Case-marking, syntactic domains and information structure in Kabyle (Berber)

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This paper aims at analyzing the relationship between word-order variation, prosody and case-marking in a Northern Berber language, Kabyle. I show that word-order variation is linked to the argumental nature of personal affixes, and codes topic-focus articulation. I also show that prosody interacts with case-marking to delimit functional domains. After investigating the role of case-marking at the level of the clause in parallel with the intra-phrasal level, I come to the conclusion that the binary case system of Kabyle is not to be equated to a marked nominative versus absolute, or ergative versus stative. Instead, I show that the integrative case, now a relational case based on the semantics of dependency (a source and a target, a locative relationship), is likely to have stemmed from a former ablative-locative case.

Introduction

Kabyle1 (Berber, Afroasiatic) is spoken in the North of Algeria by about four million speakers, five if we include those living in Europe and Canada. It is a tenseless, head-marking language and is generally presented as a VSO language, with possible SVO variations. Although this characterization may capture some general syntactic facts about the language, it does not do justice to the great variation observed in its actual use.

In this paper,2 I propose to broach the subject of the interaction of syntax and morphology through the question of the relationship between word-order variation...

1. The variety presented here is a Central Kabyle one, spoken by the At Idjer tribe, in the village of At Ikhlef, district of Bouzeguene.

2. I would like to thank the reviewers and the editors for their rich and insightful comments and suggestions. I am also very grateful to all the speakers that have, over the years, agreed to be recorded, and helped me in my fieldwork.
tion and case-marking. Word-order variation is related to information structuring, and more precisely to the categorical/thetic opposition, whereas binary case opposition (absolute versus integrative) takes on several functions: it distinguishes direct objects from postverbal subjects, and it marks dependency between a nominal and the argument structure of the predication, as it is expressed by personal and possessive affixes and clitics. I will investigate the relationship between those two levels of marking, bearing in mind that the integrative case also has other functions inside the noun phrase: it marks the possessor in genitives, and it bears on the nominal following a quantifier or a preposition.

I will first give an overview of the syntactic domains in the simple sentence in Kabyle, and of the possible word-order variations. In a second part, I will show that word-order variation is linked to topic-focus articulation, thus characterizing Kabyle as a discourse-configurational language. I will then investigate the case system of Kabyle, and show that the integrative case, which is synchronically a dependency marker, is likely to have stemmed from an ablative-locative case.

1. Personal affixes and clitics

1.1 Personal affixes

Kabyle subject affixes are often circumfixes (see Table 1), which convey information about person, gender, and number. Their alignment is accusative. Contrary to English or French basic utterances, which must contain at least an unstressed pronoun (*leaves, or *part are not acceptable utterances), Kabyle basic verbal sentences are composed of an affix and a stem (see example 1). The personal affix is obligatory and refers to the main participant of the situation (event or state).

1. ye-šça subj.3SM-eat(pfv); ‘he ate/has eaten’

basic utterance = personal affix: ye- + stem: šça
stem = root (šça) + aspectual scheme (here perfective, realized -ə).

3. There is one standard set of affixes for all TAM (Tense Aspect Mood) plus specific ones for the imperative, the hortative, and the quality verbs (in the perfective only).

4. Abbreviations are as follows: 1, 2 or 3 refer to person; s = singular, p = plural, f = feminine, m = masculine; subj = subject affix, dat = dative clitic, acc = accusative clitic, int = integrative case (annexation state); abs = absolute case (free state); pfv = perfective aspect, impfv = imperfective, aor = aorist; caus = causative prefix, pass = passive prefix, neg = preverbal (main) negator; postneg = postverbal (optional) reinforcement of neg; idneg = identificational negation, exneg = existential negation, prox = proximal particle, anaph = anaphoric determiner, irr = irrealis particle, conc = concomitance particle, cop = copula, rel* = relais relative

Table 1. Personal affixes (here with perfective radical kker ‘stand up’)

<table>
<thead>
<tr>
<th>P</th>
<th>masculine</th>
<th>Singular</th>
<th>feminine</th>
<th>masculine</th>
<th>Plural</th>
<th>feminine</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>kker-ey</td>
<td>n-kker</td>
<td></td>
<td>te-kker-em</td>
<td>te-kker-emt</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>te-kker-ed</td>
<td>te-kker-em</td>
<td></td>
<td>kker-en</td>
<td>kker-emt</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>ye-kker</td>
<td>te-kker</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I have argued against the idea that those affixes should be considered as mere agreement markers (Mettouchi 2005 and forthcoming), on the basis of the fact that neither full NPs nor independent pronouns are grammatically necessary. Indeed, basic sentences composed of a verb and its third-person affix without any "subject" NP or independent pronoun are extremely frequent, and whole stretches of texts can go without either one, even when several protagonists are being referred to, as we shall see below. And when noun phrases are present, they order themselves quite freely, on the basis of the informational structure of the predication (see next section), and not on the basis of grammatical relations: the affix/clitics configuration indicates what the grammatical relations are, and the ordering of NPs indicates what the topic/focus articulation is.

Other languages behave similarly. Chafe (1994:146-152), analyzing the information structure of Seneca, a native language of New York State, and comparing it with English, explicitly states the differences between the two languages as far as pronominal affixes and unstressed pronouns are concerned:

Instead of being used to express given information, the Seneca prefixes refer to the core participants of events and states — referents that are obligatorily included in an event or state idea. When a Seneca speaker chooses to categorize an event or state in a particular way, that categorization dictates the presence of one, two, or occasionally three participants which are obligatorily expressed with a pronominal prefix. Their activation cost is irrelevant. Whereas English uses pronouns to verbalize given referents, Seneca uses pronominal prefixes to verbalize core participants.

(Personal affixes differ from personal clitics in that they are the primary arguments of verbs, and that they are not mobile (whereas clitic climbing is the rule). Personal affixes mark a grammatical relation, not a semantic one — they subsume both the Actor and Undergoer semantic macroroles. As early as 1964, Galan claimed)

marker: rel* = irrealis relative marker; npacc = nominal phrase coreferent to the accusative clitic; npeui = coreferent to the dative clitic; npp = nominal phrase coreferent to the personal affix; pa-v = personal affix-verb (basic utterance).

5. In the terminology of Van Valin and LaPolla (1997).
that the affixes, being the sole obligatory argument markers, were the true subjects. His claim was based on Martinet's definition of the subject as the necessary appendage of the predicate "l'élément qui, dans tout énoncé non injonctif et non mutilé, accompagne nécessairement le prédicat" (1962:76). Similar arguments have been proposed for other language families:

A central concern in the study of polysynthetic languages has been to explain the connection between two of the most striking features of these languages: highly articulated systems of argument agreement marking on the one hand, and free ordering and omission of independent phrases expressing the arguments of a clause on the other. One of the oldest answers to this question has been one of the most lasting: Wilhelm von Humboldt (Humboldt 1836) claimed that in Nahuatl it is the affixes on the verb which fill the argument positions of the verb, and that independent expressions are only loosely linked to these affixes.

Phillips 1993:173

1.2 Clitics

The basic predicative unit can be followed by clitics (dative and accusative, depending on the valency of the verb and the construal of the event or situation) and a proximal or distal particle. This particle is very frequent, appearing in approximately 20% of verbal predications. The order of clitics is rigid: dative comes first, then accusative.

(2) taqict te-fka =yas =ten =id
girlLABS subj3s-find pfv dat3s acc3p prox
'The girl gave them to him/her.'

Clitics are semantically motivated: accusative clitics are patients or themes, whereas dative clitics are recipients and often function as dative dalitives, expressing the affectedness of the recipient. Counts conducted on a narrative corpus showed that among the 33 verbal predications (out of 110) that contained a dative clitic, two thirds introduced a recipient-type argument, and one third were triggered by semantic orientation (affectedness by the event or state) (Mettonchi 2005).

Accusative clitics are also used for some types of nonverbal predications to refer to the main participant in a situation. Those predicates are existential (in the negative), qualifying, and presentative. They are to be related to the thetic "VS" configurations that will be studied in Section 2.3. This use of patient clitics to express primary arguments with some predicates has been considered as evidence in favour of the existence of a split-S system in Berber (Aikhenvald 1995).

(3) ulac=itent
EXNRG=ACC3P
'They are not here/there.'

(4) aqi=it
appear=ACC3MS
'Here he comes.'

(5) d iri=tt
cop bad=ACC3PS
'She is bad.'

Table 2 shows that the distinction between dative and accusative is blurred in the first person, and that the maximum differentiation appears in the third person.

The string of clitics is attached to the head of the clause. The default head (in an indicative, realis, positive main clause) is the verb. Otherwise, preverbal (irrealis, progressive, negative, relative) particles take on head status. No noun phrase is ever allowed between the particle and the verb; if there is any NP, it must appear either before the particle (with "free state" (absolute [unmarked] case-marking, see (2'), in what we call the prehead position, or after the verb and its clitics (with "annexation state" (integrative [marked]) case-marking, see (2'')), in an extended or postcore position. The following examples are the irrealis versions of example (2):

(2') taqict ad =as =ten =id te-fk
girlLABS irr =dat3s =acc3mp =prox subj3ps-give aor
'The girl will give them to him/her.'

6. See Mettonchi (forthcoming) for more details, and bibliographical complements.
7. "The element that, in all non-injunctive and non-mutated utterances, necessarily accompanies the predicate".
9. The semivowel "y" or the vowel "i" appear in certain phonetic contexts only. (k) in 2PF dative is optional.
2. ad =as =ten =id te-fk teqcic
   IRR =DAT3s =ACC3MP =PROX SUBJ3PS-give.AOR girl.INT
   'The girl will give them to him/her.'

Personal affixes and clitics can be coreferential to lexical NPs or independent pronouns. In the previous example, for instance, teqcic is coreferential to the personal affix te-*, which is the grammatical subject of the sentence.

The indirect object, as well as the instrumental, are the only oblique arguments. They are introduced by prepositions i 'to' or s 'with'. For indirect objects in postcore position, the whole Prepositional Phrase is coreferential to the dative clitic. When indirect objects are topical, they appear as prehead NPs.

2. aqabic ad =as =ten =id te-fk
   boy.ABS IRR =DAT3s =ACC3MP =PROX SUBJ3PS-give.AOR
   'The boy, she will give them to him.'

1.3 Syntactic domains

Syntactically, the analysis of the various positions taken by NPs and affixes and clitics leads to the delimitation of precise domains: on the left and the right of the frame, the prehead and postcore slots; inside the frame, the core delimited by square brackets, and the extended core on its right, delimited by the frame itself; and finally, the basic utterance, inside the core, between brackets.

The basic utterance is referred to as pa-V (personal affix-verb), and NPs coreferential to the personal affix and accusative and dative clitics are labelled NP_{pa} (coreferent to the personal affix), NP_{acc} (coreferent to the accusative clitic) and NP_{Dat} (coreferent to the dative clitic), lexical direct objects being labelled O, and clitics Cl.

NP_{pa/Cl}[^{head-clitics (pa-V)}] NP_{pa} O

The innermost unit, the basic utterance, cannot be broken further. In examples (2') and (2''), it is realized by te-fk. The core, between square brackets, is characterized by the fact that no NP can appear in it, and by the mobility of clitics. In examples (2') and (2''), the core is ad =as =ten =id te-fk. Noun phrases can appear in the extended core, but with restrictions: only direct objects and lexemes coreferent to the personal affix are acceptable, in any order (NP_{pa}/O or O/NP_{pa}). The prehead and the postcore slots are similar in terms of syntactic constraints: they accept noun phrases coreferent to the personal affix as well as to the possessive affix, or to the dative or accusative clitics. They differ however in that the postcore NP, unlike the prehead one, must bear the annexation state (integrative case). The postcore slot also contains adjuncts, such as instrumentals, or indirect objects.

As far as complex sentences are concerned, syntactic domains are also quite rigid.10 Relative clauses, for instance, be they part of a cleft sentence or used as a noun modifier, never allow an argumental prehead noun phrase, this slot being taken by the antecedent of the relative clause or the focus of the cleft. If the antecedent refers to the object of the verb of the relative clause, then the NP coreferential to the personal affix (here teqcic) can appear, always in the extended core position:

6. ayrum || i=s=id ye-fka (teqcic)
   bread.ABS REL =DAT3s =PROX SUBJ3MS-give.PFV (boy.INT)
   the bread that he (/the boy) gave to her

7. d ayrum || i=s=id ye-fka (teqcic)
   COP bread.ABS REL =DAT3s =PROX SUBJ3MS-give.PFV (boy.INT)
   it is bread that he (/the boy) gave to her

10. The (intended) beginning of the subordinate clause is marked here by a double vertical bar, ||.
In (8) and (8') the NP coreferential to the personal affix of the main verb can be placed either in the extended core position of the main verb, or in the extended core position of the subordinate verb. But it cannot be placed in the prehead position of the subordinate verb.

Table 3. Word-order variation in conversation and narratives
(cf. Metouchi 2005 and 2007a)[12]

<table>
<thead>
<tr>
<th></th>
<th>NP_pa</th>
<th>NP_pa-Cl</th>
<th>NP_pa</th>
<th>NP_pa</th>
<th>NP_pa</th>
<th>NP_pa</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cl-V</td>
<td>Cl-Acc</td>
<td>V</td>
<td>V</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Conversation</td>
<td>25</td>
<td>1</td>
<td>60</td>
<td>35</td>
<td>22</td>
<td></td>
</tr>
<tr>
<td>3rd person verb</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Predications</td>
<td></td>
<td>[17.5%]</td>
<td>[0.5%]</td>
<td>[42%]</td>
<td>[24.5%]</td>
<td>[15.5%]</td>
</tr>
<tr>
<td>Narrative</td>
<td>15</td>
<td>3</td>
<td>20</td>
<td>51</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>3rd person verb</td>
<td></td>
<td>[14%]</td>
<td>[3%]</td>
<td>[18%]</td>
<td>[46%]</td>
<td>[19%]</td>
</tr>
<tr>
<td>Predications</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

It appears that the preverbal (or more exactly, prehead) position is stable across genres; it represents 17% to 18% of our data, and in that position, NPs coreferent to the subject affix are far more frequent than NPs coreferent to accusative clitics.

There is more variation in the extended core (or postcore) positions: the pa-V configuration is stable across genres, whereas there seems to be a complementary distribution between pa-V NP_pa and pa-V in conversation and narratives. I will come back to this later, but for now, I will simply make two remarks: word-order is flexible, and utterances without a NP_pa (a NP coreferent to the personal affix) are very frequent in the corpus.

I will show in this section that those word-order variations are linked to information structure and more precisely to the thetic/categorical distinction presented in Sasse (1987) and (1995):

Categorical utterances are said to be bipartite predications, involving a predicative base, the entity about which the predicative is made, and a predicative, which says something about the predicative base. In other words, one of the arguments of the predicative is picked out as a “topic” in the literal sense, namely, an object about which something is asserted. Thetic utterances, on the other hand, are monomodal predications (called “simple assertions” in Sasse 1987); no argument is picked out as a predicative base; the entire situation, including all of its participants, is asserted as a unitary whole.

This distinction is mirrored, according to the author himself, by Lambrecht’s sentence-focus versus predicate-focus distinction: “For Lambrecht, what we call here thematic constructions are sentence focus constructions, which involve non-topical

11. Possibly with a postcore NP.

12. We have only considered verbs completed by 3rd person suffixes, and their coreferential S and O, in the form of NPs and independent pronouns. The detailed counts are presented in two former papers, Metouchi (2005) and Metouchi (2007a).
subject NPs. These stand in opposition to predicate focus constructions with a topical subject NP (Sasse 1995:5, emphasis original).

2.1 Informational status of the bare core

In Section 1.1.1, I presented the traditional Berberologist analysis, according to which personal affixes have argumental status and can be considered as subjects. One of the arguments supporting this approach is the fact that there are rather long stretches of discourse where only the personal affix appears. The narrative sequence below shows on which basis the reference-tracking system of personal affixes is organized; seven girls have been left at home by their father for seven years, with the express command that they shouldn’t open to anyone. A bitch guards them in the yard, but an ogress tries to coax her way into the house. Third-person affixes that are not directly (i.e. in the same or the preceding intonation-unit) coindexed with an NP or pronoun are framed, the last NP’s coreferent to the framed affixes are in bold.

(9) te-kker / te-li=tt=id
SUJ13SFs-stand.up.PFV / SUJ13SFs-open.PFV=ACCUS3SFs=PROX

someone
big. F.INT-ANAPH /

"The eldest sister decided to open the door."

te-nna=yas / tmectuhl-nni aqgu /
SUJ13SFs-say.PFV=DAT3S small.F.INT-ANAPH wait.IMPF2S.AOR /

the youngest asked her to wait /

she asked her to wait /

"The little sister stood up and she said"

tef'tef=itt / deg us-s-is /
SUJ13SFs-take.PFV=ACCUS3SFs in hand.ABS-POS3S/

"give me her tail"

"The little sister stood up and she said"

alamma ulti-y / yer ifaq n tkanna //
until climb.PFV-SUBJ1s to window of attic.INT //

until I am up at the attic’s window or

The translation is intentionally close to the Kabyle recording, in order to retain a sense of the way affixes are used. These are translated by pronouns in English. The Kabyle text is perfectly understandable and clear for a native speaker, whereas the step by step English translation sounds very strange, and underspecified at times.
2.2 Informational status of the prehead slot

Indeed, prehead NPs always appear as starting points of predications. The informational status of the utterance is categorical,\(^{14}\) as is the case for utterances without lexical NPs. In Lambrecht's\(^ {15}\) terminology, those utterances are predicate-focus: there is a topic within the pragmatic presupposition, while the predicate phrase expresses a comment about the topic.

NP-less utterances like those described in Section 2.1 are also predicate-focus, but their topic is unmarked: topic continuity is expressed by the fact that no lexical NP appears in prehead position. Lexemes coreferent to the personal affix can also appear in extended core position without disrupting topic continuity, but those configurations bear special values which will be discussed in Section 2.3.

Prehead NPs can express topic shift, as in excerpt (9) above, but they can also mark contrastive topics, as in example (10), or they can select a topic for an assessment,\(^ {16}\) as in example (11).

\[10\]

\[i-laq \quad ad \ n-uyal \quad ar \ ansi=d\]

\[\text{SUBJ3PS-lack.PFV} \quad \text{IRR SUBJ1P-return.AOR} \quad \text{from.where=PROX}\]

\[\text{ne-kka/} \quad \text{SUBJ1P-come.from.PFV/}\]

"We have to go back to where we came from/"

\[ad \ n-segged/ \quad ad \ ne-ggez/\]

\[\text{IRR SUBJ1P-shout.AOR/} \quad \text{IRR SUBJ1P-jump.AOR/} \quad \text{(we have) to shout/to jump/}"

\[14\] In the sense of Sasse (1987:511): "categorical sentences contain a predication base about which some state of affairs is predicated, whilethetic sentences are simple nonpredicative assertions of states of affairs".

\[15\] Lambrecht (1994) defines focus as 'the semantic component of a pragmatically structured proposition whereby the assertion differs from the presupposition' (1994:213). The pragmatic assertion is 'the proposition expressed by a sentence which the hearer is expected to know or believe or take for granted as a result of hearing the sentence uttered' (1994:52), whereas the pragmatic presupposition is 'the set of propositions lexicogrammatically evoked in an utterance which the speaker assumes the hearer already knows or believes or is ready to take for granted at the time of speech' (1994:52). A constituent is a topic expression "if the proposition expressed by the clause with which it is associated is pragmatically construed as conveying information about the referent of the constituent" (1994:131).

\[16\] Especially in non-verbal predications such as taqiet d tagant, <girl.ABS cop mute. F.ABS>, 'the girl is/was a mute'.
This prehead slot must not be confused with the slot for contrastive focus in clefts (example (12) below), or wh-questions (example (12')).

\[(12)\] \textit{dayrum} \quad i=s{id} \quad \textit{ye-fka} \quad (\text{wtecic})

\text{COP. bread. ABS} \quad \text{REL}=\text{DAT 3S}=\text{PROX} \quad \text{SUBJ 3S}-\text{give. PFW} \quad (\text{boy. INT})

'It is bread that he (/the boy) gave to her'

\[(12')\] \textit{day acu} \quad i=s{id} \quad \textit{ye-fka} \quad (\text{wtecic})

\text{COP. what. ABS} \quad \text{REL}=\text{DAT 3S}=\text{PROX} \quad \text{SUBJ 3S}-\text{give. PFW} \quad (\text{boy. INT})

'What did (he/the boy) give to her?'

Both constructions can be analyzed as containing a fused relative clause, with an NP or a wh-pronoun introduced by a copula, in first position, for questions. The prosodic contours for both of those constructions are completely different from those of categorical sentences.\(^\text{17}\)

2.3 Informational status of the extended core

In Kabyle, the \textit{pa-V NP} \(\text{pa} \quad (\text{"VS"})\) configuration corresponds to sentence focus, which is a sentence construction formally marked as expressing a pragmatically structured proposition in which both the subject and the predicate are in focus. The postverbal NP coreferential to the personal affix is in the annexation state (integrative case), and is situated either immediately after the verb or after the object of the verb. In all cases it is prosodically included in the domain of the basic utterance (see Metouchi 2005 and 2006 for more details).

Example (13) presents a \textit{pa-V O NP} \(\text{pa} \quad \)configuration. Although there are two lexical NPs, only one of them corresponds to a new referent: the direct object, which is a semantic filler for the verb ('pancake-cooking'). The extended core NP is given in the preceding context. Cognitive processing is therefore rather underdemanding.

\[(13)\] \textit{ufes-nt} \quad t-xedem=end \quad \textit{tiyifin}

\text{find. PFW-SUBJ 3FS SUBJ 3FS-do. IMPFV-PROX} \quad \text{pancakes. ABS}

'They found

\text{them} \quad \text{at} \quad \text{n} \quad \text{babatsen} \quad /\quad \text{wife. INT=ANAPH of their father / their stepmother cooking pancakes}'

\(^{17}\) For prosodic analyses of clefts and simple clauses, see Metouchi (2003a and b), and Metouchi (2006).
Those examples are rather rare, but not totally absent from narratives. In the corpus, they tend to occur when the storyteller wants to give a full picture of the situation, a summary of a particularly salient fact or situation. Here the little girls that have been abandoned in the woods have finally found their way back home, only to find their stepmother cooking pancakes, joyful at the idea that she would never see the little girls again. On a prosodic level, those utterances all show an F0 (fundamental frequency) prominence (here on tiyrifin 'pancakes'), and a rise in intensity.

But most of the time, only one lexical argument appears in utterances, in accordance with DuBois's (2003) preferred argument structure constraints.18

Typically, extended core NP ps appear in locative-existential contexts, such as the introduction of new referents, which are liable to become topics afterwards.

(14) te-lla yiwef / te-mmuet timettut-is /
    SUBJ3PS-be.PPFV one.F / SUBJ3PS-die.PPFV wife.INT-POSSESS
    'There was a woman / his wife had died /
    wemyar-nni / i-sea sebea yessis //
    old.man.INT-ANAPH / SUBJ3MS-have.PPFV seven daughters //
    of this man / he had seven daughters //

deg yessi= deg yessis-nni sebea /
in daughters= in daughters-ANAPH seven /
among his seven daughters /

te-lla akka yiwef /
    SUBJ3PS-be.PPFV so one.F /
    so there was a woman /

d tajaret-nsen //
    COP neighbour.FABS-POSSESS //
she was their neighbour /

te-bya ad t-ay baba-tsent //
    SUBJ3PS-want.PPFV IRR SUBJ3PS-take.AOR father-POSSESS //
she wanted to marry their father //

In example (14), typically, new referents are introduced through an existential verb, ill ('be, exist'), in the perfective. In the conversational data, 17 occurrences of extended core NP ps out of 60 (32%) appeared after this verb. Indeed, a frequent context for extended core NP ps is thetic utterances, in the sense of Sasse (1987:511): "categorical sentences contain a predication base about which some state of affairs is predicated, while thetic sentences are simple nonpredicative assertions of states of affairs."

In my analysis, predications are considered thetic whenever their main argument's reference depends on the predicate's realization, and is not asserted independently. Non-thetic utterances are therefore always topic-comment, or more exactly predicate-focus predications in the sense of Lambrecht (1994), whether the topic be expressed lexically in the same clause, or higher up in the text (in that case it is represented in the current verbal clause by a personal affix).

The notion of subject as it is used in this paper is independent of information structure and only codes a grammatical relation. In Kabyle, topicality is encoded by the presence/absence and position of lexical NPs or independent pronouns, subjecthood being encoded by the obligatory presence of a personal affix on the verb's radical.

Theticity in the broad sense of the term also involves change of state verbs that refer to appearance or coming into existence: in the corpus I found, among others, yde 'change', ffei 'go out', yli 'fall', kcem 'enter', kker 'stand up, begin.' The predication depicts the manifestation of a state of affairs, instead of stating something about a topic.

In example (15), taken from the sequence in 2.1, the NP ps follows a motion verb, kker, 'stand up', which is also grammaticalized in the language as an inchoative.

(15) te-kker tmeččult nni te-nna=yas
    SUBJ3PS-stand.up.PPFV little.INT=ANAPH SUBJ3PS-say.PPFV=DAT3S
    'The little girl stood up and she said
    fk-emt=iyi tazetta-s
    give.IMPERSUBJ=DAT3S tail.ABS-POSSESS //
    "give me the (bitch's) tail"

Other examples with verbs pertaining to other semantic categories can be found in the corpus, but the context always points to sentence focus, as in the following examples, where the little girls, on their way back home, having been stranded in the woods, encounter a lion.

(16) mi d=wwd-ent yer webrid / ufa-nt=ed
    when PROX=arrive.PPFV-SUBJ3FP to path / find.PPFV-SUBJ3FP=PROX
    izem//
    lion.ABS //
    'When they reached the path / they found a lion /

As is often the case with pa-V NPs, the referent is first introduced as an Object, 'they found a lion', then the whole predication is stated thetically, 'a lion cut their path' (manifested itself). Similarly, in the same example, we can see that the speech introductory verb lula has an extended core NP, this type of predication (involving turn-taking verbs) can be reduced to 'X speaking'; it does not involve a separate predication base.

The prosodic curve of the first part of the utterance is reproduced below, and we can see that the sentence-focus construction ye-zwar=asent=id yizem forms a block, with an integrative curve for the core and extended core. We will see in Section 2.4 that postcore NPs are prosodically separated from the core.

Other frequent contexts for NPs in extended core position are relative clauses. In the conversational corpus, out of 60 <pa-V NP> combinations, 10 (16.6%) occurred in relative clauses. In the next example, the NP yid 'night' is necessarily in postverbal position, regardless of the semantics of the verb (which would have triggered a <pa-V NP> order in a main clause anyway). This syntactic constraint, mentioned in 1.3, is not without informational motivation: indeed relative clauses favour backgrounded information that is best packaged as a bundle, in a thetic configuration.

(17) mi=d ye-yli yid
    when=PROX SUBJ3MS-fall.PFV night.INT
    qgl-emt=ed
come.back.IMP.AOR-SUBJ2PP=PROX
    'When night has fallen come back'

Finally, NP s in extended core position are found in collocations and expressions, as in example (18):

(18) ad kem=ye-xdee Rabbi
    IRR ACC2PS=SUBJ3MS-punish.AOR God
    'May God punish you'

Here again, the construal of the predication is thetic; it is the whole malediction which is in focus, and we do not have a topic-comment organization.

It must be noted that in <pa-V NP> structures, it is not the NP which is in focus, but the whole predication, which is completely different. These configurations often contain given or activated referents, and the activation state of the NP itself is not predictable.

I do not state that this overview of the pragmatic values taken on by the <pa-V NP> configuration is exhaustive. But it gives us a fairly precise idea of the features that the various uses have in common: the close relationship between pa-Vs and NPs, the construal of a sentence-focus predication, the affinity with existential predicators, or more generally the expression of the manifestation or coming into existence of an event or state of affairs.

The investigation of the informational value of those configurations leads us to reject the traditional Berberologist analysis, which considers both extended core and postcore NPs as referential complements of the verbal affixes and clitics. This view does not take into account the affinity between <pa-V NP> and sentence focus, nor does it take into account the difference between postcore and extended core.

2.4 Informational status of the postcore slot

An antitopic is defined by Lambrecht as “a construction in which a lexical topic NP is positioned at the end of the clause containing the information about the
topic referent" (1994: 202). Sometimes, such an NP appears on the right periphery of the clause. It can be coreferential to the personal affix or to personal clitics. It shares with $\text{NP}_{ps}$ of the extended core the fact that it bears the annexation state (integrative case), but it is clearly different from the latter because:

- its coreference is not limited to the personal affix, but extends to the accusative clitic and the possessive affix as well;
- it is characterized by a clear prosodic break (see Mettouchi 2005 and 2006).

In example (19), the accusative clitic $=tt$ refers to the pit that the father dug in order to abandon his daughters. The referent is expressed lexically, as an afterthought by the speaker; not necessarily because there is ambiguity or because the referent may be out of the current focus of consciousness, but rather in this case because the storyteller wants to underline the importance of the pit in the story.

(19) ye-qqaz tasrafti / ye-qqaz ye-qqaz ye-qqaz ye-qqaz / subj3ms-dig.impfv pit.abs / subj3ms-dig.impfv [x 4] / 'He dug a hole / he dug and dug /
armi=tt i-fukk sebea yyam / tesraft-nni //
until=acc3ps subj3ms-finish.pfv seven days.int / ptt.int=anaph //
until he finished it at the end of seven days / the hole' //

These antitopics allow the speaker to complete the basic utterance, either because (s/)he senses that there might be a referential ambiguity or to emphasize the referent, because (s/)he considers that the co-speaker hasn't realized its importance for the current exchange.

Their prosodic contour shows that the postcore slot is not integrated into the core, as the extended core is. It is nevertheless part of the clause, and this is indicated by the integrative case.

2.5 Synthesis

The various positions and their informational values can be summarized as follows:

- the $\text{pa-V} \text{ NP}_{pa}$ ("VS") configuration, where the NP coreferent to the subject affix is in postverbal and core-internal position corresponds to sentence focus;
- the $\text{NP}_{pa/poss/Acc/Dir} \text{ Pa-V}$ ("SV") configuration, where the NP coreferent to the subject or possessive affix or an argumental clitic is in prehead position, corresponds to predicate focus, with a marked topic (topical shift or topical anchoring for an assessment);
- the $\text{pa-V}(O)$ configuration, where no coreferent NP is expressed, corresponds to predicate focus, with an unmarked topic (topic continuity);
- the $\text{pa-V(+Clitic) / NP}_{pa/poss/Acc/Dir}$ configuration, where the NP coreferent to the subject or possessive affix or an argumental clitic is right-dislocated, corresponds to predicate focus, with an antitopic (referential ambiguity, or referent pinpointing).

In terms of syntactic domains, the abbreviations SVO, VSO, and so on are somewhat misleading. They convey a false impression of symmetry around the verb. My investigations show that Kabyle is characterized by a postverbal domain that is richer and more complex than the preverbal one. In particular, the extended core, which is prosodically and syntactically distinct from the postcore slot, is more closely related to the core and basic sentence than to the prehead or postcore positions. The syntactic weight is clearly on the right of the head. But we mustn't forget that the prehead position is not exceptional at all for NPs, and that it is motivated, not grammatically, but pragmatically (by information structure constraints). Contrary to English, which combines topical, subjective, and very often agentive dimensions on the preverbal NP, Kabyle encodes those dimensions separately: the subject as a strictly grammatical relation is encoded by the affix, 19.

This had never, to our knowledge, been noted and investigated in Berber before our studies on information structure.

19. This had never, to our knowledge, been noted and investigated in Berber before our studies on information structure.
and topicality by the presence or absence of a prehead NP. One thing remains to be understood more thoroughly: the cognitive process by which the coreference between affixes and NPs is recognized.

One clue is to be found in the binary case system of Kabyle, which we are now going to investigate.

3. The case system of Kabyle

The case system of Berber has long been a challenge for linguists. Unlike the complex case systems of some Indo-European languages, the Berber system\(^{20}\) only has two terms, one which corresponds to the citation form of the noun, and the other one, marked by the phonological alteration of the first vowel,\(^{21}\) aqic 'boy' in the citation form, corresponds to weqic in the annexation state. Similarly, the annexation state corresponding to tagict 'girl' is teqict. Berberologists chose the label "annexation state" because the relationship indicated by the marker is one of dependency: the motivation for the label is that postverbal NPs, which bear the "annexation state", are attached to the core, whereas the relationship between the prehead NPs (which are in the citation form) and the core is freer. For my part, following Creissels (2006:52–53), and in the aim of adopting a less idiosyncratic terminology, I call the citation form "absolute case" and the other one "integrative case"\(^{22}\).

Whereas for marked topics, the NP is always in the absolute case, in sentence focus and for antitopics, the NP that is coreferent to an affix or clitic is in the integrative case. In terms of syntactic configuration, all prehead NPs are in the absolute case. The situation is more complex for the postverbal NPs: direct objects are in the absolute case, whereas all NPs coreferential to a personal or possessive affix or a personal clitic must be in the integrative case.

The question is whether we should analyze those facts as pointing to a subject-marking strategy, or to a broader phenomenon. I will show that although the first stance is clearly insufficient, it provides insights for a global analysis that I will present in Section 3.2.

3.1 Detopicalization and noncanonical subjecthood

A semantic study of NP\(_{pa}\)'s in the extended core shows that they do not refer to prototypical agents, and are not necessarily definite. Those properties seem to identify the utterances containing those postverbal NPs with the "sentence-focus constructions" mentioned in Lambrecht (2000:624): "SF [sentence-focus] marking involves cancellation of those prosodic and/or morphosyntactic subject properties which are associated with the role of subjects as topic expressions in PF [predicate-focus] sentences". Indeed, the use of the "annexation state" in clausal contexts could be considered as a detopicalizing device, together with the postverbal position of the NP, and its prosodic fusion in the verb's intonational curve. All those features the NP\(_{pa}\) shares with complements. And in fact, Galand (1994:83) states that: "la traduction française et une certaine routine ont fait (et parfois font encore) considérer [le complément explicatif] comme le 'sujet' du verbe, mais l'obligation de mettre le nom à l'état d'annexion prouve que son rôle syntaxique est bien celui d'un complément"\(^{23}\).

However, the notion of detopicalization, because it implies that the topic should be the basic element of the predication, would give topicality an importance and a precedence which it does not have in Berber: we are not confronted to a language that is primarily SVO and occasionally or secondarily VSO; it is rather the contrary: extended core NP\(_{pa}\)s are on the whole more frequent than prehead ones, and their range of uses is richer.

Another approach consists in considering that NP\(_{pa}\)s bearing the integrative case are in some way noncanonical. Indeed in many languages, there are subclasses of subjects bearing a case that is neither nominative nor ergative, but genitive, dative, or locative, etc. (Aikhenvald, Dixon, and Onishi 2001; Bhaskarao and Subbarao 2004). In the preface to the first book, Dixon, Aikhenvald, and Onishi (2001:ix) use examples to define noncanonicity: "For example, in a nominative-accusative language, S and A functions\(^{24}\) may be marked by nominative case for most verbs (the canonical marking) but by dative or genitive case for a small set of verbs (the noncanonical marking). In an absolutive-ergative language, a function

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21. For a more detailed description, see Chaker (1988).

22. This terminology encompasses nominative-accusative systems, absolutive-ergative ones, and all binary systems where a case limited to certain syntactic contexts ("integrative") is opposed to a form that is used for citation, and in the syntactic contexts where the integrative is not used.

23. "Because of the French translation and a certain degree of routine, the [postverbal NP\(_{pa}\)] has been, and is still considered as the verb's 'subject', but the fact that the 'annexation state' is obligatory proves that this syntactic role is indeed that of a complement".

24. O is the object, S the intransitive subject and A the transitive subject.
will receive the canonical ergative marking with most transitive verbs, but may receive noncanonical locative or dative marking, with two small sets of verbs".

Onishi (2001:25) states that there are several semantico-syntactic verb classes associated with noncanonical marking of subjects, cross-linguistically:

Class I: One- or two-place (Primary-A) verbs with affected S (or A), e.g. *be chilled, have a headache, be sad, be surprised*.

Class II: Two-place (Primary A-B) verbs with less agentive A (or S)/less affected O (or E), e.g. *see, know, like, look for, follow, help, speak to, resemble*.

Class III: Two-place Secondary verbs with modal meanings, e.g. *want, need, can, try, seem*.

Class IV: Intransitive/transitive verbs expressing "happenings" (They usually have canonically marked counterparts with agentive meanings).

Class V: verbs of possession, existence and lacking.

In addition, Onishi (2001:36) points out that lack of control or volition, stativity, and modality (irrealis among others) are features associated in some languages with noncanonical subject marking. The first two features are in fact related to verb Classes I, IV and V.

It happens that many verb-types associated to extended core NP_s in Kabyle roughly correspond to Classes IV and V. In addition, I have shown (Mettouchi 2004) that Kabyle is a language where stativity, linked to intransitivity, is the basic aspect/valency format, transitives being morphologically derived for a high number of verbs. We are therefore in a language that is likely to show noncanonical subject marking. However, this approach of the problem needs to be tested further, since if stativity is undoubtedly fundamental in the predicate system of Kabyle, it is not the stative predicates (Onishi’s Class I) which specifically trigger the use of the integrative case.

Moreover, the integrative case is not limited to NP_s in Kabyle: all right-branching NPs that are coreferent to a personal or possessive affix, or to a personal clitic, must bear this case-mark. The problem is therefore not specifically that of subject marking. Rather, it concerns all NPs that imply reference to a participant in the predication.

3.2 The locative-ablative hypothesis

Not only does the integrative case-marking concern arguments other than the subject, but it also appears inside NPs as an intra-phrasal marker. The relevant contexts are those of nominal or prepositional complementation: genitive, prepositional phrases, numeral, or quantifier complements.

Genitives.26

(20) axxam umeksa
    house.abs shepherd.inf
    'The shepherd’s house.'

Comparison of equality:

(21) axxam=agi am wexxam=iw
    house.abs=deict like house.inf=poss15
    'This house is like my house.'

Numerals or quantifier complements:

(22) teta teqecin
    three girls.inf
    'Three girls.'

Prepositional phrase:

(23) deg wexxam
    in house.inf
    'In the house.'

3.2.1 Intra-phrasal contexts

Basing his analysis on the fact that prepositions are former nouns that have grammaticalized into adpositions, Chaker (1988:689) considers that there is a unity underlying all those uses: "tous se ramént en définitive à la relation déterminative entre deux noms satellites: nom déterminé lexical pour le ‘complément de nom’, grammatical pour l’explication des interlocuteurs."

26. For most genitives, the integrative case is doubled. Phonetically, the realized phoneme is a tensed version of the first (semi-)concatenated: *aqian teqecit* [dog.abs girl.inf, the girl's dog], *aqian wexqec* [dog.abs boy.inf, the boy's dog]. Syntactically, however, Berberologists consider that a preposition n ('of') has to be reconstructed, and therefore, the standard orthography is *aqian n teqecit / n wexqec*, with simple integrative case after the preposition. Genitives where the possessor is a lexeme whose integrative case is in i- or u- (instead of we- or te-) do not double, as for *umeksa* in our example.

27. "all cases can be reduced to the determinative relation between two nominals: a lexical determined noun for the 'prepositional noun complement', a grammatical determined item for the explicitation of personal affixes'.
I think that if this analysis is synchronically acceptable, it can however be made more precise, and related to an actual case-marker, which I am now going to define.

First of all, instead of considering only the relationship as one of determination, we might investigate further and try to characterize semantically the relationship that holds between the two terms in those intra-phrasal units.

The genitive can be seen as relating a source, the shepherd, to a target (the house, the referent that the speaker is trying to determine). The shepherd is the anchoring-point, and the house is an element that is related to it, not qualitatively as an adjectival modifier would be, but in terms of its being part of the set of possible belongings of the shepherd. In other words, the genitive construes a potential domain around the anchoring point, and from this virtual set, it extracts one element that is the thematic goal of the predication. This analysis of the genitive underlines the fact that the NP bearing the integrative case can be considered as the starting point of a cognitive relational process. In the framework of Langacker's (1993) cognitive grammar, the reference point (the possessor) locates the target (the possessed item), and the integrative case is the conceptualizer which establishes mental contact with the target entity by means of the reference point.

Quantifiers and numerals also extract elements from a set; saying 'three girls' implies that a set of countable items is presupposed, which is the basis for the selection of some members of the set. Those members are not considered qualitatively, but quantitatively. Once again, we can notice that the integrative case bears on the reference point, which is here the set of countable items.

The integrative case on nominals following prepositions is a somewhat more complex phenomenon, but it can be explained if we keep in mind the fact that not all prepositions trigger the integrative case. Two of them, among the most ancient ones, are followed by nominals in the absolute: s 'to, towards' and ar 'until, towards'. Those prepositions are "allative"; they refer to a movement towards a target. Conversely, among the prepositions followed by the integrative case, we find segl "from (origin)", deg "in (stative location)". Prepositions therefore fall into two subsets: on the one hand, the allative subset, associated to the absolute case, and on the other hand, the ablative-locative subset, associated with the integrative case. It is interesting to note that most of the time in Kabyle, the ablative and the locative prepositions are subsumed under a common reduced form, e.g. Also relevant to my hypothesis is the fact that the lexeme following the comparative am ("like, as" (example (21))), which is the reference point of the comparison, is in the integrative case.

Those facts are arguments in favour of my claim, according to which an ancient ablative-allative opposition characterized the system of prepositions. This system is somewhat blurred, because the integrative case has been extended to almost all prepositions, thus concealing the former semantic unity of the original configuration: it has become a dependency marker. This extension of the integrative case on NPs following prepositions can be put in parallel with the extension of that case-marker to all lexemes to the right of the verb (extended core and postcore).

I will now show that in the same way as the semantics of ablative-locative is relevant to the intra-phrasal contexts explored above, it is also relevant to NP Ps in the extended core. Similarly, the extension of the integrative case on NPs in the postcore slot, just like the extension of the integrative case to NPs following all kinds of prepositions (except s and ar), is motivated by an extension of the ablative-locative dimension to the more abstract one of relational dependency.

3.2.2 From intra-phrasal to intra-clusal

I showed in Section 2.3. that the <pa-V NP Ps> 's informational status was linked to sentence focus, and theticty. It is possible to link that informational status to semantic-cognitive values: in <pa-V NP Ps> constructions, the NP Ps can be considered as the anchoring-point of the predication, the verb being its manifestation. Example (24) is a typical instance of such thietic, sentence focus predications.

(24) ye-wwed-d wayzen
subj3sms-arrive.pfv=prox ogre.int
'The ogre arrived.'

It is possible to reformulate the utterance in the following way: "arrival of the ogre", or "manifestation of the existence of the ogre". The ogre is the reference point, the source of the predication, the verb being rather empty semantically (or at least very frequent and apt to be complemented by a number of possible NPs). The same organisation characterizes existential predications and, by extension, all the predicatives that regularly contain an NP Ps in the extended core, namely, those containing change of state verbs that refer to appearance or coming into existence: among others, yel 'change, ffey 'go out, yly 'fall, kcem 'enter, kker 'stand up, begin.'" When the use of an NP Ps in the extended core is not motivated by the semantics of the verb itself, the sentence focus or the thietic format provides the same semantic motivation for an ablative-locative case: the whole situation is construed globally, there is only one focus of interest, and the manifestation is not that of a referent, but that of a whole predicative relation. The case-marker here indicates

28. I consider that the integrative case on antitopics is a further development in Kabyle, since the available data seems to show that in other dialects the integrative only appears on extended core NP Ps.
that what is salient is the coming into existence of a situation or event, of which the experiencer is the locus.

The Berber languages in which there is an absolute/integrative opposition do not all use the integrative in the postcore slot, i.e. for antitopics. Kabyle does, and I hypothesize that this is due to the extension of the function of this ablative-locative case to that of a dependency marker.

The proposed scenario is that due to the argumental nature of person affixes and clitics, NPs were felt to be adjuncts coreferential to those person-markers, in particular at the right of the core, since the head-initial syntax of the language implies that cognitive processing co-indexes right-branching NPs to clitics and affixes that are on its left, and borne by the TAM particle or the verb. If we go back to the phrase-internal use of the integrative in the domain of prepositions, we can see that the extension of the integrative from an ablative-locative to an oblique follows the same path: the more abstract and general dependency relation stems from a more precise ablative-locative relation. This extension also explains why the absolute/integrative opposition also holds for NPs in nonverbal predicates, as is shown in (25).

(25) taqciq-ntni \_ d tagugamt
     girl.labs-anaph cop mute.fabs
     'That girl is/was mute.'

(25') d tagugamt taqciq-ntni
     cop mute.fabs girl.int-anaph
     'That girl is/was mute.'

Although (25') is far rarer than (25), or than the basic nonverbal utterance d tagugamt 'she is/was mute', it is nevertheless perfectly acceptable, and shows that there is no need to have personal affixes or clitics in order for the integrative case to be used. This may point to a development by which the integrative case would have become only a position-marking case, as was suggested by an anonymous reviewer. However, we must keep in mind that not all postverbal NPs are in the integrative: direct object NPs are in the absolute. I would therefore argue in favour of a relation-marking case linking the nominal in the integrative to the overt or covert argument structure of the predication, the (covert) argument structure of a nonverbal predication such as (25) being <Experiencer/Predicate>.

This hypothesis according to which the integrative case of Kabyle would stem from the reanalysis of a locative-ablative case-marking into a dependency marker has never been proposed, to my knowledge. I have developed it in several publications (Mettouchi 2005, 2006, and 2007a).

Other hypotheses have been put forward, namely, that the integrative case-mark of Berber should actually be a genitive. Sasse (1984:120), for instance, explicitly links genitive and integrative (here called 'dependent form'): 'The dependent form signals the non-focalized subject, the adnominal genitive, and the object of prepositions (normally = genitive in Afroasiatic). According to Sasse, the Proto-Cushitic case-system had three cases (subject, absolute, and genitive or possessive), to which he proposes that the binary case-opposition of Berber should be the functional equivalents: "The functional range of the 'independent' form of Berber is equivalent to that of the Cushitic Absolute (with one minor difference, that the subject of nominal sentences in Berber is in the 'independent' form), and that of the dependent form to that of the Cushitic Subject Case + Genitive. The formal identity of Subject Case and Genitive is a common feature of Cushitic languages" (1984:121). This hypothesis is interesting in that it relates subject and possessor, but in the absence of a thorough investigation of the functional range mentioned in the quote, it is very difficult to go beyond tentative parallels, and even more difficult to explain those similarities.

The same criticism can be addressed to König (2006), in which she proposes that the Berber system should be interpreted as in terms of a marked nominative (my integrative) opposed to an accusative (my absolute). She classifies Berber among Type-1 languages, in which "the accusative is the morphologically unmarked form and the nominative the morphologically marked form" (2006:658). She states that in such languages the accusative covers O and the marked nominative S and A (2006:658). One of the problems is that the so-called accusative is also the form taken by topical and focused NPs in Kabyle, as well as by NPs in nominal predicates. Although König is aware of this fact, she does away with it in a way that might be relevant for other African languages (2006:726, n. 27), but is not for Kabyle: in Kabyle as I showed, not only topical (i.e. prehead) NPs bearing the absolute ("accusative") case-marker can be S, O, or A, but antitopical (i.e. postcore) NPs bearing the integrative ("marked nominative") case-marker can also be S, O, or A. Moreover, I showed that possessive affixes also trigger the use of the integrative case on the coreferent NP (which is neither A, O, or S). König's generalization is valid for Kabyle only if we exclude entirely the prehead and postcore slots, which is somewhat problematic. No explanation is given to account for the fact that the unmarked case (sometimes a "zero", sometimes an "accusative") should be shared by topical NPs and Object, and the "marked nominative" by antitopical NPs and A or S postverbal NPs.

29. König's interpretation of other authors' analysis of Berber data unfortunately leads to some oversimplifications, for lack of access to first-hand data, and therefore to the complexity of the actual case-marking systems of Berber.
As far as I am concerned, my claim is that case-marking has to do with coreference with the overt or covert argument structure of the predication, and through that coreference relation, inclusion in the syntactic domain of the sentence, be it as an extended core NP, or as a postcore NP or POS or C. Even in former stages that can be reconstructed language-internally as well as by dialectal comparison, case-marking in clauses is best ascribed to the semantico-cognitive construal of events and situations, not to the grammatical status of NPs.

Another suggestion is made by Lipinski (1997/2001), who relates the integrative case of Berber to an “ergative”, and the absolute case to a “non-active” case. This opposition between ‘ergative’ and ‘non-active’ (2001:259–265) suggests that agentivity should be a feature of extended core or postcore NP’s. Synchronously, nothing of the sort can be stated for Kabyle.

However, given the tendency of extended core NP’s to occur with unaccusative verbs (see 2.3 above), it is possible that intransitivity might be an original feature of such constructions. In that case, the correlation would be: A₂ + O = absolute case, and S = integrative case. But this would only be valid for the core of the sentence, since topicality and antitopicality clearly neutralize grammatical relations (all topics are in the absolute in Kabyle, whereas all antitopics are in the integrative). Moreover, the counts conducted in Mettouchi (2007b) do not show a marked bias in favour of intransitivity for extended core NP’s; the use of the integrative case for extended core NP’s in transitive predications is synchronically frequent.

3.3 Synthesis on the binary case-system of Kabyle

My diachronic scenario involves a first stage in which the ablative dimension of the annexation state was still predominant. This gave rise to a treatment of the <pa-V NP> clausal sequence on the same model as <numeral NP >, <ablative preposition NP >, or <Possessed NP NP > in intra-clausal constituents.

In a second stage, in the realm of the clause, all types of sentence focus, not only those which were semantically motivated by an ‘ablative’ dimension, became thus marked by the integrative case. The common factor uniting those types of clauses is the notion of “block”: pa-V and NPs are closely associated in a sentence-focus construction; the entire situation, including all of its participants, is viewed as a unitary whole. This notion of unit or block led to a conception of the annexation state as representing the right boundary of the clause, thus reinforcing the coreference relationship to the personal affix.

The relationship between the coreferent NP and the personal affix was then extended to other coreferential relationships, namely, the one between personal definite or possessive affixes and antitopical NPs. This stage is characteristic of Kabyle, and corresponds to the reinterpretation of the annexation state as a dependency marker.

Now what does it mean that a language should consider the ablative-locative as such an important semantic case that it places it at the heart of the system? I propose that the explanation lies in the overall architecture of the language in question. For Kabyle (and other Berber languages), a fundamental dimension that pervades the whole system at various levels is deixis: the TAM system is tenseless and the underlying predicates are very often stative, the proximal particle is very frequent and grammaticalizes as a present relevance, benefactive, and testimonial marker, among other values. The irrealis particle is a former speaker-oriented deictic, so that future events for instance are conceptualized as coming towards the speaker, not stemming from their intention or projections. The nonverbal copula is also of deictic origin. All this points to a general architecture where the incidence of globalized events and situations on the speaker is first and foremost, in many areas of the language. I consider that the importance of the ablative-locative dimension should be related to the same principle, and pertains to the same vision whereby the predications construed by the speaker are massively conceptualized as stable global entities that exist, happen, manifest themselves, appear in the speaker’s realm, and possibly affect him/her.

It would be interesting to work in this perspective on case-marking in African languages, in order to check whether such mental construals could be the motivation for at least some absolute/integrative case systems (including absolute/ergative ones), especially in Afroasiatic.

Conclusion

The interplay between word-order, the pronominal argument system, prosody, and case-marking is an example of complex coding of topic-focus articulation, grammatical relations, and the delimitation of syntactic and functional domains.

I have demonstrated that word-order variation in Kabyle largely depends on topic-focus articulation, thus classifying Kabyle as a discourse-configurational
language. I have related syntactic domains to information structure values in the parallel way:

- the pa-V NP_{pa} ("VS") configuration, where the NP coreferent to the subject affix is in postverbal and core-internal position corresponds to sentence focus; it is associated with an integrative prosodic curve.
- the NP_{pa/poss/acc/det} pa-V ("SV") configuration, where the NP coreferent to the subject or possessive affix or an argumental clitic is in prehead position, corresponds to predicate focus, with a marked topic (topical shift or marginal anchoring for an assessment);
- the pa-V(O) configuration, where no coreferent NP is expressed, corresponds to predicate focus, with an unmarked topic (topic continuity);
- the pa-V(+Clitic) / NP_{pa/poss/acc/det} configuration, where the NP coreferent to the subject or possessive affix or an argumental clitic is prosodically right-dislocated, corresponds to predicate focus, with an antitopic.

I have investigated the role of case-marking at the level of the clause in parallel with the intra-phrasal level. It is only by studying both syntactic contexts that we can see that case-marking in Kabyle cannot be equated to an argument-marking case such as the nominative, but has to be analyzed as a relational case, based on the semantics of dependency (a source and a target, a locative relationship).

More precisely, I have shown that the integrative case, which is synchronically a dependency marker, is likely to have stemmed from an ablative-locative case, originally the marked member of a binary opposition with an ablative case. Ablative prepositions on the one hand, and situational, eventive, or presentational thetic sentences on the other hand, were the original contexts for this case-marker which was later reanalyzed as a dependency marker. This reanalysis at clause level is probably due to the argumental nature of the personal affixes and clitics, which implies that their coreferential right-branching NPs should be related to them. At phrase level, the behavior of prepositions as syntactic heads probably played a role in the reinterpretation of the ablative-locative case into a plain, general oblique. However, the ablative-locative dimension of the integrative case is still very much perceptible in the system, be it at clause or at phrase level.

I would like to conclude this chapter by underlining the importance of a thorough study of language-internal phenomena on the basis of first-hand, authentic, and if possible nonelicited data, in order to form a sound basis for typological generalizations and for theoretical debate. It is particularly important to insist on this for Berber, since current typological studies include it more and more in their search for universals.

References

The internal and comparative reconstruction of verb extensions in early Chadic and Afroasiatic

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Verb extensions have a high frequency in many of the Chadic languages. The present study compares the evidence previously presented by Paul Newman and Russell Schuh for West Chadic with new evidence from a second primary branch of Chadic, drawn specifically from the Mafa language, with the aim of discovering whether this pattern might go far back in Chadic linguistic history. Applying the methods of internal reconstruction to the Mafa verb lexicon reveals a large number of formerly productive extensions in that language. The comparison of the Mafa and West Chadic findings indicates that most of these morphemes can be reconstructed back to proto-Chadic and that proto-Chadic therefore likely possessed a complex system of productive verb extensions. Inter alia, this study supports Schuh's as well as this writer's contention in previous works that recurrent stem-augmenting processes, and not 'loss of radicals', accounts for most roots in Afroasiatic languages with more than two consonants.

As I see it, the reconstructability of root-augmenting suffixes in Chadic should lead those who have not already done so to rethink the Semitic-influenced concept of "loss of radicals" as a way to account for verbs with fewer than three consonants in language families such as Berber and Chadic. A much more likely picture, sketched broadly in Newman (1991), is an ancient and continuing process of ADDING radicals as one of a number of stem-augmenting processes in all families, Semitic included [emphasis in original].

Russell Schuh

With these words Russell Schuh (2003) succinctly identifies a key question in Afroasiatic (Afrasian, Afrasan) linguistic reconstruction and provides the answer the evidence from West Chadic requires – that the original verb stems of Afroasiatic generally had fewer than three consonants and that the addition of verb suffixes/extensions was an important stem-augmenting process in producing stems with