a CS marker. I have already demonstrated in a previous study (Achab 2003) that FS nouns are full DPs while CS nouns are bare NPs which need to be selected by a syntactic head D.¹³ A noun in the CS form is illicit in the SVO order as evidenced with the noun *aqcic* in (30b). This difference between free state and construct state is crucial to our current discussion as it directly relates to person feature in a way to become clear shortly. It is by now a well-known fact among Amazigh scholars that the initial vowel *a* on the noun *aqcic* in (30b) is an incorporated determiner while it is demonstrated by Achab (2003) that the morpheme *y-* showing on the verb (30a-c) is an incorporated pronoun and serving as the head for the argument projection as well as the spelling out of the EPP feature on T. Following Chomsky (2001), in the present study D feature is recast as a person feature part of the ϕ -set of features. In addition to ϕ -features, the agreement morpheme *y-* is also marked for person and D features. Accordingly, in (30c), where there is no lexical subject, in the agreement morpheme *y-* includes both a D (or EPP) and a person feature. Likewise, the agreement morpheme element *y-* in the VSO sentence (30a) too has both features, person and EPP because the argument (in the CS form) lacks the initial vowel *a* (see Achab 2003 for a discussion). Accordingly, both sentences (30a) and (30c) can be interpreted as having a *pro* in spec of T. Similarly, in the SVO sentence (30b), the morpheme *y-* is in the domain of T while the FS lexical argument, which has its own head determiner (represented by the initial vowel), is in Spec of CP (or TopP, outside the domain of T).

In all three sentences in (30), T probes the morpheme *y-* on the verb inflexion for its ϕ -features. As a result, the ϕ -features and the uninterpretable Case feature of T are eliminated, its EPP feature satisfied by the person feature while the Case feature of the morpheme *y-* satisfied. In the SVO sentence (30b), the derivation further continues with CP (TopP) merging with TP. Should the external argument be assumed to be generated in the domain of *v*, it would surface in the CS form because of the morpheme *y-* acting as its D, and as a CS noun, i.e. as a bare NP it could not move

¹² See Achab (2003) for an analysis of state alternation.

¹³ Only DPs constitute arguments, bare NPs do not (Stowell 1989, Dechaine 1993, 2002 and Longobardi 1994).

to spec of TopP. A full DP or its head D can undergo movement but not a bare NP alone.¹⁴ Therefore, the FS argument can only merge with TopP as a full DP as evidenced by the initial vowel. The DP which is in Spec of Top is needed to eliminate the EPP feature of Top, while the morpheme *y-* matches and therefore eliminates the ϕ -features of T. The Case feature on T gets eliminated and the structural nominative Case established as an off shoot in the terms described by Chomsky: “[s]tructural Case is not a feature of the probe (T or *v*) but it is assigned a value under agreement then removed by Spell-Out from the narrow syntax. The value assigned depends on the probe: nominative for T, accusative for *v*. Case itself is not matched, but deletes under matching of ϕ -features.” (Chomsky 2001: 6).

There remains to explain how the Case of the preverbal lexical is spelled out given that the functional case was checked by the agreement morpheme *-y*. For now, I do not have any better explanation than to include them in a chain of some sort because both the agreement morpheme and the preverbal subject are located within the same CP phase. What is important is that the functional case feature associated with T, inherited from C, has been valued and checked by the morpheme agreement by virtue of the configuration spec, T. In other words, the preverbal subject and the morpheme *i-* on the verb and the preverbal subject have only one Case feature, which is used to eliminate the uninterpretable feature on T. Note that this problem does not arise with respect to the postverbal position since the morpheme *i-* is the head projection of the CS lexical subject, which a bare NP, not a DP.

Now that we have explained the derivation of the sentences in (30) involving a person feature, we are in a position to compare with the participial constructions lacking person agreement. This is taken care of in the next subsection.

4.1 PERSON ANTI-AGREEMENT

In the introduction to Section 3, we suspended the following question: what does the morpheme *y-*, which lacks the person feature, or the morpheme *-n*, as in the negative participial sentences in (19), spell-out? Following Ouhalla’s (2005) analysis, mentioned above, we take this feature to be [CLASS]. Accordingly, we assume that unlike verbs, participles in Amazigh do not have the capacity to do the job that requires person feature’s assistance, while at the same time, they need to check or spell-out a feature that requires [CLASS’] assistance. Following our suggestion put forward in section 2.6 according to which participles share the same elements, the complementizer *i* and the genitive particle *n* as shown with the following examples.

(32) Axxam-i-n-u
house-COMP-GEN-1SG.
My house.

(33) D nekk i y-ldi-n tawwurt (perfective)
COP me COMP SUFF-open-PERF door
It is me who opened the door

In (32), the genitive element *n* is selected by the complementizer *I* and appears to adjacent to it. In

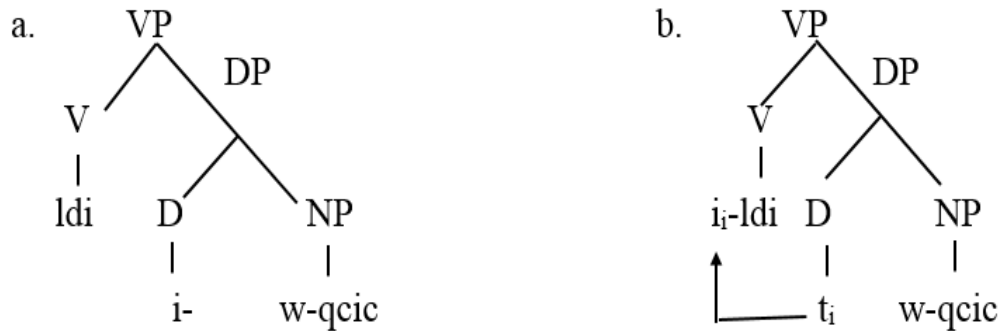
¹⁴ This also follows by the assumption made by a number of linguists that DPs are arguments while bare NPs are not (Stowell 1989, Dechaine 1993, 2002 and Longobardi 1994).

(33), the particle *n* appears as a suffix on the verb stem subsequent to the movement of the verb stem *ldi* as shown below, ignoring other details for the time being.

(34) [CP [TP d nekk [CP i [CLASSP [GEN n [ASPP [VP ldi [DP tawwurt]]]]]]]]

The structure above does not yet match the sentence in (33) as we are still missing the participial suffix *y-* and it does not reflect the right order between the root \sqrt{ldi} and the genitive particle. Let us discuss these facts now, starting with the morpheme *y-*. Achab (2003) provides an analysis of construct and free state in Amazigh where he argues that CS nouns are bare NPs which need a head D to be projected as opposed to FS nouns which are full DPs. This solves the conundrum regarding the projection of postverbal subjects which are in CS, therefore lacking the head D. The morpheme *y-* then incorporates onto the verb in the way illustrated in (36) for the VSO sentence given in (35), ignoring the object *tawwurt*, which is irrelevant to the discussion.

(35) **i-ldi** w-*qcic* tawwurt
 3SG.M.-opened CS-boy door
 The boy opened a door.



But the structure above is about a fully inflected verb which a postverbal subject that stands in full agreement with the subject *pro* (or the agreement morpheme *y-*) As far as participles are concerned, we know now that the morpheme *y-*, although spelled-out, lacks the person feature. But unlike the VSO sentence in (35), there is no for a D to serve as the head of projection for a bare NP postverbal subject because, as shown above, participial (or AA) sentences do not have any postverbal subject and there is no other CS bare NP to justify such a role for the agreement morpheme. Accordingly, we need to find the reason of being of such a morpheme as well as its original site. The answer to this question resides in the category status of the participle. In most languages, the item known as the participle forms its own category as it is neither a verb nor a noun or may be a mix of both because they are deverbal nominals.¹⁵ The nominal status of the participle in Amazigh is disputed and participles cannot be used in nominal positions where NPs (or DPs) are expected. Accordingly, even the terminology chosen to refer to it as a participle is disputed, although it is being perpetuated for lack of a better term (see Galand 2013). What Amazigh participles share however with participles known in other languages such as English or French is the fact that they do not carry

¹⁵ As a matter of fact the word *participle*, from Latin *participium*, was specialized by Latin grammarians because the category it refers to “participates” both as a noun and as a verb.

the person feature and for that reason they cannot satisfy the EPP feature on a functional category, which is T for most linguists, albeit inherited from C (Chomsky 2001 among many others). This lack of person in the verb inflexion is explained in terms of a constraint when the T in the structure lacks person and this type of T is called defective (T_{def}) by Chomsky (2001). Chomsky argues that when T is defective it means that it is not selected by C or v^* , which constitute a strong phase, but by another category, such as V for instance, which lacks EPP feature and which constitute a weak phase.¹⁶ Ouhalla (2005) relates this difference to the feature composition of Predicates which he takes to be functional categories:

- (36) a. Pred [PERSON, CLASS] (verbal predicate)
 b. Pred [NUMBER, CLASS] (participial predicate)
 c. Pred [CLASS] (nominal predicate)

Ouhalla's classification of Predicates recalled above suggests that the reason of being of the participle is to provide the features [NUMBER] and [CLASS], but this clearly problematic as the morphology of participles in some varieties such as Kabyle displays no number and no gender as explained in Section 2.1. If the participle has none of the ϕ -features and no class feature, then what does the morpheme y - spell-out? Chomsky (2001) suggests three kinds of uninterpretable features which need to be eliminated by mapping them onto their feature counterparts on lexical items: (i) features such as the Φ -set which select a target/probe and determine what kind of category K it seeks; (ii) features such as EPP which determine whether P offers a position for movement, and (iii) features such as Case to select the category K that is moved. We have excluded all these features in the course of discussion, including Case which is valued as an offshoot as the relation Agree is established. Therefore, unless we invent new features, the only feature that remains has to do with the genitive relation. Genitive constructions are known to have a head category, which is either a preposition or a case across languages, a subject and an object as illustrated with the following examples.

- (37) a. Her book
 b. Aksel's book
 c. The door of the city

In the examples above, the head corresponds to the genitive pronoun in (37a), the particle "s" in (37b) and the preposition "of" in (37c); the object correspond to "book" in (37a-b) and "door" in (37c); while the subject corresponds to 3.f.sg in (38a), "Aksel" in (37b) and "the city" in (37c). If we are analyzing the participle as a genitive construction, we have to identify these three elements in the example used for illustration in (38), repeated below

- (38) D nekk i y-ldi-n tawwurt (perfective)
 COP me COMP SUFF-open-PERF door
 It is me who opened the door.

where the object corresponds to the idea conveyed by the root \sqrt{ldi} , the genitive head by the particle

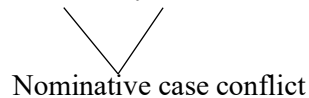
¹⁶ See Ouali (2008) for an alternative proposing that T_{def} is selected by C although it does not inherit its features.

n and the subject (i.e. genitive EPP) by the morpheme *y-*. However, the subject of the genitive should not carry a person feature as otherwise it would give rise to a Case conflict since it would inherit the [PERSON] feature from C and, as a result, the higher subject nekk “I” / “me” would be illegitimate. The genitive particle has its own inherent Case, therefore there is no need for a configurational case.

5 CONCLUSION

In this paper we have developed the idea that the form called participle in Amazigh traditional linguistics and anti-agreement in generative linguistics is derived by means of the genitive particle *n* that appears as a suffix. After discussing data from various dialects drawing a parallel between participial and genitive constructions, we showed that the genitive is used as an avoidance strategy so that T loaded with EPP and Case features not be selected as otherwise a T would require a transfer of a Case and EPP/person feature to from C to T, which would leave the clefted subject without a Case causing the derivation to crash as illustrated below.

(39) [CP [TP d [CP nekk i [TP y-ldi [DP tawwurt]]]]]]]



Instead, the genitive makes it possible to select a defective T to avoid a Case and EPP conflict between a subject morpheme on the verb (or its *pro* version).

(40) [CP [TP d [CP nekk i [GEN n [TP_{def} y-ldi [DP tawwurt]]]]]]]]]



REFERENCES

- Achab, K. (2003). Alternation of state in Berber. In Jacqueline Lecarme (ed.) *Research in Afroasiatic Grammar II*. Amsterdam: John Benjamins.
- Achab, K. (2005a). Stative and Resultative Structures of Amazigh verbs of quality. *Cahiers Linguistiques d'Ottawa*, 33, 65-95, Ottawa.
- Achab, K. (2005b). Le genre et son origine en berbère et dans les langues chamito-sémitiques. In A. Lonnet & A. Mettouchi (eds) *Faits de Langues 26*, numéro spécial intitulé *Les Langues Chamito-Sémitiques (afro-asiatiques)*, Paris.
- Achab, K. (2012). *Internal Structure of verb Meaning, a Study of Verbs in Tamazight (Berber)* Cambridge Scholars Publications. Newcastle: England.
- Aghali Zakara, M. (1992). *Psycholinguistique touarègue*. Paris INALCO.
- Allaoua, M. (1986). *Description linguistique d'un parler de Petite Kabylie (Ayt- Ziyane)*. Thèse de doctorat, Université de Copenhague.
- Baier, N. (2018). *Anti-Agreement*. Thesis Dissertation. University of California, Berkeley.
- Beguino, F. (1942). *Il berbero nefusi di Fassato*. Roma. Istituto per l'Oriente, mentioned by Galand (2013).
- Boumalk, A. (2003). *Manuel de conjugaison du tachelhit (langue berbère du Maroc)*. Paris. L'Harmattan.

- Chomsky, N. (2001). Derivation by phase. *MIT Occasional Papers in Linguistics*, 18. Cambridge, MA.
- Dechaine, R.-M. (1993). Serial Verb Constructions. In J. Jacobs et al. (eds.) *Syntax: An International Handbook of Contemporary Research*. 799-825. Berlin: de Gruyter.
- Dechaine, R.-M. (2002). Decomposing Pronouns. *Linguistic Inquiry*, 33, 409-422.
- Galand, L. (1980). Une integration laborieuse: les verbes de qualité du berbère. *Bulletin de la Société Linguistique de Paris*, 75, 347-62.
- Galand, L. (1990). Du nom au verbe d'état: témoignage du berbère. In: HansMukarovsky (Ed.) *Proceedings of the Fifth International Hamito-Semitic Congress*. Viena.
- Galand, L. (2006). "Le participe" berbère. In A. Lonnet & A. Mettouchi (eds) *Faits de Langues*, 26, numéro spécial intitulé *Les Langues Chamito-Sémitiques (afro-asiatiques)*, Paris.
- Galand, L. (2013). *Regards sur le berbère*, Tizi-Ouzou, Editions Achab.
- Longobardi, (1994). Reference and proper names: a theory of N-movement in syntax and logical form. *Linguistic Inquiry*, 1994, 609-665.
- Ouali, H. (2008). On C-to-T -feature transfer: The nature of Agreement and Anti-Agreement in Berber. In *Agreement restrictions* (pp. 159–180). Berlin: Mouton de Gruyter.
- Ouhalla, J. (1993). Subject-extraction, negation and the anti-agreement effect. *Natural Language & Linguistic Theory*, 11, 477-518
- Ouhalla, J. (2005). Agreement, Anti-agreement and the EPP. *Natldil Language and Linguistic Theory*, 23, 655-686.
- Penchoen, T. (1973). *Étude syntaxique d'un parler berbère*. Naples: Centro di Studi Magrebini.
- Prasse, K.-G. (1972). *Manuel de grammaire touarègue (tahaggart)*. (Vol. 3). VI-VII. Verbe. Akademisk Forlag, Copenhagen.
- Stowell, T. (1989). Null Antecedents and Proper Government (1986). In S. Berman, J.-W. Choe and J. McDonough, eds., *Proceedings of NELS 16, GLSA*, Amherst Mass., 476-493.