Weak and strong definites in Kabyle[*]

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SUMMARY

There appears to be little consensus on the marking of definiteness in Kabyle, and in Amazigh more generally (see e.g. Lahrouchi 2013 on this issue). The goal of this paper is to fill this gap. After arguing that current theories of definiteness in Amazigh do not adequately account for the definiteness facts in Kabyle, I provide a robust description of definiteness marking in the language. Specifically, I argue that Kabyle marks the distinction between so-called *weak* and *strong* definites (see Schwarz 2009). I then provide a preliminary analysis of definiteness in Kabyle, which derives this semantic distinction compositionally.

RÉSUMÉ

Il ne semble pas y avoir de consensus sur la manière dont la définitude est marquée en kabyle et dans les langues berbères plus généralement (voir par ex. Lahrouchi 2013 sur cette question). Cet article a pour but de combler cette lacune. Après avoir démontré que les théories actuelles de la définitude en langues berbères ne peuvent expliquer adéquatement les faits en kabyle, j'offre une description de la définitude en kabyle. Plus précisément, je démontre que le kabyle marque la distinction entre la définitude «faible» et la définitude «forte» (voir par ex. Schwarz 2009 sur cette distinction, nommée *weak* et *strong definiteness* en anglais). Je propose ensuite une analyse préliminaire de la définitude en kabyle qui explique cette distinction sémantique de manière compositionnelle.

1 INTRODUCTION

Though definiteness in Amazigh has received some attention (see e.g. Vycichl 1957; Guerssel 1995; Achab 2003; Ouhalla 2005; Mettouchi 2011; Lahrouchi 2013), it remains relatively understudied.

Moreover, existing work on Amazigh definiteness falls short of consensus. While some researchers have argued that definiteness is associated with the so-called "construct" and "free state" agreement paradigms (Vycichl 1957; Chaker 1995), others have specifically argued against this generalization, providing different accounts of how definiteness should be derived (see e.g. Guerssel 1995; Achab 2003). In this paper, I argue that previous accounts of definiteness in Amazigh either make wrong predictions or cannot capture the entirety of the data.

The main goal is to show that Kabyle marks the distinction between two types of definites: *weak* definites and *strong* definites (Schwarz, 2009). Roughly speaking, weak definiteness are definites that presuppose uniqueness, whereas strong definiteness are definites that presuppose both uniqueness and anaphoricity. I demonstrate that while weak definites are realized as bare nouns (1), strong definites require the presence of the postnominal determiner *-nni* (2).[1]

(1) i-swa   w-rgaz.
     3M.SG-drank CS.man
     'The man drank.'   (Weak definite in Kabyle)

(2) i-swa   w-rgaz-**nni**.
     3M.SG-drank CS-man-DEF
     'The man drank.'   (Strong definite in Kabyle)

The structure of the paper is as follows. In section 2, I summarize previous analyses of definiteness in Amazigh. In section 3, I provide background on the distinction between weak and strong definites, and then show that Kabyle marks this distinction. In section 4, I provide a preliminary formal analysis of definiteness marking in Kabyle. Section 5 concludes.

2   PREVIOUS WORK ON DEFINITENESS IN AMAZIGH

In this section, I provide a summary of the literature on definiteness in Amazigh. In section 2.1, I address theories that have linked definiteness to the Amazigh "state alternations". In section 2.2, I address Guerssel's (1995) theory, which ties definiteness to clitic-doubling. In section 2.3, I present Achab's (2003) theory, partially adopted in this paper, which derives definiteness via the use of a covert type-shifting operation.

2.1   STATE ALTERNATIONS AND DEFINITENESS

A number of linguists working on Amazigh languages have considered associating the Amazigh "state" alternation paradigm, provided in Table 1, with definiteness (see e.g. Vycichl 1957, Chaker 1995).

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[1] To appreciate the contrast between weak and strong definites, it is necessary to establish appropriate context. I do not provide context in (1) and (2), context forcing the different types of definites is provided in section 3.

Table 1: Singular state alternations in Kabyle

	Construct State	Free State
M	**w**-NOUN	**a**-NOUN
F	**t**-NOUN-**t**	**ta**-NOUN-**t**

An example of such an analysis is Vycichl 1957, who associates the free state vowel *a–* with the definite determiner (Achab, 2003).

However, as already pointed out by many linguists working on Amazigh (e.g. Guerssel 1995; Achab 2003; Ouhalla 2005; Lahrouchi 2013), neither of the two states should be synchronically associated with definiteness.[2] Nominals inflected with construct or free state both readily receive definite and indefinite interpretations depending on the contexts in which they occur, as shown by the following example from the Ait Seghrouchen dialect of Amazigh:[3]

(3)   y-wcu   wryaz **ta-cur-t** i   **w-rba**.
       3M.S-gave man   FS.ball to CS-boy
       'The man gave a/the ball to a/the boy.'   (adapted from Guerssel 1995)

As indicated in the translation of the above example, due to Guerssel 1995, free and construct state forms can both receive definite and indefinite interpretations. Therefore, like previous work, I conclude that state alternations are unrelated to definiteness in Amazigh.

2.2   GUERSSEL 1995

After concluding that definiteness cannot be governed by state alternations, Guerssel (1995) proposes that definite interpretations are associated with clitic-doubling. This is partly based on the observation that bare subjects, contrary to bare objects, must be interpreted as definite:[4]

(4)   a.   y-wtu   w-ryaz ta-funas-t.
             3MS-drank CS-man FS.cow
             'The/*a man hit the/a cow.'   (Guerssel, 1995)
       b.   t-wtu   t-funas-t a-rgaz.
             3FS-hit CS-cow FS.man
             'The/*a cow hit the/a man.'   (Guerssel, 1995)

As shown above in (4b) and (4b), while subjects must receive definite interpretations, objects can be interpreted as definite or indefinite depending on the context.

To account for this asymmetry, Guerssel argues that what has been traditionally described as verbal agreement, *y-* and *t-* in (4), is in fact a case of clitic-doubling, and that this clitic-doubling

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[2] This does not preclude that vowel *a-* from having once served as a definite determiner.

[3] While the free state is used with preverbal subjects, direct objects, and objects of some prepositions, the construct state is used with postverbal subjects, objects that have been clitic doubled, and objects of some other prepositions (Achab, 2003).

[4] By "bare subjects/objects", I mean nouns that do not co-occur with an indefinite quantifier or a definite determiner of any kind, including demonstratives.

is what forces the definite interpretation.[5] He compares this with uncontroversial cases of clitic-doubling in Amazigh, as in the optional doubling of the dative object in (5b), which does indeed always correlate with a definite interpretation.

(5) a. Wci-x   aysum i-w-mucc.
          gave-1S meat   to-CS.cat
          'I gave meat to the/a cat.'
     b. Wci-x-**as**   aysum i-w-mucc.
          gave-1S-DAT.3S meat   to-CS.cat
          'I gave meat to the/*a cat.' (lit. 'I gave him$_i$ meat to the cat$_i$)   (Guerssel 1995)

As shown above, when the dative object is not clitic-doubled, as in (5a), both definite and indefinite interpretations of the dative object are available. When, on the contrary, the object is clitic-doubled, only the definite interpretation is available.[6]

   This account, however, makes incorrect predictions. For one, if subject marking on the verb is a case of clitic-doubling, then it should not be possible for a verb to be inflected with subject marking when the subject is indefinite. Nonetheless, subjects introduced with the indefinite determiner *yiwn* are also obligatorily cross-referenced for number and person on the verb, contrary to what Guerssel's account predicts:

(6) ***(y)**-arẓa   yiwn w-rgez axxam-iw.
     3M.SG-break INDF CS-man FS.house-my
     'A man destroyed my house.'

In (6), the indefinite subject is clearly cross-referenced with third person marking on the verb. Therefore, subject marking on the verb cannot be what forces the definite interpretation of subjects in examples like (4).

   Furthermore, though it is true that bare subjects in Kabyle generally receive definite interpretations, it is not the case that *all* subjects in the language must be definite. While unergative and transitive constructions force definite interpretations of bare subjects, unaccusative constructions allow both definite and indefinite interpretations. This is illustrated in the examples below, with scenarios that show in what situations the use of a bare noun would be felicitous.

(7) i-swa   **w-rgaz**.
     3M.SG-drank CS.man
     'The man drank.' / Not: 'A man drank.'[7]   (UNERGATIVE)
     <u>Felicitous</u> *if a man that both the speaker and addressee know drank.*   (definite)
     <u>Infelicitous</u> *if, out of the blue, the speaker tells the addressee that a man is drinking. The*

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[5] Though one might think that the construct state is what is forcing the definite interpretation of the subjects in (4), Guerssel agues that this is not the case, since indirect objects in examples like (3) are interpreted as indefinite even though the nominal is inflected with construct state.

[6] The definiteness effect with clitic-doubling is independently expected. Clitics are generally analyzed as pronouns, which are themselves definite (see e.g. Gutiérrez-Rexach 2000).

[7] The indefinite interpretation of the subject (i.e. *a man drank*) would require the presence of the indefinite quantifier *yiwn*.

addressee didn't know about the existence of the man prior to this.   (indefinite)

(8) y-ɣyi-d   **w-uẓṛo** af xxam-iw
     3M.SG-fell-DIR CS.rock on house-my
     'The/a rock fell on my house.'   (UNACCUSATIVE)
     <u>Felicitous</u> *if a rock that both the speaker and addressee knew hung dangerously over the*
     speaker's house, finally fell on the speaker's house.   (definite)
     <u>Felicitous</u> *if, out of the blue, the speaker tells the addressee that a rock unknown to the*
     addressee, fell on her house.   (indefinite)

These examples show that the obligatory definiteness associated with subjects described in Guerssel (1995) is not tied to clitic doubling, but to other syntactic or semantic properties of the subject (e.g. agentivity or base position). Though it remains to be understood *why* agentive subjects require definite interpretations in Kabyle, I conclude that Guerssel's account does not make the right predictions. That is, the obligatory definiteness of transtive and unergative subjects is not tied to whether or not the subject has been clitic doubled.

2.3 ACHAB 2003

Achab (2003), working specifically on Kabyle, argues that Amazigh languages lack an overt definite determiner.[8] Achab hypothesizes, following Chierchia (1998) on languages that lack morphemes that overtly mark definiteness, that definites in Kabyle are derived via a null operator, namely ι. This is schematized below:

(9)   Op
            /\
         Op   DP
         ι /\
              D NP
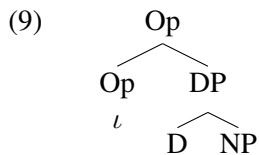
                                                                                    (Achab 2003)

The idea is that languages that lack a designated definite morpheme make use of a last resort semantic type-shifting operation, ι, which type-shifts a predicate from type $<et>$ to type e (Partee, 1987), and which presupposes the uniqueness of an entity that satisfies this predicate.

In the rest of this paper, I follow Achab in assuming that the ι type-shifting operation described above always takes place with nominals that receive a definite interpretation. However, I show that this cannot be the whole story. Specifically, I demonstrate that Kabyle marks the distinction between two kinds of definites: (i) *weak* definites, derived solely via ι and which introduce a uniqueness presupposition; and (ii) *strong* definites, which require the presence of an extra morpheme, *-nni*, which I will argue introduces an anaphoricity presupposition on top of the uniqueness presupposition introduced by ι.

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[8] Note that Achab (2003) posits that the head of DP is realized in Kabyle by either the free state form *(t)a-* or a few so-called "non-genuine" prepositions. Crucially, however, these morphemes are not specified for definiteness.

3 TWO KINDS OF DEFINITES IN KABYLE

In this section, I show that Kabyle distinguishes between two kinds of definites: *weak* definites and *strong* definites. Interestingly, the distinction between weak and strong definites observed in Kabyle patterns according to Schwarz's (2009, 2013, to appear) and Jenks' (2018) observations on this distinction in German and Mandarin. In section 3.1, I provide background on definiteness and the distinction between weak and strong definites. In section 3.2, I show that weak definites in Kabyle are realized as bare nouns. In section 3.3, I show that strong definites require the presence of the postnominal determiner *-nni*.

3.1 BACKGROUND

The underlying semantics of definite descriptions has been subject to much debate in theoretical linguistics. Though there are many approaches to definiteness, two perspectives stand out. On one hand, many linguists have argued that definite determiners introduce a uniqueness (or maximality) presupposition (e.g. Russell 1905; Strawson 1950; Hawkins 1978). On the other hand, others have argued that definite determiners encode a presupposition that the speaker and addressee are *familiar* with the satisfier of the nominal (Christophersen 1939; Kamp 1981; Heim 1982). Other scholars have combined features of both accounts into a more generalized theory of definiteness (e.g. Farkas 2002; Roberts 2003).

More recently, based on the observation that some languages overtly distinguish "unique" uses from "familiar" uses of definite articles, Schwarz (2009) proposes that there are two kinds of definite articles across languages: *weak* definites and *strong* definites (see also Schwarz 2013). While weak definites presuppose uniqueness, strong definites presuppose both uniqueness and anaphoricity (or "familiarity"). This contrast can be observed, for example, in the Frisian (Germanic) dialect of Fering, which exhibits an overt contrast between these two kinds of definites:

(10) a. Ik skal deel tu [**a**   / ***di**   kuupmaan].
I must down to the*weak* / the*strong* grocer.
'I have to go down to the grocer.'

 b. Oki hee an hingst keeft. [***A**   / **Di**   hingst] haaltet.
Oki has a horse bought. the*weak* / the*strong* horse limps
'Oki has bought a horse. The horse limps.'   (Ebert 1971)

(10a) is a typical example of a weak definite article, realized as *a* in Fering. Here, the grocer has not been previously introduced in discourse and could potentially be unfamiliar to the addressee, but the use of the definite determiner is nonetheless acceptable. In example (10b), another definite article form must be used, *di*, since the horse has already been introduced in discourse, and so an anaphoricity presupposition must be introduced on the satisfier of the nominal.

Following Schwarz's work, a considerable amount of researchers have reported this distinction across languages (see e.g. Arkoh and Matthewson 2013 on Akan; Jenks 2015 on Thai and Mandarin; Cho 2016 on Korean; Ingason 2016 on Icelandic; Jenks 2018 on Mandarin, Cisnero 2018 on Cuevas Mixtec; Irani 2018 on American Sign Language; Schwarz 2018; and Šereikaitė 2018 on Lithuanian).

In the next section of this paper, I contribute to this view of definiteness with additional empirical support from Kabyle, showing that it also marks this distinction.

3.2   WEAK DEFINITES IN KABYLE

According to Schwarz (2009, 2013), various different subtypes of definites fall into the category of weak definites, all of which presuppose uniqueness or maximality. These are are summarized below:

(11)   *Subtypes of weak definites*
       1. Immediate situation uses of definites
       2. Larger situation uses of definites
       3. Kind-denoting definites
       4. Weak Definites, in the sense of Carlson and Sussman (2005)

In what follows, I go through examples of each subtype of weak definite in Kabyle, and show that in each of these examples, a bare noun is used.

The terms "immediate situation use" and "larger situation use" are due to Hawkins (1978), who identifies different uses of definite determiners, including some which fall under the category of strong definites (see 3.2 below). Briefly put, immediate situation uses of definite articles occur when a speaker makes reference to a unique entity present in the immediate context (e.g. *the book* if the speaker only has one book in front of them). Larger situation uses, on the other hand, occur when a speaker makes reference to a unique entity in a larger context (e.g. the use of *the president* if the speaker is in Algeria and wants to refer to the president of Algeria).[9] In Kabyle, both immediate and larger situation uses are realized with bare nouns, as expected if weak definites are realized as bare nouns in the language. First consider an immediate situation use of a definite:

(12)   Context: *The speaker is in a room with someone describing things that are in the room.*
       They look at the (only) door in the room, and say:
       ta-ppur-t   ttazgzawt.
       FS.F-door-FEM COP.F.green
       'The door is green.'   (IMMEDIATE SITUATION USE)

In the above example, the speaker is describing a list of objects in a room. In this case, since both the speaker and addressee are in the room, and since there is only one contextually salient door in it, the bare noun receives a definite interpretation.

Now consider a larger situation use:

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[9] Both types of definites rely on proper execution of contextual domain restriction. For example, if you are in Algeria and you mention *the president*, the it is understood that the domain is restricted to (at least) the set containing the entities that are present in Algeria, and perhaps excluding those which are not.

(13) Context: *Out of the blue, the speaker tells the addressee:*
way-eɣ **i-ṭiyj** assa.
saw-1SG M-sun today
'I saw the sun today.'   (LARGER SITUATION USE)

The noun *iṭiyj* 'sun' is a typical example of a noun that tends to be used in larger situations. As shown above, the noun appears in its bare form.

Bare nouns are also used to refer to kinds in Kabyle, as predicted if kinds are weak definites. This is illustrated below, where the plural noun *yizmawn* 'lions' is used to refer to lions as a kind:

(14) waarit **yizma-wn**.
dangerous lion-PL
'(The) lions are dangerous.'

In the above example, the bare noun refers to a kind. Note, however, that is not possible to determine whether the noun should receive a bare plural indefinite or definite interpretation, since bare nouns in Kabyle can receive both definite and indefinite interpretations, depending on the context.[10] Regardless, if kinds in Kabyle were to receive a definite analysis, then the above example shows that a weak definite—the bare noun form in Kabyle—must be used.

Another case of weak definites are what Carlson and Sussman (2005) and Carlson et al. (2006) describe as Weak Definites (n.b. capitalization on Weak Definite).[11] These are uses of definites which do not seem to require that the satisfier of the nominal be uniquely identifiable in the context (Aguilar-Guevara, 2014). A well-established diagnostic for such definites is observed in ellipsis contexts. While Weak Definites can receive a sloppy interpretation, as shown in the English example in (15a), nouns that are incompatible with Weak Definite interpretations cannot (15b):

(15)   a.   Fred went to *the store*, and Alice did, too. (OK as different stores)
       b.   Fred went to *the desk*, and Alice did, too. (must be the same desk)

(Carlson and Sussman 2005)

Both Schwarz (2009) and Aguilar-Guevara (2014) argue that such definites should be subsumed under the category of weak definites.

Some Kabyle nouns also allow Weak Definite interpretations, and, as expected, these are realized as bare nouns:

(16) Context: *Razqay went to a market located at one end of the city on Monday, and Sara went to another market located at the other end of the city on Tuesday.*
i-ṛoḥ   Razqay ar **suq**,   Sara daɣan t-ṛoḥ.
3M.SG-went Razqay to market Sara too   3F.SG-went
'Razqay went to the market, and so did Sara. '

The above example forces an intepretation in which Razqay and Sara went to different markets.

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[10]This issue is also raised by Jenks (2018, fn. 5) on Mandarin.
[11]Aguilar-Guevara (2014) argues that such definites are kind-denoting

As expected if the definites described in Carlson and Sussman 2005 fall into the larger class of Schwarz's (2009) weak definites, *suq* 'market' surfaces in its bare form in the above example.

In sum, the above data show that weak definites in Kabyle are realized as bare nouns. If we only consider these data, there is no sign of overt definiteness marking in Kabyle, corroborating previous work on definiteness in Amazigh (e.g. Achab 2003, Ouhalla 2005). However, in the next section, I show that definiteness is sometimes overtly realized in Kabyle, since strong definites are overtly marked.

3.3   STRONG DEFINITES IN KABYLE

As was the case with weak definites, there are various subtypes of strong definites (Schwarz, 2009). These are provided below:

(17)   *Subtypes of strong definites*
       1. Anaphoric uses of definites.
       2. Uses of definites in donkey sentences.
       3. Bridging uses of definites.
       4. Definites that are restricted by relative clauses.

As will be demonstrated below, strong definites in Kabyle must co-occur with the postnominal determiner *-nni*, described as a demonstrative in Mettouchi 2011.[12]

Perhaps the clearest case of strong definites across languages are cases where a nominal is used to refer back to an already introduced referent in discourse (anaphoric definites). In Kabyle, *-nni* is required on such nominals, as demonstrated by the narrative sequence in (18).

(18)   NARRATIVE SEQUENCE IN KABYLE

       a.   y-illa   yippes   yiwn w-rgaz   akud t-meṭo-t.
            there.was one.day one   CS.man with CS.woman
            'Once upon a time, there was a man$_1$ and a woman.'
       b.   a-rgaz-#(**nni**) d   aɣzfan.
            FS.man-DEM   COP tall
            'The man$_1$ was tall.'

In (18b), the nominal *argaz* 'man' must obligatorily co-occur with the postnominal *-nni*, since the referent of the nominal has been introduced in the immediately preceding sentence in (18a).

Another context widely reported to require strong definite forms are donkey sentences (see e.g. Schwarz 2013 on various languages and Jenks 2018 on Mandarin), notable for allowing covarying

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[12]Mettouchi (2011) argues, in contrast to previous descriptions of *-nni* (Dallet, 1982), that though the use of this morpheme often correlates with anaphoricity, it is not always required in contexts where a noun has been previously introduced in discourse. However, it is unclear for how long the use of the anaphoric form of the definite article is obligatory, a fact that is also discussed in Ebert 1971 and Schwarz 2009, 2019. For example, the strong form of the definite article seems to be obligatory with nominals that co-refer with a nominal in an immediately preceding sentence, a fact which I have also observed in Kabyle. However, once a referent becomes "central" to the narrative, the weak form of the article might become appropriate again. Since this is a general cross-linguistic issue that lies beyond the scope of this paper, I leave it for future work.

interpretations of definite descriptions (either a pronoun or full DP) (Heim 1982, 1991;Wilson 1984; Elbourne 2005). First consider an English example:

(19)   Every man who owns a donkey beats the donkey.   (Elbourne, 2001)

In the above example, the definite DP *the donkey* can co-vary with *every man* such that every man beats a different donkey. In Kabyle, as expected, such donkey sentences require the strong form of the definite article:

(20)   Context: *Some people went bird hunting. Not everyone saw a bird, but each person who did see a bird killed the bird they saw.*
         mkul winn   iy wajan afrux, y-nɣa   afrux-#(**nni**).
         each person C saw   bird,   3SG-kill bird-DEF
         'Every person who saw a bird, killed the bird.'

As shown above, the noun *afrux* 'bird', when used in the context of donkey anaphora, requires the presence of *-nni*, as predicted if strong definites are always realized with *-nni*.

   Another construction which is reported to require the presence of strong definite articles are so-called "producer-product bridging definites", originally identified in Clark 1975, and described in Hawkins 1978 under the label of "associative anaphora".[13] An example of an English producer-product bridging definite is provided below:

(21)   John bought a book yesterday. **The author** is French.   (Schwarz 2009)

In the above example, *the author* picks out the author of the book that was introduced in the previous sentence. As discussed at length in Schwarz (2009), such definites require the strong article form. Now consider the following two sentences which involve a similar definite in Kabyle:

(22)   PRODUCER-PRODUCT BRIDGING DEFINITE

         a. syi-ɣ   i   yiwe-t n-taɣuct.
             heard-1SG PREP one-F PREP-FS.song.
             'I listend to a song.'
         b. acennay-#(**nni**) teyha ta-ɣuct-is.
             singer-DEF   nice FS.voice-his
             'The singer has a nice voice.'

In (22a), the speaker first mentions that they listened to a song. Immediately after, they mention that the singer (not previously mentioned) has a nice voice. It is understood that the singer is the singer of the song that was just mentioned. As expected, since this is a case of producer-product bridging definite, *-nni* obligatorily suffixes to *acennay* 'singer' in (22b).

   Finally, Schwarz (2009) also shows that definite DPs restricted by relative clauses must generally surface with the strong form of the definite article, though judgments are not always clear. A

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[13]Note that producer-product bridging definites contrast with part-whole bridging definites, which are generally not introduced with the strong from of the definite article (see e.g. Schwarz 2009; Jenks 2018).

similar pattern is observed in Kabyle: definite nominals restricted with a relative clause or an adjective (which I assume is embedded in a relative clause), must generally surface with *-nni* (though, just like Schwarz reports, judgments are sometimes not as clear as the other cases discussed above):

(23) RESTRICTIVE RELATIVE CLAUSES

    a. d   Razqay i   d   a-rgaz-$^?$**(nni)** i y-uɣen   axxam-agi.

        COP Razqay COMP COP FS.man-DEF C 3M.SG-buy house-DEM

        'Razqay is the man who bought that house.'

    b. ɣyay   wuxxam-#**(nni)** acevḥan.

        expensive house-DEF   white

        'The house that is white is expensive / the white houses.'[14]

3.4 SUMMARY

In this section, I showed that Kabyle marks the distinction between the two types of defintes identified in Schwarz (2009): weak and strong definites. Specifically, I showed that while weak definites surface as bare nouns, strong definites require the presence of *-nni*.

Before moving on to the analysis, it is interesting to note that the distribution of weak and strong definites in Kabyle is similar to the distribution of definites in Mandarin. Just like in Kabyle, Jenks (2018) observes that Mandarin weak definites surface as bare nouns, while strong definites obligatorily surface with demonstratives. This parallel distribution can be observed in the following Mandarin examples:

(24) Hufei he-wan-le   **tang**.

      Hufei drink-finish-LE soup

      'Hufei finished the soup.'   (WEAK DEFINITE IN MANDARIN, Jenks 2018)

(25)   a. Jiaoshi   li   zuo-zhe yi ge nansheng he yi ge nüsheng.

        classroom inside sit-PROG one CLF boy   and one CLF girl

        'There are a boy and a girl sitting in the classroom.'

    b. Wo zutian   yudao #(**na ge**) **nansheng**.

        I   yesterday meet that   CLF boy

        'I met the boy yesterday.'   (STRONG DEFINITE IN MANDARIN, Jenks 2018)

Example (24) shows that bare nouns are used weak definites. This example would be felicitous, for instance, in an immediate situation context. Example (25), on the other hand, shows that definites that have already been introduced in discourse require the presence of a demonstrative. The similarity between Kabyle and Mandarin is striking: both realize weak definites as bare nouns, and both use a morpheme that looks like a demonstrative to convey strong definiteness.

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[14]Without *-nni*, the nominal is interpreted as generic, e.g.: *white houses are expensive*.

4   TOWARDS AN ANALYSIS

In this section, I sketch a preliminary analysis of weak and strong definites in Kabyle, based on Schwarz 2009 and Jenks 2018. For weak definites, I adopt Achab's (2003) hypothesis and follow Jenks (2018) on Mandarin in arguing that ι is responsible for the uniqueness presupposition. For strong definites, I argue that ι still derives the uniqueness presupposition, but that *-nni* introduces an anaphoricity presupposition on top of the uniqueness presupposition. In other words, strong definites are derived compositionally. This is different from Jenks 2018, in which weak and strong definites are considered separate lexical items altogether.

In section 4.1, I summarize Jenks' account of weak and strong definites in Mandarin. In section 4.2, I provide an alternative account that derives the distribution of weak and strong definites compositionally. In section 4.3, I argue in favour of the proposed alternative account.

4.1   JENKS 2018

Jenks (2018) derives the distinction between weak and strong definites in Mandarin by assuming they instantiate separate lexical items. The proposed denotations, modelled in situation semantics (Barwise and Perry, 1983), are reproduced below:

(26)   *Weak definite article*
$$[\![\iota]\!] = \lambda s_r.\lambda P_{\langle e,\langle s,t\rangle\rangle}. : \exists!x[P(x)(s_r)].\iota x[P(x)(s_r)]$$

(27)   *Strong definite article*
$$[\![\iota^x]\!] = \lambda s_r.\lambda P_{\langle e,\langle s,t\rangle\rangle}.\lambda Q_{\langle e,t\rangle}. : \exists!x[P(x)(s_r) \wedge Q(x)].\iota x[P(x)(s_r)] \qquad \text{(Jenks 2018)}$$

In the above denotations, both the weak definite, ι, and the strong definite, ι^x, presuppose the uniqueness of an entity within the context of a particular situation (note that Jenks assumes that the semantics of demonstratives in Mandarin is equivalent to ι^x).

As for the difference between weak and strong definites, Jenks follows Schwarz (2009, 2013) in assuming that the only difference is that strong definites require an extra indexical argument (Q above), responsible for introducing the anaphoricity presupposition. In such, the anaphoricity presupposition is not introduced by the demonstrative proper, but by the indexical argument which the demonstrative takes. While this indexical argument (referred to as the domain restriction) is sometimes overtly realized, it is most often realized by null indices relativized to the assignment function.

In sum, the proposal in Jenks 2018 involves two lexical items: ι corresponds to the weak definite determiner, and Mandarin demonstratives (i.e. ι^x) correspond to the strong definite. Under this account, strong definites, despite sharing with weak definites a uniqueness presupposition, are not derived compositionally. In the next section, I propose an alternative account which makes use of the fact that weak and strong definites share a uniqueness presupposition.[15]

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[15]The analysis is closely related to work on noun classifiers in Chuj (Royer, 2019).

4.2 PROPOSAL

I propose that strong definites are derived compositionally from the semantics of the weak defi-
nite. Specifically, I propose that definites in Kabyle are *always* derived with ι, and that *-nni*'s sole
contribution is to trigger an anaphoricity presupposition whenever possible.

   I propose the that ι exhibits the semantics in (28), based on the denotation of the definite deter-
miner in Heim and Kratzer 1998. For reasons of simplicity and illustration, I do not use situation
semantics, but extensional semantics (based on Heim and Kratzer 1998).

(28)   *Denotation of definite determiner*
        $[\![\iota]\!] = \lambda f: \exists! x \in C\ [f(x)].\ \iota y \in C\ [f(y)]$ (e.g. Heim & Kratzer 1998)

The denotation of ι provided in (28), used by Heim and Kratzer (1998) as the basic denotation for
the definite article in English, presupposes the uniqueness of an entity in a set of entities present
in the context (C). This denotation derives Kabyle weak definites exactly the way Achab (2003)
proposed: covertly via a type-shifting mechanism (Chierchia, 1998). An example compositional
meaning of the DP *argaz* 'the man' is provided below in (30).[16]

(29) ι a-rgaz
        ι FS.man
        'the man'

(30) $[\![\iota]\!]([\![DP]\!])$
        P: $\exists! x \in C\ [x$ is a man$]$
        A: $\iota x \in C\ [x$ is a man$]$

Assuming that *argaz* 'FS.man' has the semantics of a regular nominal predicate of type $\langle e,t \rangle$, com-
posing *argaz* with ι yields the desired output for the weak definite: a definite DP that presupposes
the uniqueness (and existence) of an entity in the context, which in this case is a particular man.

   Turning to strong definites, I propose that *-nni* triggers an anaphoricity presupposition on top of
a the uniqueness presupposition introduced by ι. In other words, strong definites are decomposable
as two parts: ι and-*nni*. Specifically, I propose that *-nni* denotes the identity function (type $\langle e,e \rangle$)
represented in (31).

(31) $[\![$-*nni*$_i]\!]^g = \lambda x: x = g(i).\ x$

In (31), the anaphoricity presupposition arises since *-nni* introduces an index interpreted relative to
a contextually provided assignment function.[17] An example derivation is provided below in (33),

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[16]I am assuming, following Achab (2003), that free state morphology occupies the head of DP.

[17]My analysis is similar to Jenks' (2018), insofar as the strong definites are associated with an extra indexical argument.

with the assumed structure in (32).[18]

(32)   ɩ a-rgaz-nni
       ɩ FS.man-DEF
       'the man'
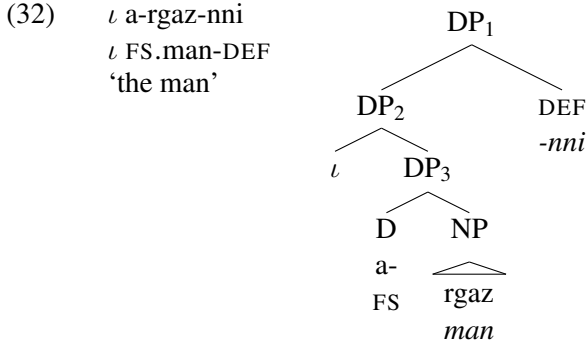
(33) $[\![DP_2]\!]([\![-nni]\!]^g)$
       P: $\exists!x \in C \,[x \text{ is a man}] \wedge \underline{x = g(1)}$
       A: $\iota x \in C \,[x \text{ is a man}]$

As shown above, *-nni* introduces an anaphoricity presupposition on top of the uniqueness presup-position triggered by ɩ. That is, the nominal *argaz* 'man' is both presupposed to be unique and is anaphorically identifiable through the assignment function. The result is a strong definite, derived compositionally from the semantics of the weak definite determiner, ɩ, and the semantics of *-nni*.

4.3   SUMMARY

In this section, I proposed to account for the contrast between weak and strong definites in Kabyle compositionally. This analysis is an alternative to Jenks 2018 on Mandarin and Schwarz 2009, 2013 more generally, who derive the same distinction lexically.

Since weak definite articles are not overtly realized in neither Kabyle nor Mandarin, it is not obvious whether we should favour one theory over the other. However, note that weak and strong definites share a common core—they both presuppose uniqueness— and the theory proposed above aims to capture this common core: the uniqueness presupposition arises with both weak and strong definites because ɩ is present with both weak and strong definites. On the other hand, a lexical ambiguity theory, as proposed in Jenks 2018, does not immediately account for this common core.

Moreover, if the proposal is correct, then it predicts that we should find languages that derive strong definites overtly by combining a morpheme that presupposes uniqueness with a morpheme that presupposes anaphoricity. This is the case for Chuj (Mayan), as I have argued in recent work. Consider the following examples:

(34)   Saksak *(**k'en**) uj.
       white   CLF/DEF moon
       'The moon is white.'   (WEAK DEFINITE IN CHUJ)

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[18]I assume, following Mettouchi (2011) that *-nni* patterns like a demonstrative in its distribution. Further, I follow Alex-iadou et al. (2007) in putting the demonstrative in the specifier of DP. Moreover, since *-nni* is postnominal, I assume it occupies the right specifier, though nothing in the analysis hinges on this assumption.

(35)   Ay   jun   nok' tz'i' yet' jun   nok' mis t'atik. Saksak **nok'**   tz'i' #(**chi**).
       EXT INDF CLF dog with INDF CLF cat here. white   CLF/DEF dog DEM
       'There's a dog$_i$ and a cat here. The dog$_i$ is white.'   (STRONG DEFINITE IN CHUJ)

In Royer 2019, I argue that noun classifiers (glossed as CLF above) are weak definite determiners
(they only encode a uniqueness presupposition), which explains why they are required with cases
of weak definites like (34). As for strong definites, I demonstrate that Chuj requires both a classifier
and a demonstrative. This is the case in (35).

    There is a clear parallel between Kabyle and Mandarin, on the one hand, and Chuj, on the other.
While Kabyle and Mandarin, in lacking a morpheme that encodes a uniqueness presupposition,
must derive uniqueness presuppositions covertly (using ι), Chuj features a set of morphemes (the
noun classifiers) whose sole contribution is to presuppose uniqueness (Royer 2019). In other words,
whereas the composition of strong definites in Kabyle and Mandarin is only partially overt, it is
totally transparent in Chuj. Therefore, the Chuj data provides additional evidence for the composi-
tional account proposed in this paper.

5   CONCLUSION

The goal of this paper was to provide a description and analysis of definiteness marking in Kabyle.
I showed that Kabyle marks the distinction between the two types of definites identified in Schwarz
(2009): weak definites, which encode uniqueness, and strong definites, which encode both unique-
ness and anaphoricity. I then sketched an account of the distinction between weak and strong defi-
nites, arguing in favour of an analysis that derives the distinction compositionally.

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