Focus Constructions in Berber

SHLONSKY, Ur

Reference


Available at:
http://archive-ouverte.unige.ch/unige:83252

Disclaimer: layout of this document may differ from the published version.
Focus Constructions in Berber

Ur Shlonsky

1. Introduction

In this paper an attempt is made at analyzing the interaction of two focus constructions in Berber, a surface VSO language spoken in North-Africa. 1 The two, we shall name, following Guerssel (1985), left-dislocation and clefting. It is shown that left-dislocation is a non-movement strategy while clefting involves clause-bound operator fronting. The interaction between the two gives rise to long-distance dependencies. The clause-boundedness of movement in Berber is shown to derive from the structure of the complementizers in the language. Descriptively, subordinating complementizers do not permit movement through them. Some properties of long-distance dependencies are discussed with an emphasis on the nature of a CP-adjunction site. The Berber data strongly suggest that the language regularly employs what has come to be known as ‘exceptional Case marking’ strategies.

2. Left-Dislocation

Consider first Left-Dislocation of subjects in root clauses.

(1) a. (ldir) y-ju Amazigh.
   ldir 3ms-be Berber
   (ldir), he is a Berber.

b. (ldir) y-sghu ddisk.
   ldir 3ms-bought record
   (ldir), he bought a record.

c. (ldir) y-hegh zy taddart.
   ldir 3ms-exited from house
   (ldir), he left the house.

The dislocated NP is separated from the rest of the sentence by comma intonation, as

1. The core of this paper is the result of the collective effort of the participants in the Spring 1985 class on Berber syntax. Special thanks go to Steve Abney, Mohamed Guerssel, Ken Hale, Loren Trigo and Michele Sigler. All errors, omissions and the countless incoherencies are my own.
indicated in the translations. Note, also, that the sentence is perfectly grammatical even if the left dislocated NP is null.

Not only subjects, but any NP may be left dislocated. But if it is not a subject, then a resumptive pronoun must appear in the clause. Since resumptive pronouns in Berber are clitics, they are coindexed in accordance with the coindexation rules of the language.2

(2) a. ddisk ṣaghu t Yidir. record, 3ms bought it Idir
   The record, Idir bought it.

b. tadfort y-flegh zzy-s Yidir.
   house 3ms-exited from-it Idir.
   The house, Idir left it.

c. *tadfort y-legh zzy-s Yidir.
   from house 3ms-exited from-it Idir.

The absence of a clitic when subjects are left dislocated is presumably due to the fact that Berber is a null-subject language. The obligatory presence of overt resumptive clitics when non-subject NPs appear in left-dislocated position suggests that that position is external to the clause to which it is related, i.e., it is in a non-argument position with respect to the clause in question. A resumptive clitic is necessary to absorb the θ-role assigned to the argument position associated with the left dislocated NP and to fulfill the requirements of the projection principle.

The simplest hypothesis is that left-dislocated NPs are base-generated in clause-peripheral position and the resumptive pronouns in the respective argument position (cf. Chomsky (1977)). Coindexing of the clitic and the peripheral NP assuring the correct interpretation of the phrase.

A question now arises as to the precise location of the putative position in which a left-dislocated phrase is generated. Specifically, is it external to IP alone or to CP as well? Consider the following examples.

(3) a. qeen-x is y-uzn Mohand litub. know-1a that 3ms-sent M.
   I know that Mohand sent a book.

b. qeen-x litub is-t y-uzn Mohand.
   know-1a book that-1 it 3ms-sent Mohand.
   I know that, as for the book, Mohand sent it.

c. *qeen-x is litub y-uzn-t Mohand.
   know-1a that book 3ms-sent it Mohand

If the left-dislocated NP were merely external to IP, we would expect (3c) to be grammatical, which it is not. It appears, then, that left-dislocated NPs appear outside of CP. For the time being, let us assume, that they are generated in a position adjoined to CP. The S-structure of (3b) is, then, as in (4), with irrelevant details suppressed.

(4) [qeen-x, qeen-xlitub [y-uzn-t Mohand]]]]

If left-dislocated NPs are in fact base-generated in a non-argument position, and receive their θ-role through coindexing with a resumptive pronoun, it is not clear what licences them at D-structure. At LF, the θ-role assigned to the resumptive clitic (or pronoun in [NP/S] position) is transmitted to the left-dislocated NP and the resumptive pronoun is interpreted as a variable bound by the left dislocated NP.3

Left-dislocation is not a subcase of move-a. Predictably, then, the locality constraints on movement would not be applicable to the relationship between a left-dislocated NP and its associated resumptive clitic (or gap in the case of subjects) Long-distance left-dislocation ((5a below)), as well as left-dislocation over an island ((5c) and (5e)) ought to be grammatical.

(5) a. Tifa y-ama Bassu is y-qeen Mohand is taddat.
   Tifa 3ms-said Bassu that 3ms-know Mohand that 3fs-entered house
   Tifa, Busu said that M. knows that she entered the house.

b. wiyiyin assum?
   who ate meat
   Who ate the meat?

2. Clitics attach to preverbal particles in COMP or in their absence, to the verb itself.

3. This paper was written before I had access to Massam (1965) where structures similar to Berber left-dislocation are discussed extensively, and an explicit algorithm for θ-role assignment to left peripheral arguments is proposed.
3. Clefting

A second type of focus construction prevalent in Berber is clefting. It differs from left dislocation in several respects:

- Any Vj element may be clefted while only NP's may be left dislocated.
- The clefted element is associated with a gap, not with a resumptive pronoun.
- The clefted element is focused with respect to the rest of clause by the complementizer ay/ha.
- Left-dislocated elements appear in root clauses without any complementizer separating them from the rest of the sentence.
- In embedded left dislocation constructions, the left-dislocated NP appears to the left of (outside of) the entire clause which is subordinated by means of the particle is/la.
- When a clause containing a cleft is subordinated, the clefted element appears to the right of the subordinating complementizer is and is preceded by the copula d. Left-dislocated NP's always appear to the left of is.
- When the subject is clefted, the verb appears in the participial form which is unmarked for e-features.

These facts are illustrated in the sentences in (6). (6a) is a regular declarative sentence. (6b) illustrates clefting of a direct object. (6c) of a prepositional object. In (6d), an entire PP is clefted (pied piped).4 In (6e) an adverb is clefted while (6f) illustrates the clefting of a subject.

4. There is another, more common construction, in which the preposition is doubled, e.g. "(d) gher Fas a-gher y-uzn wryaz tabratt." Discussion of these forms, as well as (6c) is in section (7).

(6) a. y-uzn wryaz tabratt gher Fas idennatt. 3ms-sent man letter to Fes yesterday
    The man sent the letter to Fes yesterday.

b. (d) tabratt ay y-uzn wryaz gher Fas idennatt. cop letter that 3ms-sent man to Fes yesterday
    It is a letter that the man sent to Fes yesterday.

c. (d) Fas a-gher y-uzn wryaz tabratt idennatt. cop Fes that-to 3ms-sent man letter yesterday
    It is Fes that the man sent the letter to yesterday.

d. (d) gher Fas ay y-uzn wryaz tabratt idennatt cop to Fes that 3ms-sent man letter yesterday
    It is to Fes that the man sent a letter yesterday.

e. (d) idennatt ay y-uzn wryaz tabratt gher Fas, cop yesterday that 3ms-sent man letter to Fes
    It is yesterday that the man sent the letter to Fes.

f. (d) wryaz ay y-uzn: tabratt gher Fas idennatt, cop that sent-part letter to Fes yesterday
    It is the man that sent the letter to Fes yesterday.

A clause containing a cleft may be subordinated, but then the clefted NP appears to the right of the subordinating complementizer is, preceded by the copula d.

(7) y-firm Bassu is d Tifa ay yininn. 3ms-undressed Bassu that cop Tifa that sleep
    Bassu understood that it is Tifa that is sleeping.

I will assume that the clefted element, like the dislocated NP, is generated in a position adjoined to CP. Unlike left-dislocation and for reasons we shall discuss momentarily, it is followed by the complementizer a/ha. The position of the clefted NP with respect to a higher clause, i.e. its appearance to the right of the subordinating particle is due to the fact that the clefted NP is always separated from the boundary set by is by an additional clause containing the copula d and a null-explicative subject. (cf. Italian: 'e Gianni che Mario odin' vs. English: "It is John that Bill hates"). The copula d may be phonetically null under conditions which need not concern us here. Thus, consider the S-structure representation of (7), again omitting irrelevant details.

(8) y-firm Bassu [sp[sa] cop Tifa ay yininn]
complements. Are there other differences between a COMP phonetically realized as *may and is? In what follows, it will be shown, that unlike left-dislocation, clefting involves operator movement, of which *may, with or without a preposition is a phonetic realization. Specifically, I shall argue that there are two sorts of complementizers in Berber, *-type COMP's which have a middle position in which an operator may move, and a type COMP which allow in fact require, a specifier.

4. The Interaction of Left-Dislocation and Clefting

Let us now examine one peculiar property of these cleft constructions. Recall that recent clefts have gaps and a resumptive clitic is not generated. When, however, a clefted element comes from a deeply embedded clause, a resumptive clitic is obligatorily present in the clause from which the clefted element was extracted. Consider first two story structures.

(9) a. (d) talatt ay yuri Mohand.
   cop letter that 3ms-write Mohand.
   It is a letter that Mohand wrote.

b. * (d) talatt ay yuri Mohand.
   cop letter that 3ms-write Mohand.
   It is a letter that Mohand wrote.
   (10) ay-wtu t/0 y-wtu 3ms-hit Mohand.
   self hit 3ms-hit Mohand.
   It is a letter that Mohand wrote.

Recall that it is the process of left-dislocation which results in resumptive clitics. Suppose now that long-distance clefting consists of left-dislocation followed by short-distance clefting, as proposed in Greenberg (1973). That is to say, consider that clefting involves the movement of

an operator to COMP. The operator is base-generated in the position of the left-dislocated NP so that movement is actually local. The O-structure representation of (9a) is then as follows.

(11) [i\_talatt [i\_y-wtu t/0 y-wtu 3ms-hit Mohand]]

The complementiser ay can be viewed as simply the phonetic realization of a fronted

operator. Rather than moved from an embedded position, it is fronted across no barriers. Below we shall argue, following May (1985), that adjoined positions ought to be viewed as excluded from the maximal projection which immediately dominates them. Thus, fronting of an operator from a CP-adjoined position does not cross CP. It appears that this strategy is the only one available for long-distance dependencies. Unlike English, for example, Berber does not permit long-extraction. If that is the case then the only elements which allow of long-distance cleft dependency should be those elements which may be generated in the left-dislocated position. The prediction that is then made is that while short clefting can effect any non-verbal element, long-clefting is possible only with elements which allow of left dislocation. Postponing for the moment the tricky case of prepositional phrases, consider the following sentence. In (11), the clefted adverb may have only wide-scope interpretation. That is to say, it does not modify the embedded verb.

(11) idennn fay mii-x is y-wtu Mohand talatt.
   yesterday that know to that 3ms-send Mohand letter
   It is yesterday that I thought that Mohand sent the letter.

Another test for the analysis proposed above is afforded by the behavior of fronted anaphors.

In root clauses, an anaphor may be clefted but it may not be left-dislocated.

(12) a. y-wtu Mohand ist-wns.
   3ms-hit Mohand sell-him Mohand.
   b. (d) ist-wns ay y-wtu Mohand.
   cop sell him that 3ms-hit Mohand
   It is himself that Mohand hit.
   c. *ist-wns y-wtu t Mohand.
   self-hit 3ms-hit-him Mohand
   Himself, Mohand hit him.

Consider now long clefting.

(13) *ist-wns ay tri-x is t/0 y-wtu Mohand.
   self-hit that saw is that it/0 3ms-hit Mohand
   It is himself that I saw Mohand hit him/0.

The ungrammaticality of (13) follows from the analysis proposed above. The fronted operator could not have come from the left-dislocated position to the left of is because anaphors may not be left-dislocated. If clefting were unbounded, nothing would rule out (13). Its
ungrammaticality suggests that clefting is clause-bound.

If clefting involves clause-bound movement we should expect that, in contrast to
left-dislocation, clefting out of islands will result in ungrammatical sentences. One
construction that can be tested for is one in which an operator may
move is filled by another NP, as in (14).

(14) a. *ziR-x is tessudem Tifa Mohand.
    saw 1S that 3Ss-kissed Tifa Mohand
    I saw that Tifa kissed Mohand.

b. ziR-x Mohand is d tessudem Tifa.
    saw 1S Mohand that 3Ss-kissed Tifa.
    I saw Mohand that Tifa kissed him.

c. ziR-x Mohand is d Tifa ay t yssudmen.
    saw 1S Mohand that cop Tifa that him kissed part
    I saw Mohand that it was Tifa that kissed him.

d. *di Tifa ay ziR-x Mohand is d tessudem.
    cop Tifa that saw 1S Mohand that him 3Ss-kissed
    It was Tifa that I saw Mohand that she kissed him.

(14a) is a regular declarative sentence. In (b), the object of the embedded clause is
left-dislocated. In (14c), the object Mohand is again left-dislocated, but this time over a clause
containing a clefted subject. Since left-dislocation involves no movement, the sentence is
grammatical. (14d) is the mirror-image of (14c): the embedded subject is cleft over a clause
containing a left-dislocated object. The position in (14b) from which the operator is fronted is
filled by an overt NP and therefore movement must cross clausal boundaries and the
sentence is ungrammatical.

Relative clauses in Berber are formed with complementizer din which, by hypothesis is
an ay-type complementizer; i.e., it requires an operator. Now, predictably, clefting out of
relative clause will result in the ungrammaticality common to Complex-NP island violations.

(15) *di Tifa ay zir-x aryaz din-tt yssudmen.
    cop Tifa that saw 1S man that her kissed part
    It is Tifa that I saw the man that kissed her.

The ungrammaticality here is due to the fact that there is no left-dislocated slot for the
operator associated with ay to be generated and long-movement would violate Subjacency.

Notice now that if the relative clause is separated from the matrix by an is clause,
long-distance clefting results in a grammatical sentence even though the clefted element is
associated with a gap inside a relative clause.

(16) (d) Tifa ay nni-x is l-zri-t aryaz din-tt yssudmen.
    cop Tifa that thought 1S that saw 2Ss man that her-kissed part
    It is Tifa that I know that you saw the man that kissed her.

The grammaticality of (16) follows immediately from the properties of Berber extraction. The
operator ay is base-generated as a left-dislocated NP to the left of is, so that its fronting is
legitimate. The D structure of (16) is, then, as in (17).

(17) {.{Tifa ay nni-x is l-zri-t aryaz din-tt yssudmen din t)]]

We have so far tried to establish the following points.
- There are two types of focus constructions in Berber, clefting and left-dislocation.
- In both constructions, the focused element appears in a position adjointed to CP. In the
  case of left-dislocation it is resumed by a pronominal clitic, while clefting involves operator
  fronting.
- The two structures can both be employed. Long-distance cleft constructions are derived
  by fronting an already left-dislocated element.
- Movement in Berber is clause-bound. The claim I am making is that only one type of
  COMP allows movement through it. Since the regular subordinating complementizer does
  not have a position for operator movement, operators can only move into the nearest
  COMP.

Let us consider this last point more closely. The hypothesis is that only an ay-type
COMP permits operators to move into it. One way of looking at it is afforded by recent work of
Higginbotham (1985): Some COMP's are inherently 'saturated' so that a SPEC is redundant.

If is-COMPs do not have a SPEC position associated with them, one would predict that
sentences in which adjuncts extracted over an is complement ought to be ungrammatical as
movement of the adjunct could not be through COMP and consequently too many barriers
would be crossed resulting in an ECP (and subjacency) violation. Predictably, the only
interpretation of a left-peripheral adjunct ought to be with the matrix verb.
An interesting contrast in attentiality is provided by comparing English and Berber. In English a left-peripheral adjunct has two interpretations: it can either have scope over the top clause or over the bottom clause. Thus, the That-trace effect is suspended in adjucents. (See Lasnik and Saito (1984), Chemisky (1986), for discussion.) In Berber, however, sentence-initial maymif 'why' may only have been overt the bottom clause.

(18) a. Q. Why do you think that John laughed at me?
    A1: Because you were wearing a zoolit suit.
    A2: Because I saw him laughing.

b. Q. Why do you think that on me she laughed?
    Why do you think that he laughed at me?
    A2: Because I saw him laughing.

The contrast suggests that in fact a does not allow movement through it.

S. The Adjunction Site

Consider, now the following three-storied constructions.

(19) a. nlj-x is y-un Muhand j y-uzn Yidir tabarrat.
    think is that 3rd know M. That somebody I letter
    I thought that Muhand knows that Yidir sent the letter.

b. (d) tabarrat ay nlj x is y-uzn M. ay j y-uzn Yidir.

c. (d) tabarrat ay nlj x is y-uzn M. is j y-uzn Yidir.

d. (d) jir ay nlj x is y-uzn M. la y-uzn tabarrat.

e. (d) jir ay nlj x is y-uzn M. is y-uzn tabarrat.

In (18a-c) the object, minn 'the letter,' is clided. Since cliding is clause-bound and since the sentences are grammatical, it follows that a left-dislocated operator, associated with the clided NP is present, at D-structure, in the CP-adjunct position immediately beneath the verb 'think.' Minimally, then, the D-structure representation of (18a-c) is as follows, omitting irrelevant details.

(20) (d) tabarrat ay nlj x [is y-uzn M. ay j y-uzn Yidir]]]]]]]]]]]]]]]]]]]]]]]]]]]]

Note, now, that in (19a-e) but not in (19h, d), a clitic is also present in the clause containing the verb "seen know." We have seen that resumptive clitics are an indication of Left-Discocation. But if left-dislocation has occurred in the intermediate clause, one would expect (21b) to be grammatical, which it is not. As the comparison of (21a) and (21b) shows, a pronoun is possible where a NP with independent reference is not.

(21) a. zri-x Idir is-ti irji-x ej is-ti t-wtu Tifa ej
    saw-1s idir that-him dreamed-1s that-him 3sa-hit Tifa
    I saw idir that (as for him) I dreamed that Tifa hit him.

a'. Idir ay zri-x is-ti irji-x is-t t-wtu Tifa.

b. zri-x Idir is-ti jirix Tifa is-ti y-wtu ej ej.

c. zri-x Idir is-ti jirix Tifa is-ti y-wtu ej ej.

What these facts suggest is that there is only a single CP adjoined position per clause. (21b) is ruled-out because the clitic in the 'dream' clause underlingly occupies the same slot as Tifa, which has been dislocated from the lower clause.

Returning now to the facts in (18c), consider the following representation.

(22) [,[tabarrat, ay, nlj x, y-uzn M. ay, j y-uzn Yidir, y-yunen M. ay, e, is, t-wtu, y-yunen Y, e]]]

What seems to be happening is that the CP-adjunct position is "open" to the base-generation of any element. As we shall argue below, adjoined positions are category-neutral; any element may, in principle be generated under an adjoined node. Since, as we shall argue, it is not a theta position, its presence at D-structure cannot be said to follow from a mapping of lexical representation. Rather, it is an option formally available by the X-bar schema. Elements generated under an adjoined node are not licensed at D-structure, where...
liccns inQ

i~ tr ngnmlrïn~nl~ pronou n in th>J

in

and~.:;

rhe o:e rcnt::;

(24) a.

(22).

v' a .. ;st nl

Consider the following example.

b. \( \text{tabratt a-mu sell-x is t y uzn. Mohand gher Fas} \)
letter that dat heard-1s that it 3ms sent Mohand to Fes
It is the letter that I heard that Mohand sent to Fes.

While \( \text{tabratt} \) is associated with the accusative pronoun in the lower clause, the operator associated with it in the matrix bears dative Case. The verb sell 'hear' takes only dative objects, as illustrated in (25).

(25) a. \( \text{sell-x Mohand.} \)
heard-1s Mohand

b. \( \text{sell-x i Mohand.} \)
heard-1s dat Mohand
I heard Mohand.

These facts strongly favor the view that the operator associated with the clotted element is raised from a position Case-accessible by the matrix verb. We have tried to show that the operator is generated in the CP-adjointed position. Assuming that Case is assigned under government, it follows that verbs can govern into this position. Again, this phenomenon is reminiscent of 'exceptional Case marking' configurations. What we have is a configuration as in (26) where a NP is accessible to Case-marking (and hence to Government) by a c-commanding verb (or preposition) outside of its maximal projection. In English, some verbs which take sentential complements assign (accusative) Case to an adjacent NP inside the selected phrase. In Berber, this seems to be the normal state of affairs. Berber extends this option by allowing Case-marking of any NP, not just the subject of the embedded clause.

In recent work May has argued that adjoined elements lie outside the maximal projection. Informally, his idea is that, to be included by a maximal projection, an element must be dominated by every segment of that projection. In (26), the adjoined element is dominated by the higher segment but not by the lower one. It seems to me that these Berber facts lend independent support for May's analysis.
The peculiarity of the phenomenon at hand is that a verb governs (and assigns Case to) a position which is outside its θ-grid. The left-dislocated element, whether it remains in-situ or is clefted, receives its Case from the governing verb and its θ-role by coindexing with a pronoun. In languages such as English, movement is of two types: Movement to a Case position (NP movement) and operator-fronting. In Berber, we have tried to show that there is no movement of the first type. The only kind of movement for which there seems to be evidence is operator fronting in cleft-constructions. If move alpha is free and unconstrained, we must ask why movement in this case is obligatory. Why, for example, can the operator not remain in-situ and then be interpreted as bearing the scope that it does. Assuming that WH-operators must be raised to an A′-position where they can exercise scope over the phrase in question, we find that some languages permit this kind of movement to occur at LF. (e.g. Chinese). Suppose, now, that Berber has the following restriction: WH-Movement does not take place in LF. It then follows that operators must move in the syntax in order to be in the appropriate position in LF. This restriction is independently supported by the fact that Berber has no WH in-situ constructions.

In the following paradigm, it is shown that other verbs which take prepositional complements display behavior consistent with the analysis proposed above. As shown in (27) and (28), acy 'realize' takes instrumental s, and cekk 'suspect' the preposition 'in'.

(27) a. Mohand ay nni-x is is t-ucy is y-uzn tabratt.
   Mohand that thought-1s that with him 3ms-realized that 3ms-sent letter
   It is Mohand that I think that she realized that he sent the letter.
   b. *(d) M. ay nni-x is t-ucy is ...
   c. (d) M. a s t-ucy ...
   d. *(d) M. o y t-ucy ...

(28) a. Mohand ay nni-x is dis cekk-x is ...
   Mohand that thought-1s that in him 3ms-suspected that ...
   It is Mohand that I thought she suspected that he ...
   b. *Mohand ay nni-x is t-cekk is ...

7. Prepositional clitics have two allomorphs: The first is used when it appears in-situ or in a pied-piped construction. The second is the clitic form. For example, the preposition 'in' in (28) below is realized as the clitic dis.

There is one more piece of evidence which can be brought to bear upon the claim that a verb assigns Case to an NP in a CP-joined position which it dominates. Suppose that the verb in question is deprived of its accusative Case-assigning properties. Since the NP in the CP-joined position requires Case, such a sentence would be ungrammatical. (29) is ungrammatical because the verb is in the detransitive form (= passive) and therefore cannot assign accusative Case. (29c), however, is perfectly well-formed as there is no element in the CP-joined position and the detransitivized properties of the verb are not challenged.

(29) a. ssan-x Mohand is y-rah gher Fas.
   know-1s Mohand that 3ms-went to Fas
   I know that Mohand went to Fes.
   b. *y-ttw-assen Mohand is y-rah gher Fas.
   3ms-pass-know Mohand that 3ms-went to Fas
   Mohand is known to have gone to Fes.
   c. y-ttw-assen is y-rah Mohand gher Fas.
   3ms-pass-know that 3ms-went Mohand to Fes
   it is known that Mohand went to Fes.

7. PP and Prepositional-Object Fronting

In Section 2 it was shown that only NP's may be left-dislocated. When an object of a PP is left-dislocated, a prepositional pronoun is clefted onto the preposition which, in many cases, exhibits a different shape. The preposition itself is also clefted.

(30) zi-Marikkan: 'from America' zzi-s 'from it'
    i'/di-Fas 'in Fes' di-s 'in it'
    gher-taddart 'to the house' gher-s 'to it'

(31) a. Y-uzn Mohand tabratt gher Fas.
   3ms-sent Mohand letter to Fes
   Mohand sent a letter to Fes.
   b. Fas y-uzn-gher-s Mohand tabratt
   Fes 3ms-sent to it Mohand letter
   (As for) Fes, Mohand sent a letter there.

Both PP's and prepositional objects admit of clefting. When a prepositional object is clefted,
the preposition itself is cliticized. The prepositional clitics which appear in cleft constructions differ from those used in left-dislocation constructions. In the latter, they take pronominal clitics, which bear \( \gamma \)-features while in the former, the bare preposition is cliticized and appears to the right of the element \( a \).

(32) a. uzn-\( x \) tabratt gher Fas
    sent-1s letter to Fes
    I sent a letter to Fes.

b. (d) Fas a-gher uzn-\( x \) tabratt.
    cop Fes that-to sent-1s letter
    It is Fes that I sent a letter to.

Suppose now that what we have been calling the operator \( a/\gamma y \) is actually composed of two elements: the pronominal element \( a \) and the WH-element which is either marked for a preposition, as in e.g., \( a \)-gher above or unmarked, in which case it appears as \( \gamma y \). The unmarked element is used for cliticizing NP's and, as we shall immediately see, may be used for PP clefts as well. The free variation of \( a/\gamma y \) is due to the fact that \( \gamma \) may be phonologically null.

When an entire PP is clefted, two options are generally available, though the second is preferable. In the first case, the complementizer appears as \( a/\gamma y \), that is, the unmarked value is used. In the second case, the prepositional operator is used. Both options are illustrated in (33).

(33) a. (d) gher Fas ay rah-\( x \),
    cop to Fes that went-1s
    It is to Fes that I went.

b. (d) gher Fas a-gher rah-\( x \),
    cop to Fes that-to went-1s
    It is Fes that I went to.

Since the operator \( a + \{ \} \) is fronted from a base-generated position in the clause, we should expect (33b) to be the unmarked option: When a PP is clefted, it is the PP-operator which is fronted. However, when clefted elements do not have operators which bear their specific categorial features, as for example adverbs, the operator \( a/\gamma y \) is used. This is illustrated in (34).

(34) idennatt ay rah-\( x \) gher Mohand.
    yesterday that went-1s to Mohand.
    It was yesterday that I went to Mohand.

So the option of using the unmarked \( a/\gamma y \) is extended to PP's as well. The reason why clefted prepositional objects require the prepositional operator is that they need to be identifiable. Suppose that \( a/\gamma y \) were used: The proposition would then be irrecoverable.

Consider now long-distance cleft dependencies of prepositional objects.

(35) a. ssen-\( x \) is y-uzn Mohand tabratt gher Fas.
    know-1s that 3ms-sent Mohand letter to Fes
    I know that Mohand sent a letter to Fes.

b. (d) Fas a-gher ssen-\( x \) is gher-s y-uzn Mohand tabratt.
    cop Fes that-to know-1s that-to-it 3ms-sent Mohand letter
    cop Fes that know-1s that-to-it 3ms-sent Mohand letter

Recall that long-distance cleft dependencies involve the conspiracy of two independent processes. First, an element is left-dislocated in a CP-adjoined position. Then it is WH-moved from that position. In (35c), a prepositional-object operator which has been left-dislocated out of the bottom clause is fronted in the matrix.

The case of (35b) is trickier. Consider its D-structure representation.

(36) (d) \( \{_c[Fas\_w]_e\}_t[\_p ssen-\( x \) \_w, a-gher\_w, \_t, y-uzn Mohand tabratt gher\_w] \}_t \}_t)

If the presence of a pronominalized preposition in the embedded clause is taken as an indication of left-dislocation, a puzzle confronts us. The associated left-dislocated element ought to be a NP, but it is a prepositional operator. Suppose, however, that the embedded pronominal preposition gher is merely a preposition with a pronominal clitic, as in (37) and that no left-dislocation has taken place.

(37) rah-\( x \) gher-s.
    went-1s to-it
    I went to it.

Suppose further, that a gher is base-generated in the CP-adjoined position. Now, a-gher is an operator and must be fronted. The fronted operator must now bind a variable. The only
available candidate is the pronominal clitic on the preposition of the embedded clause.

Put differently, I am assuming first that the CP-joined position is open to the base-generation of any element. In theory-internal terms, suppose that the adjoined position is category-neutral. That is to say, any constituent may be generated in it. This allows a prepositional operator to be generated in that position. The only thing that could rule out such a representation is if the operator failed to move. But that will not happen if we hold to our previous contention that operator fronting in Berber occurs before LF.

There is one issue that we still must contend with, namely, the nature of the gap left by operator fronting. Note that if a trace is left in the CP-joined position, it will be interpreted as the variable. Suppose, however, that no trace is left, (or that the trace is deleted.) This option should be available given a theory of \textit{affect}-\alpha. Crucially, the position is not under the jurisdiction of the Projection-principle and so no harm is done if it is simply disregarded. The LF representation of (35b) is, then, as in (38).

\[(38)[\{x,Fas\alpha-ghe\{\alpha,\text{sen-}x\}[_{\{\alpha,\text{y-}u\text{zn Mohand tabratt}\}]]\}]]\]

The possibility of freely generating elements in the adjoined position is what permits the generation of (35b).

If the verb in the matrix of a construction such as (35b) above does not assign accusative Case, the sentence is ungrammatical and only a prepositional operator bearing the Case-marking of the verb is allowed.

\[(39)\ a. \text{sell-x } \text{Mohand.} \text{}\]
\hspace{1cm} \text{heard-1s dat Mohand}
\hspace{1cm} \text{I heard Mohand.}

\hspace{1cm} b. *\text{sell-x Mohand.}

\hspace{1cm} c. \text{Fas a-mu sell-x is-ghe\{\alpha,\text{y-}u\text{zn Mohand tabratt.}\

\hspace{1cm} d. *\text{Fas a-ghe\{\alpha,\text{y-}u\text{zn Mohand tabratt.}\

\[(40)\ a. \text{ucy-x } \text{Mohand.} \text{}\]
\hspace{1cm} \text{realized-1s with Mohand}
\hspace{1cm} \text{I realized Mohand. (i.e. I became aware of Mohand.)}

\hspace{1cm} b. *\text{ucy-x Mohand.}

\hspace{1cm} c. \text{Mohand u-cucy-x is...\

\hspace{1cm} d. *\text{Fas a-ghe\{\alpha,\text{y-}u\text{cyan is...\

What these examples illustrate is that verbs which take prepositions (or, to be more precise, verbs that assign non-accusative Case) are sensitive to the material which appears in the CP-joined position prior to fronting. Accusative-assigning verbs are neutral with respect to that material and a-\alpha, for instance, can appear in that position at D structure, under an accusative-assigning verb. One possible line of explanation is that the verbs which assign non-accusative Case assign a term of \textit{inherent} Case at D-structure while structural Case assignment is neutral, precisely because structural Case is assigned at S-structure by which point the actual PP will have been WH-moved with only a trace remaining. Since, by hypothesis, adjunction-sites are category-neutral, the trace left by PP-operator fronting is not identifiable as a PP-trace. Trace-deletion must then take place between S-structure and LF.\footnote{This explanation leaves open the status of the Uniformity Condition of Chomsky (1986a).}

Consider, now the case of three-story dependencies. In section 4 we saw that two options are available for a three-story chain. The relevant examples are repeated in (41).

\[(41)\ a. \text{nni-x is-y-\text{seen Mohand is-y-}\text{u}z\text{zn Ydir tabratt.} \text{}
\hspace{1cm} \text{Thought that the know-Mohand list \text{nni-x} send \text{i\text{dir} letter}}
\hspace{1cm} \text{I thought that \text{NNI} knows that I\text{dir} sent the letter.}

\hspace{1cm} b. (d) \text{tabratt ay nni-x is-y-\text{seen M. le-y-}\text{u}z\text{zn Ydir.}

\hspace{1cm} c. (d) \text{tabratt ay nni-x is-y-\text{seen Mohand is-y-}\text{u}z\text{zn Ydir.}

When PP-shouts are checked, however, only the option illustrated by (41b) is available.

\[(42)\ a. (c) \text{Fas a-y nni-x is-y-\text{seen Ydir is-ghe\{\alpha,\text{y-}u\text{zn Mohand tabratt.} \text{}
\hspace{1cm} \text{It is \text{Fas} that \text{NNI} knows that Mohand sent the letter to it.}

\hspace{1cm} b. (d) \text{Fas a-ghe nni-x is-y-\text{seen Ydir is-ghe\{\alpha,\text{y-}u\text{zn Mohand tabratt.} \text{}
\hspace{1cm} \text{It is \text{Fas} that \text{NNI} knows that Mohand sent the letter to it.}

\hspace{1cm} c. *\text{(d) Fas a-y nni-x is-ghe\{\alpha,\text{y-}u\text{zn Ydir is-ghe\{\alpha,\text{y-}u\text{zn Mohand tabratt.} \text{}
\hspace{1cm} \text{It is \text{Fas} that I thought that \text{NNI} knows that to it \text{Mohand sent the letter.}
d. *(d) Fas a-ghers nni-x is-ghers y-yssen Yidir is-ghers y-uzn Mohand tabratt.

It is Fes that-to-it I thought that-to-it Idir knows that Mohand sent it the letter.

Recall now that PP's may not be left-dislocated. The intermediate 'offending' clitic can only be interpreted as having moved from the CP-adjoined position since the verb 'know' does not take a PP complement. But at some later level of representation, the restriction against left-dislocated PP's will force such a phrase to be ungrammatical. Note, now, that just as with in the case of three-story NP clefts a PP-taking verb can be generated in the intermediate clause and an independently referring PP may be present there, as in (43).

(43) (d) Boston a-y nni-x i New-York is-ghers y-uzn Mohand tabratt.

'It is Boston that I said in New-York that to it Mohand sent the letter'

8. Conclusion

In this paper, an attempt was made to characterize certain long-distance dependencies in berber. It was shown that the conspiracy of two distinct syntactic processes, left-dislocation and clefting, gives rise to unbounded dependencies. Both of these focalizing devices were argued to involve the base-generation of elements adjoined to a clausal node and it was proposed that the X-bar schemata be modified so as to permit base-generated adjunctions. Clitic movement, such as English wh-movement is not attested in Berber. It was suggested that this is no mere accident but follows from specific properties of the Berber complementizer system. Insofar as the analyses proposed in this paper are tenable and provide some insight into the grammar of Berber, they may be viewed as providing support for the conceptual framework of the Government and Binding Theory.