

Explorations in the Syntactic Cartography of Algerian Arabic

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Abstract

Despite having more than 30 million speakers and differing greatly from Classical Arabic, Algerian Arabic syntax remains little documented and rarely analysed, with most existing work focusing on vocabulary and morphology. Using original data from the largely undocumented dialect of the town of Dellys, this thesis presents a preliminary map of some important points in the syntactic cartography of Algerian Arabic, mapping out some of the multiple DP-related functional positions to reveal a surface situation bearing strong similarities to those postulated by Beghelli and Stowell (1997) and Rizzi (1997). It then shows, through consideration of binding and the nature of clitic resumptive pronouns, that in both Algerian and Classical Arabic this structure is subject to a basic dichotomy that justifies some version of the traditional CP/IP distinction: positions below FocP are accessible to movement, while positions above it can be accessed only through the use of resumptive pronouns. I demonstrate that a functional hierarchy of minimally six positions is required to account for the observed facts; these may be labelled, in order from top to bottom, as follows: TopP FocP AgrSP NegP NeutP VP.

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يعطيكم الصحة!

Introduction

There are few languages whose syntax can be considered well-documented; fewer, if any, whose syntax has been thoroughly analysed; still fewer whose syntactic development across time has been traced. Algerian Arabic, despite having more than 30 million speakers and differing greatly from Classical Arabic, falls in none of these categories, having attracted far less scholarly attention even than Moroccan or Egyptian Arabic. Most existing work on it has focused on vocabulary and morphology; syntax has been given short shrift, as was once commonplace in descriptive work. This neglect is a loss to linguistics: displaying conspicuous differences with its well-documented ancestor in some respects and clear continuity in others, Algerian Arabic presents an excellent opportunity to understand the development (and hence the nature) of certain syntactic phenomena, and to test claims about universal grammar.

Using original data from the largely undocumented dialect of the town of Dellys, this thesis seeks to cast light on this little-charted territory by presenting a preliminary map of some important points in the syntactic cartography of Algerian Arabic, mapping out some of the multiple subject and object positions to reveal a surface situation bearing strong similarities to the split CP of Rizzi (1997) and to that postulated by Beghelli and Stowell (1997) for LF on entirely independent scope-related grounds. Having demonstrated the existence of this functional hierarchy, I then show through consideration of binding and the nature of clitic resumptive pronouns that in both AA and CA this structure is subject to a basic dichotomy that justifies some version of the traditional CP/IP distinction: positions below and including FocP are accessible to movement, while positions above it can be accessed only through resumptive pronouns.

This thesis first gives necessary background on the language, on previous research, and on the verbal morphology and clitics in historical perspective. It then maps out the relevant DP-related functional positions in order from the VP upwards, extends the resulting functional hierarchy to the relative clause, and finally contrasts the behaviour of resumptive pronoun constructions to movement, establishing and motivating a syntactically relevant division. I find it necessary to postulate at least the following hierarchy:

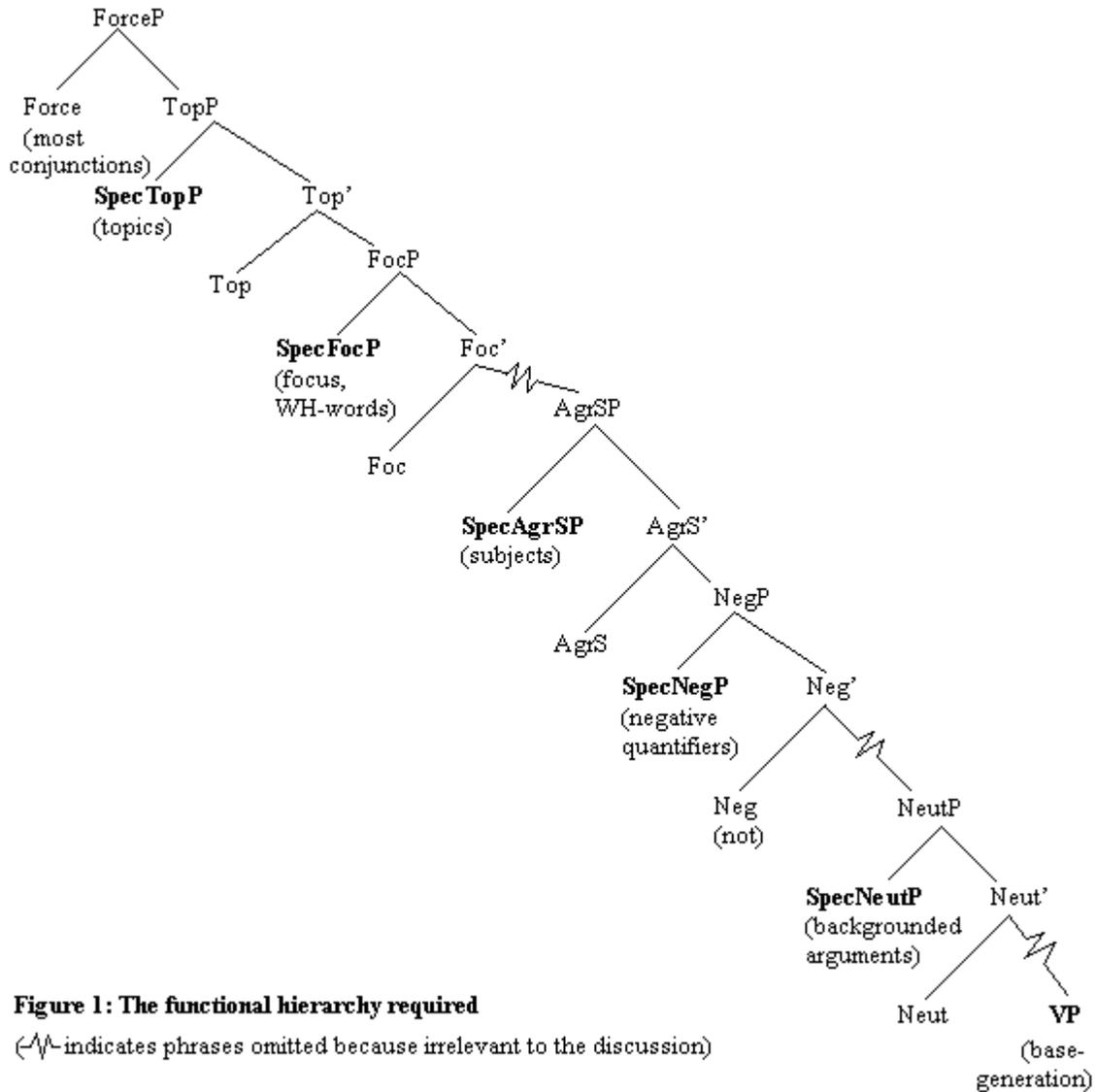


Figure 1: The functional hierarchy required

(↯ indicates phrases omitted because irrelevant to the discussion)

0 Background

0.1 Algerian and Classical Arabic

The term “Algerian Arabic” (henceforth AA) refers to the Arabic-descended dialect continuum spoken across most of northern Algeria, called *darja* دارجة, *`arbiyya* عربية, or (archaically) *barbriyya* بربرية by its speakers. It falls within the Maghreb Arabic dialect bundle, characterized in particular by the innovation of *n-* and *n...-u* for the first person singular and plural respectively. Like Moroccan Arabic, it has substantially simplified its vowel system, losing most Classical short vowel distinctions. Algerian Arabic differs from Classical Arabic perhaps as much as Italian from Latin; it has, for example, lost morphological case, the dual number, and plural gender distinction, while developing a new copula, a set of dative clitics, a circumfixed double negative, and SVO default order, accompanied by substantial vocabulary change. However, for sociolinguistic reasons its speakers generally consider it a dialect, not a separate language. It has a small literary tradition, consisting mainly of folk (*šə`bi* شعبي) poetry written in the Arabic script, but also including some plays, proverbs, and stories; however, most writing is in Classical Arabic.

The primary dialect used here will be that of Dellys, a coastal town 100 km east of Algiers with an almost entirely undocumented urban dialect. I have gathered extensive original data on it, including a corpus of natural speech transcribed from recorded conversations and numerous elicited grammaticality judgements. Unless explicitly indicated otherwise, all data is my own.

Classical Arabic (henceforth CA), the language of most Arabic literature, scarcely needs introduction; formerly the main language of 6th-century Arabia, it became one of the

world's main literary languages with the expansion of Islam. However, for most of its lifespan it was written by non-native speakers, opening it to influence from the syntax of their native dialects. To avoid this problem, I illustrate points here with examples taken from the Qur'an (610-632 AD) wherever possible¹. Linguistic variation was at least as much present in ancient Arabia as in modern Arabia, and the Classical Arabic described here, essentially representing a single privileged dialect among many, is thus not necessarily the direct ancestor of the modern Arabic dialects; however, the recorded dialectal differences of the period are relatively minor (Versteegh 1997), making CA at worst a good approximation to that ancestor.

For details of the transcription and abbreviations used, see the appendix.

0.2 Previous explorations of DP-related projection cartography

There have been several efforts to map out a more thorough picture of subject and object positions cross-linguistically. One important contribution was the VP-Internal Subject Hypothesis (cf. Koopman & Sportiche 1991), which separated two subject positions, SpecVP and SpecIP, making it easier to account for VSO order and for quantifier floating; under this hypothesis, the subject is generated in SpecVP and, in languages such as English, raises to gain case. Pollock 1989 presented evidence that the IP needed to be split, between, at least, TP (hosting tense) and AgrP (hosting subject agreement), opening a fruitful line of inquiry into just how many projections “inflection” consisted of. The hypothesis that case is assigned in Spec-Head relationships encouraged the postulation of an AgrOP to whose specifier objects raise in order to gain case (cf. Chomsky 1993).

¹ Translations are my own, in order to maximize literalism, but draw on the three English editions noted in the bibliography.

Diesing (1992), based on German alone, proposes that there are (at least) two positions available to subjects, which can be distinguished by their position relative to adverbs and by the readings they force for indefinite plurals – existential for the lower, generic for the higher:

- ...weil ja doch Linguisten Kammermusik spielen.
...since there are linguists playing chamber music.
- ...weil Linguisten ja doch Kammermusik spielen.
...since (in general) linguists play chamber music.

Bobaljik and Jonas (1996) show that in Germanic languages both positions must (contra Diesing) be external to the VP, and present evidence from adverb positions that the lower one is SpecTP, while the higher may be SpecAgrSP. Kiss (1996) argues that the relevant semantic distinction is not existential vs. generic, but rather specific vs. non-specific.

Beghelli (1995) and Beghelli and Stowell (1997) argue that the observed scopes of subject and objects can best be explained by postulating that, at LF, they move out of VP to appropriate specifier positions on the following hierarchy: RefP (referentially independent topics) > CP (wh-words) > AgrSP > DistP (phrases headed by each/every) > ShareP (indefinites) > NegP (negative quantifiers) > AgrIOP > AgrOP > VP. Szabolcsi (1995) argues that these correspond well to overt PF forms in Hungarian, identifying its Topic position with SpecRefP, Quantifier with SpecDistP, and Focus (for indefinites) with SpecShareP.

Rizzi (1997) splits the CP into (minimally): ForceP (for complementisers expressing propositional type), TopP (for topics – that is, fronted old information), FocP (for focus – ie fronted new information), and FiniteP (for finiteness). TopP, in his schema, is recursive: it can take TopP as its complement. In Italian, furthermore, he presents

evidence that it can occur either before or after FocP; this has no observed counterpart in AA.

Cinque (1999) argues that adverbs occupy fixed specifier positions; thus, he takes subject, object, and negation position alternations relative to adverbs to indicate the existence of multiple positions for each. Chao and Mui (2000) present evidence for the applicability of Cinque's, Rizzi's, and Beghelli and Stowell's maps of the clause to Cantonese. Cardinaletti (2004) gives an overview of the preverbal subject field (noting on p. 115 that "the postverbal subject field... displays massive language variation, which is still poorly understood"), and distinguishes a SubjP (for "strong subjects") above AgrSP (for "weak subjects").

As this non-exhaustive overview shows, the existence of multiple possible DP-related positions has become well-established; however, their number and positions, not to speak of their cross-linguistic applicability, remain controversial.

1 Morphology and syntax of the verbal complex

An examination of the verbal complex is essential for understanding the examples – in particular the important distinction between resumptive pronouns and movement – and useful in determining the position of other positions relative to the functional hierarchy through which the verb moves.

In verbal and adjectival morphology, Algerian Arabic (AA) differs from Classical Arabic (CA) mainly in having consistently lost the dual and the feminine plurals, as well as mood. Furthermore, in CA, plural inanimates take feminine singular concord, and verbs followed by their subjects take singular agreement; neither feature is found in AA, where verbs agree in number/gender with their subjects irrespective of position or animacy.

1.1 Subject agreement and aspect

In AA, verbs are obligatorily marked for person (1st/2nd/3rd) and number/gender (conflated into masculine/feminine/plural), with prefixes and/or suffixes that vary according to aspect. Stem choice is affected both by aspect and by person: there are four relevant stems, imperative (I), imperfect (F), perfect 3rd person (P), perfect non-3rd-person (B). The details are irrelevant here; for the analysis used, see Souag 2000. Suffice it to note that all stems are predictable from F: P and B derive from F by vowel ablaut, while I is usually identical to F apart from a prefixed *a-* in stems beginning with two successive consonants. Overt subject pronouns are unnecessary – *pro* is licensed.

Table 1: Algerian Arabic conjugation

	Perfect (Past)	Imperfect (Present/Future)	Imperative
I	B- <i>t</i>	<i>n</i> -F	
you.MSg	B- <i>t</i>	<i>t</i> -F	I-
you.FSg	B- <i>ti</i>	<i>t</i> -F- <i>i</i>	I- <i>i</i>
he	P-	<i>y</i> -F	
she	P- <i>ət</i>	<i>t</i> -F	
we	B- <i>na</i>	<i>n</i> -F- <i>u</i>	
you.PL	B- <i>tu</i>	<i>t</i> -F- <i>u</i>	I- <i>u</i>
they	P- <i>u</i>	<i>y</i> -F- <i>u</i>	

This system represents a simplification of the CA one (cf. eg Haywood and Nahmad 1965), in which duals and masculine and feminine plurals were distinguished, and the imperfect was divided into three moods, distinguished by the final vowel or the presence/absence of a final *-na/-ni* suffix. Morphemes lost in AA are shown in bold below. Both systems can partly be decomposed further than this table might suggest; in AA, the plural is systematically formed by *-u* added to the masculine singular, except in the first person, while the second person feminine is consistently formed by adding *-i* to the second person masculine.

Table 2: Classical Arabic conjugation

	Perfect (Past)	Imperfect (Present/Future)	Imperative
I	B- <i>tu</i>	'-F- v	
you.MSg	B- <i>ta</i>	<i>t</i> -F- v	I-
you.FSg	B- <i>ti</i>	<i>t</i> -F- <i>ii</i> [na]	I- <i>ii</i>
he	P- <i>a</i>	<i>y</i> -F- v	
she	P- <i>at</i>	<i>t</i> -F- v	
you.Dual	B-<i>tumaa</i>	<i>t</i>-F-<i>aa</i>[<i>ni</i>]	
they.M.Dual	P-<i>aa</i>	<i>y</i>-F-<i>aa</i>[<i>ni</i>]	
they.F.Dual	P-<i>ataa</i>	<i>t</i>-F-<i>aa</i>[<i>ni</i>]	
we	B- <i>naa</i>	<i>n</i> -F- v	
you.M.PL	B- <i>tum</i>	<i>t</i> -F- <i>uu</i> [na]	I- <i>uu</i>
you.F.PL	B-<i>tunna</i>	<i>t</i>-F-<i>na</i>	I-<i>na</i>
they.M	P- <i>uu</i>	<i>y</i> -F- <i>uu</i> [na]	
they.F	P-<i>na</i>	<i>y</i>-F-<i>na</i>	

1.2 Direct object clitics

In both AA and CA, direct object clitic pronouns are suffixed after subject agreement markers, and are impossible (CA) / rare (AA) where an overt DP object is present below FocP. Nearly identical suffixes (only the first person singular differs) are used for the possessive and for the objects of prepositions.

Table 3: Object clitics

	Algerian	Classical
me	-ni	-nii
my/me (prep.)	-i (/C_)	-ii
	-ya (/V_)	-ya (/V:_)
you/your.Sg	-k	-ka
you/your.F.Sg		-ki
him/his	-u (/ C_#)	-hu
	-h (/ V_#)	
	-hu- (/ _C)	
her	-ha	-haa
you/your.DUAL		-kumaa
them/their.DUAL		-humaa
us/our	-na	-naa
you/your.PL	-kūm	-kum
you/your.F.PL		-kunna
them/their	-hūm	-hum
them/their.F		-hunna

In both languages, these can never be substituted for by a stand-alone pronoun, although

AA at least allows a stand-alone pronoun to occur in addition to the clitic:

1. *šaf-*(ə)k ənta* (AA)
saw- you you
He saw you.
2. **ra'aa 'anta* (CA)
saw you
He saw you.

In both languages, these clitics can never occur without being adjacent to a verb,

preposition, or noun governing them (except in CA double object clitics, for which see

1.3.) As a corollary, they cannot be coordinated with each other:

AA:

3. *šaf sliman u xaləd*
saw Slimane and Khaled
He saw Slimane and Khaled.
4. *šaf- ək u *(šaf)-ni*
saw-you.SG and *(saw)-me
He saw you and *(saw) me

CA:

5. *bayna l- mar'-i wa- zawj-i-hi*
between the-man-GEN and- spouse-GEN-his
between the man and his wife (2:102)
6. *bayna- haa wa-*(bayna)- hu*
between-her and-*(between)- him
between her and him (3:30)

In AA, it is equally impossible to coordinate clitics with non-clitics:

7. ***šaf-ək u xaləd*
**saw-you.SG and Khaled
He saw you and Khaled.

However, contra Fassi Fehri 1993:103, Qur'anic CA appears to allow it for verbs:

8. *jama`- naa- kum wa- l- 'awwal-iina*
gathered-1Pl.PF- you.MPL and- the- first-PL.GEN
We have gathered you and the first men. (77:38)
9. *xalaq- a- kum wa- lladiina min qabl-i- kum*
created-3MSgPF- you.MPl and- Rel.MPl from before-GEN- you.MPl
He created you and those before you. (2:21 – compare also 26:170, 37:134)

but not for prepositions or nouns:

10. *bayn-ii wa- *(bayna) ixwat-ii*
between-me and- between brothers-my
between me and my brothers (12:100)

In AA, quantifier floating, if analysed as reflecting the quantifier's staying in a position

through which the DP passed (cf. Sportiche 1988), confirms that the object clitic does not stay (or did not originate) in the VP²:

11. *ṣəb- na- hūm tamma kaml-in*
 found- 1PL.PF- them there all-PL
 We found them all there.

The quantifier here must be at least as high as the original position of the object; the object clitic, however, is separated from it.

To explain the impossibility of coordination for most clitics in both languages, one might appeal to Ross 1967's Coordinate Structure Constraint banning movement out of a coordinate structure, or to the idea that only constituents of the same syntactic category can be conjoined (cf. Chomsky 1957). The former implies that clitics move out of the position of other objects, either to occupy a position immediately adjacent to where the verb ends up, or to incorporate into the verb as proposed by Fassi Fehri 1993. The latter implies that clitics are base-generated elsewhere. Shlonsky 1998 suggests that they are generated in AgrO and join the verb through head movement, thus predicting that clitics should be allowed to co-occur with non-clitic objects – a prediction which is clearly wrong for CA, but not necessarily wrong for AA. Under either analysis, examples like 8 and 9 are problematic, suggesting that the correct analysis of CA object clitics may differ from the rest; notably, CA object clitics are similarly exceptional in their distribution in resumptive constructions (ch. 4.)

² In the Qur'an, no instances of the quantifier being separated from what it quantifies are found, whether accidentally or due to grammaticality constraints, but this may be accidental:

1. *la- hadaa- kum 'ajma`-iina*
 then- guide- you.MPI all-ACC.PL
 then He would have guided you all (16:9)

1.3 Indirect object clitics

The treatment of indirect object clitics differs systematically between the two languages. In CA, indirect objects and direct ones are not distinguished morphologically: both take accusative case as non-clitic DPs, and both are expressed with the same clitic set when cliticised. However, certain combinations of object clitics³ are acceptable in CA, and in them, the indirect object comes first:

12. *y- urii- kumuu- hum*
3IMPF-show- you.MPL- them.M
He shows you them (8:44)
13. *zawwaj- naa- ka- haa*
married- 1PL.PF- you.MSg-her
We have married her to you (33:37)
14. *'akfil- nii- haa*
entrust- me- her
Entrust her to me (38:23)

Such sequences are entirely unacceptable in AA, which has a distinct set of indirect object clitics, used in particular for benefactive and malefactive senses⁴ – an innovation absent from Classical Arabic, but found in many other modern dialects. The indirect clitics transparently derive from CA *li-* “to” plus the pronominal suffixes; since, like AA, CA typically places one-word PPs like these immediately after the verb and before the direct object, it is easy to see how they must have cliticised.

Table 4: Algerian Arabic indirect object clitics

³ The first must be strictly higher on the person hierarchy 1>2>3 than the second; cf. Fassi Fehri 1993:104. Other cases are dealt with in CA by suffixing the indirect object clitic to the verb and the direct object clitic to the object-marking dummy preposition *'iyyaa-*.

⁴ Indirect clitics are also used to substitute for CP/TP verb complements: *tə-qdər-lu* “you are able to do it”, *ʔəf-t-lu* “you knew it (a statement)” (as opposed to *ʔəf-t-u*, which could only be “you knew him/it (an entity)”). However, “say” takes the direct object clitics: *qūlt-ha-lu* “I told him it”.

	Algerian	Classical etymology
me	- <i>li</i>	<i>l-ii</i>
you.Sg	- <i>lək</i>	<i>la-ka / la-ki</i>
him	- <i>lu</i>	<i>la-hu</i>
her	- <i>lha</i>	<i>la-haa</i>
us	- <i>lna</i>	<i>la-naa</i>
you.PL	- <i>lkūm</i>	<i>la-kum</i>
them	- <i>lhūm</i>	<i>la-hum</i>

Indirect clitics are obligatorily suffixed after direct object clitics:

15. *y- wərrī- hu- lkūm*
 3IMPF- show- it.M- to.you.PL
 He shows it to you

They cannot occur on prepositions or nouns. In AA, indirect clitics display some agreement-like behaviour. Non-clitic DP indirect objects are normally marked with *l-* “to”, and the verb can optionally feature an indirect clitic agreeing in number and gender – eg *ʔit-ha-[lu] l-xaləd* “I gave it to Khaled”. This provides a useful way to distinguish *l-* marking an indirect object from *l-* “to”.

We now see that the object clitics (but not possessive and prepositional object clitics) in AA differ from those of CA in order as well as in coordination properties. Etymologically, this is readily explicable, and indeed correlates rather obviously to an alternation observable in English: I gave *him it* vs. I gave *it to him*.

1.4 Tense

Classical Arabic has one tense prefix, *sa-* marking future tense; it precedes subject agreement morphology and follows negation.⁵

The Dellys dialect, like other central AA dialects, has no preverbal tense prefixes.

⁵ It also has stand-alone tense particles, which are slightly freer in their positioning.

However, some are found in other Algerian dialects, such as Jijel, and in Moroccan Arabic; like those of Classical Arabic, they are prefixed outside subject agreement morphology, but within negation. Thus in the Jijel dialect, where the present tense prefix is *ka-/ku-*, we have⁶:

16. *ma ka- yə- skən- š`ənd baba-h*
 not PRES- 3IMPF- live- Neg at father-his
 He doesn't live at his father's place.
17. *ma ku- nə- dbəħ- š f- əl- jaj*
 not PRES- 1IMPF- slaughter-Neg in- the- chicken
 I don't slaughter chickens. (Marçais 1952:595)

1.5 Negation

In Algerian Arabic, the negative of a verb is formed with *ma* before the verb and *-š(i)* after; the latter element disappears if a negative polarity item is present, like French *pas*. Neither element can ever be separated from the verb. The negative of an imperative is formed from the imperfect, not the morphological imperative: *ma-t-qul-š* “don't say.”

The *ma* in this construction derives from the only one of several Classical negative particles⁷ to co-occur freely with verbs in the perfect and the imperfect, *maa*. All of these negative particles normally stand alone; CA has no obligatory double negative. AA's suffixed *-š(i)* derives⁸ from Classical *šay'-a-n* “a thing (accusative)”, used with the

⁶ In the Jijel dialect, a peculiarity not shared with Moroccan Arabic can be observed: this tense particle shows partial person agreement, being inflected for the feature $\pm 3^{\text{rd}}$ person. *ka-* is used in the 3rd person, *ku-* in 1st and 2nd. Poletto 2000:13 points out that certain northern Italian dialects, such as Friulian, have subject clitics inflected for this feature, which she terms “deictic”. These, however, fall above negation, and she analyses them as occupying a head position within an extended CP. This *ka-* particle transparently derives from a post-classical contraction of the perfect of the verb *kun* “be” (perfect non-3rd-person stem *kün-*, perfect 3rd-person stem *kan-*).

⁷ The others were inflected for tense: *laa* could co-occur only with the imperfect and imperative; *lam*, despite requiring the verb to be morphologically in the jussive, forces a past tense interpretation; *lan*, which morphologically takes the subjunctive, forces a future interpretation. In some conservative dialects of AA (though not the central ones under discussion), *la* continues to be used in a few contexts, notably as a negative complementiser (“lest”) after verbs such as *xaf* “fear”.

⁸ Suleiman 1999:115.

meaning “anything” or “at all” as an intensifier in negative constructions, as in these Qur’anic examples:

18. *wa- laa t- ušrik- uu bi-hi šay’-a-n*
 and- not 2IMPF- associate- M.PL with-him thing-ACC-INDEF
 And do not associate anything with Him. (4:36)
19. *laa ya- đlim- u n- naas- a šay’-a-n*
 not 3IMPF- wrong-INDIC the- people- ACC thing-ACC-INDEF
 [God] does not wrong people at all. (2:170)

(Accusative case is used to form adverbs as well as direct objects.) In such constructions, it played the role of a negative polarity item, explaining diachronically why its Algerian descendant form should be in complementary distribution with NPIs.

The words with which *-š(i)* alternates include DPs and PPs such as *walu* “nothing”, and adverbs such as *`əmɾ-* “never” (literally “lifespan”; requires personal possessive suffixes agreeing with subject) and *wəllah* “by God; truly”. While the DPs and PPs optionally move to SpecNegP (ch. 2.2), at least the latter adverb is base-generated higher than SpecNegP:

20. *wəllah walu ma šəf-t*
 by.God nothing not saw-1SG
 Truly, I haven’t seen a thing.
21. *wəllah xaləd ma ja*
 by.God Khaled not came
 Truly, Khaled did not come.

1.6 Verb movement and the Mirror Principle

The Mirror Principle (Baker 1988) provides a useful tool to examine verb movement: Morphological derivations must directly reflect syntactic derivations, and vice versa. While the subject marking must be dismissed as lexically inserted inflection, particularly since it affects the stem, the front and back of the verb still provide two hierarchies: tense

is closer to the verb than negation on the front (for both), and direct object is closer than indirect object (AA) or vice versa (CA.) The former point is particularly important; their inseparability from the verb requires us to assume that the verb moves out of VP, and is consistent with an analysis in which the verb undergoes head movement successively through T and Neg (cf. Zanuttini 1996.) Assuming that AgrO is lower than AgrIO, the latter is consistent with Shlonsky 1997's theory for AA, but not for CA, where the order, morphology, and complementary distribution with non-clitic objects are easier to derive through incorporation.

2 DP-related functional projections in Algerian Arabic

A careful examination of Algerian Arabic reveals a minimum of five positions that can be occupied overtly by the subject or object; only one falls after the default position of the verb. The lowest (SpecNeutP), following after the verb, is the default position for both objects and subjects, but preferentially the former; above it is the position to which negative variables may move (SpecNegP); above it is a subject position associated with contrastive readings (SpecAgrSP); above that is the position of WH-words and focused arguments (SpecFocP), and above them all the topic position (SpecTopP).

2.1 Postverbal object and subject position: SpecNeutP, not VP

In AA, the default position of the object is overwhelmingly after the verb; it raises higher than the verb only in certain marked cases, such as WH-movement. Examples:

22. *ʃab ʃkara*
found bag
He found a bag.
23. *yə-qra-w fi-ha l-qūr'an*
3IMPF-study in-it.F the-Quran
They study the Qur'an in it.

In sentences without a non-clitic object, the least marked position for the subject, which it occupies about half the time (see below), is likewise postverbal. As the unmarkedness of postverbal subjects with clitic objects shows, this is not related to transitivity; and, unlike in Classical Arabic, the verb agrees fully with the subject irrespective of order.

24. *ma y- ʔql- u-š lamin*
not 3IMPF- recognise- him-Neg Lameen
Lameen doesn't recognise him.⁹
25. *yə-qra-w fi-ha t-təlba*

⁹ This sentence is ambiguous; without context, *-u* can more readily be read as plural subject marking, giving “They do not recognise Lameen.”

3IMPF-study in-it.F the-students
 The students study in it.

With example 24 illustrating that the verb need not be adjacent to the subject (indeed, as two of these illustrate, the default position for short one-word PPs is immediately after the verb), and 25 and 26 illustrating that it is commonly higher than the subject, I need scarcely belabour the point that – as we have shown on independent morphosyntactic grounds – the verb raises out of the VP.

Do the subject and object, in these cases, remain in the VP? Quantifier floating indicates otherwise, assuming Sportiche 1988's analysis of quantifier floating as reflecting the quantifier's staying in a lower position through which the DP has moved. For non-clitic objects and postverbal subjects, the default position for the quantifier is after the object:

26. *šəf-t šhabi tamma kamlin*
 saw-1PL.PF friends there all-PL
 I saw all my friends there.
27. *ja-w šhab-i kamlin*
 came-3PL friends-my all
 All my friends came.

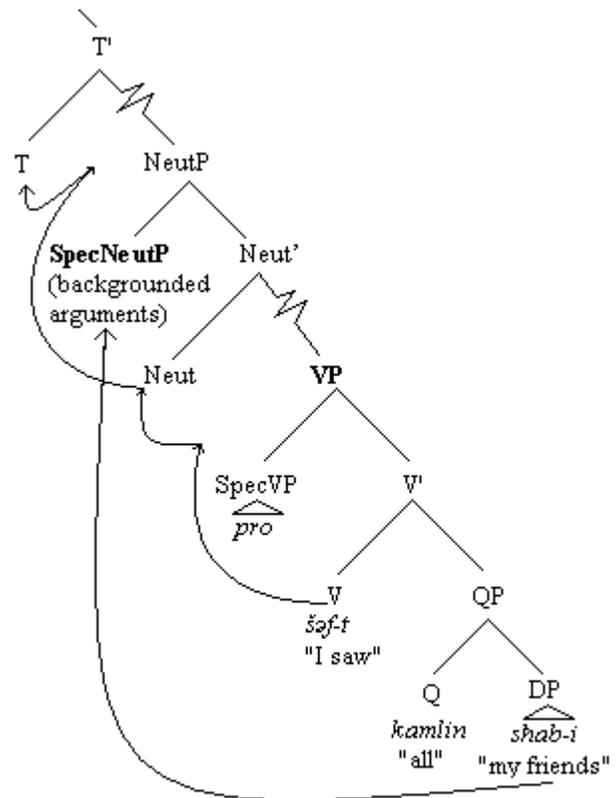


Figure 2: Object movement illustrated:
šəf-t šhabi kamlin "I saw all my friends"

Before it is possible, but marked:

28. *šəf-t kamlin (*?tamma) šhabi(marked)*
 saw-1PL.PF all-PL (*there) friends
 I saw *all* my friends (*?there).
29. *ja-w kamlin šhab-i (marked)*

came-3PL **all** friends-my
All my friends came.

This would appear to preclude the idea of regarding either as remaining in VP.

2.1.1 Post-verbal combinations

If the postverbal subject position and the default object position are distinct, then one would expect to be able to combine them easily, and in a fixed default order. On the other hand, if they are identical, we expect postverbal subjects and objects either not to co-occur at all or to co-occur only in highly marked circumstances. The latter expectation is borne out: when an overt (non-clitic) subject and object are both present, and the object is postverbal, the preference for SVO order becomes overwhelming. In these circumstances, SVO order is the only natural order for a simple declarative sentence in an unmarked situation, as here:

30. *u tūlba yə-t`əllm-u fi-ha l-qūr'an*
and students 3IMPF-learn-PL in-it.F the-Qur'an
And students learn the Qur'an in it.

While VSO and VOS are possible, if very rare, their occurrences are strongly suggestive of movement of the verb or some phrase containing it. VSO occurs most commonly in questions and emphatic affirmations (although I have found no context in which it is obligatory), suggesting verb movement to some position in the CP related to statement interpretation.

31. *wəlla gir šra r-rajəl əl-fəlfəl*
By God, bought the-man the-pepper
By God, the man bought the pepper.
32. *rəgg°d-ət amal bənt-ha?*
put.to.bed-3F Amal daughter-her?
Has Amal put her daughter to sleep?

VOS, which is only possible when context or real-world knowledge disambiguates it from VSO, is most common with (semantically redundant, given the morphology) focused pronoun subjects – and the focus position (see below) is substantially higher than the normal position of the verb:

33. *n-ħabb* *əḏ-ḏħik*¹⁰ *ana-ya*
 1Sg.IMPF-love the-laughter I-FOC
 I like laughter, me.

Both VOS and VSO can also occur as a result of the fronting of old information:

34. *waš* *šra* *r-rajəl?* - *šra* *r-rajəl* *əl-fəlfəl*
 what bought the-man? **bought the-man** the-pepper
 What did the man buy? **The man bought** the pepper.
35. *n-ruħ-u* *nə-šri-w* *əl-xūbz?* - *šra* *l-xūbz* *xaləd*
 1IMPF-go-PL 1IMPF-buy-PL the-bread? **bought the-bread** Khaled
 Shall we go buy bread? Khaled **bought the bread.**

2.1.2 Subject position statistics

The claim that postverbal subjects are perfectly normal in the absence of an overt (non-clitic) object, but become highly marked exceptions in one’s presence, is sufficiently surprising to demand evidence beyond native speaker intuition alone. Fortunately, analysis of published corpuses supports it. The three Algiers Arabic selections found on pp. 211-214, 217-221, and 225-231 of Boucherit 2002 were examined for all clauses with an overt (non-*pro*) subject. The results were as follows:

Table 5: Subject position statistics for Boucherit 2002

	VS	SV
Stand-alone object	0	6
Clitic object	3	4
No object	19	23

This suggests that the odds of a subject being postverbal increase significantly when no

¹⁰ The irregular verbal noun *ḏəħk* is more common.

stand-alone object is present, and fall to a negligible amount when one is present.

A longer excerpt from a somewhat different dialect, that of Biskra (a town 300 km from Algiers, on the edge of the Sahara), was also examined: the story *wald-əl-məḥgura*, pp. 161-171 of Bourayou 1998. The results (excluding verbs taking a CP complement) were:

Table 6: Subject position statistics for Bourayou 1998

	VS	SV
Stand-alone object	2	15
Clitic object	5	4
No object	22	47

This suggests the same (although the much higher frequency of SV order is striking, and probably reflect the differences in dialect and genre.) A chi-squared test reveals that these results do not suffice to rule out the null hypothesis at a 95% confidence level (see appendix); however, they clearly agree with the native speaker intuitions described above.

2.1.3 The semantics of postverbal subjects

There is a fairly clear contrast in AA between the preverbal and postverbal readings of indefinite non-specific subjects. For these, postverbal subjects yield existential readings, while preverbal ones yield contrastive ones.

36. *ja rajəl*
 came man
 A man (whose identity is unimportant or unknown) came.
37. *rajəl ja*
 man came
 A man (as opposed to a woman) came.
38. *ja-k maşsu*
 came-you.Sg mason
 A mason came to you.
39. *maşsu ja-k*
 mason came-you.Sg

A *mason* came to you. (eg in reply to “who came?”, or as opposed to a plumber)

For the preverbal position, the plain existential reading is simply not available, while the contrastive reading can emerge in the postverbal position only with heavy stress. The same intuitions apply to more obviously transitive verbs, as long as the object is clitic:

40. *maʃsu səggəm-ha*
mason fixed-it.F
A *mason* fixed it. (eg in reply to “who fixed it?”, or as opposed to a plumber)

Note that the postverbal position does not select between specific vs. generic readings:

41. *əš-šnawa yaklu-h*
the-Chinese eat-it.M
Chinese people (generic) eat it. / The (specific) Chinese people will eat it.
42. *yaklu-h əš-šnawa*
eat-it.M the-Chinese
Chinese people (generic) eat it. / The (specific) Chinese people will eat it.

2.1.4 What does the postverbal field contain?

The extreme markedness of VSO/VOS orders, together with the unmarkedness of VS and VO orders alone, suggests that postverbal subjects and objects raise to a single shared postverbal position, which can be occupied by a subject only if not already filled by an object. The alternative hypotheses – that each occupies a separate position, but some independent constraint on information structure or scope causes subjects to raise, or prevents verbs from raising, whenever a non-clitic object is present – seems unpromising and unmotivated.

If the position is indeed shared, the simple fact that it is available to both subjects and objects rules out numerous otherwise promising analyses. It cannot be SpecVP or CompVP, because (as shown above through quantifier raising) both subjects and objects

raise out of VP, and because in clauses with transitive verbs SpecVP must be filled by (a trace of) the subject, and CompVP by (a trace of) the object. It cannot be SpecAgrSP or SpecAgrOP (Chomsky 1993), because in transitive sentences these must be associated to subjects and objects respectively, and because, if subjects occupied AgrOP or vice versa, one would expect the verb to display inverse agreement.

Examples of positions that can be occupied by either subjects or objects, depending on issues of scope and interpretation, are numerous: the position to which WH-phrases raise, the topic position, the focus position (Rizzi 1997), and SpecRefP (possibly to be identified with topics), SpecDistP, and SpecShareP (possibly focus) in Stowell and Beghelli (1997)'s hierarchy. However, all of those mentioned are ruled out as labels for this position, both by their semantics and by their locations above SpecNegP. One might envisage a lower position in this hierarchy reserved for the marking of neither topic nor focus, but for what might be called backgrounding – a position with scope lower than either of the other two but higher than the VP. In cases with a human object and an inanimate subject, for example, English typically backgrounds the less salient subject by passivisation; but passivisation in AA does not permit expression of the agent (no **by a car*), so one would expect the subject to be backgrounded by keeping it after the verb. Sure enough, the unmarked way to say “Slimane was hit by a car” has Slimane in the topic position (for which see below) and car in the background position:

43. *sliman dər̄b-at-u .tunubil*
 Slimane hit-3F.PF-him car
 Slimane got hit by a car.

This position would then be the default position for objects to raise to, since objects normally take scope under subjects, but would be readily available to subjects if the object were topicalised or focused. This proposal appears closely analogous to Ordóñez 1997's SpecNeutP¹¹, a location below T to which subjects in Spanish are argued to move to gain a neutral interpretation; indeed, the alternation observed in AA allows me to avoid this idea's principal problem – explaining how objects, too, gain a neutral interpretation in Spanish VSO sentences. I therefore provisionally label it SpecNeutP.

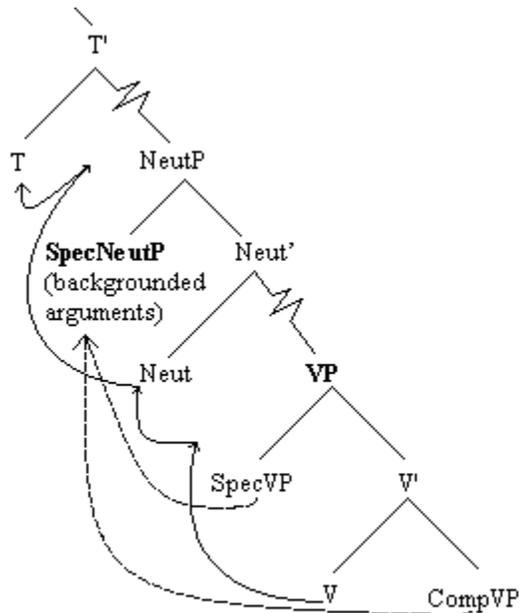


Figure 3: Movement in the postverbal field (verbal head movement, DP raising to SpecNeutP)

The association of this position with existential readings, for indefinite subjects, at first sight lends it a certain resemblance to the lower subject position of Germanic languages (Diesing (1992) – see 0.2.) However, both positions are unavailable to objects, and subjects readily occupy them irrespective of the presence or absence of objects. Moreover, the contrast in Algerian Arabic is neither between generic and existential nor specific and non-specific, as illustrated in 2.1.3.

2.1.5 Postverbal positions in CA: no evidence of SpecNeutP

The alternation between VS and SVO orders that motivates the postulation of SpecNeutP in AA is entirely absent from Classical Arabic. There, the default word order is VSO, irrespective of the presence or absence of a non-clitic object (although SVO is also

¹¹ Unable to find a copy of this work, I rely on descriptions of it in Fuertes 2001 and Costa 1999.

2.2 Negative quantifiers: SpecNegP

In AA, as noted above, certain words are in complementary distribution with the second part of the circumfixed double negative, the *-š* normally suffixed to the verb (compare French *pas* or Kabyle *ara*.) These include various adverbs base-generated higher than

SpecNegP, to be described later, and various DPs and PPs expressing variables outside the scope of negation which are base-generated in various places, but can optionally move overtly to SpecNegP. This movement has no direct analogue in CA, as far as I am aware, where such items are normally overtly c-commanded by Neg.

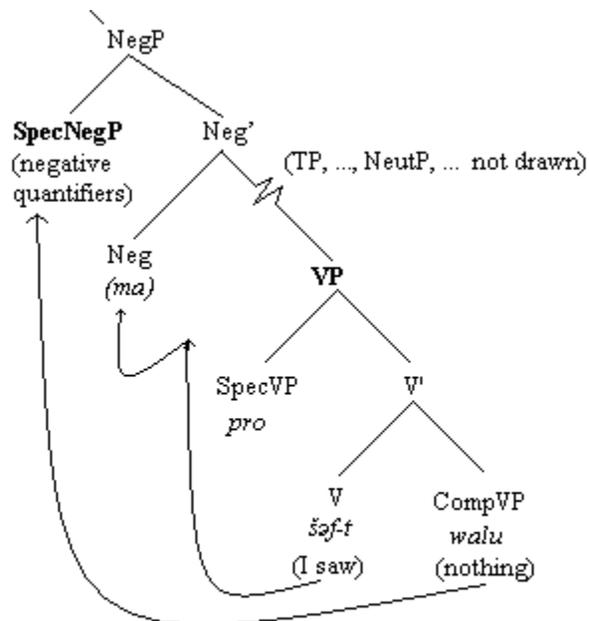


Figure 4: Negative quantifier raising illustrated:
walu ma šəf-t, "I saw nothing"

These negative quantifiers include DPs such as *walu* "nothing" and DPs or PPs preceded by a negative polarity determiner such as *ħəttə* (+indef.) "(not) a single¹²", eg *ħəttə ħaja* "not a thing", *ħəttə l-waħəd* "to not a single person." The previously mentioned items may remain in situ, or may be fronted to precede the verb. Unlike topicalisation, but like WH-movement, this fronting leaves no audible trace.

49. *ma* *šəf-t* *walu*
not saw-1Sg nothing
I saw nothing.
50. *walu* *ma* *šəf-t*

¹² Note that *ħəttə* is polysemous; followed by a definite noun it means "even" and does not alternate with *-š*, whereas followed by an indefinite non-specific noun it means "a single" and does.

- nothing not saw-1Sg
I saw *nothing*; I didn't see a thing.
51. *ma* *šəft* **(ħəttə)* *nəjma*
not saw-1SG **(a.single)* star
I didn't see any stars.
52. **(ħəttə)* *nəjma* *ma* *šəft*
**(a.single)* star not saw-1SG
I didn't see a single star.

Note that not all DPs or PPs which alternate with *-š* can occupy this position.

Specifically, DPs or PPs preceded by *gir* “except, nothing but” (French *(ne...) que*)

alternate with *-š* but cannot be fronted.

53. *ma* *šəft* *gir* *əs-šəb*
not saw but the-cloud
I saw nothing but clouds.
54. **gir* *əs-šəb* *ma* *šəft*
but the-cloud not saw
**Anything but clouds I did not see.*
55. *gir* *əs-šəb* *ma* *šəft* *ħəttə* *ħaja*
but the-cloud not saw any thing
Except for clouds, I didn't see anything.

That this position is immediately adjacent to the verb is apparent from the fact that

subjects cannot intervene between it and the verb:

56. *walu* *ma* *šaf* *xaləd*
nothing not saw Khaled
Khaled did not see anything.
57. *?* walu* *xaləd* *ma* *šaf*
nothing Khaled not saw
Khaled did not see anything.

It is thus unsurprising that it should be lower than the one that WH-words move to:

58. *aškun ma šaf walu?*
who? not saw nothing?
Who didn't see anything?
59. *aškun [lli] walu ma šaf?* (much better with *lli*, but marginally acceptable without)

- who? [Rel] nothing not saw?
 Who didn't see anything?
 60. **walu aškun ma šaf?*
 nothing who? not saw?
 *Nothing who didn't see?

It is also lower than the positions of some preverbal adverbs:

61. *qrib ma y-šuf walu*
 nearly not 3IMPF-see nothing
 He sees almost nothing.
 62. **walu qrib ma yšuf*
 nothing nearly not 3IMPF-see
 * Nothing does he almost see.
 63. *qrib walu ma yšuf* (somewhat degraded)
 nearly nothing not 3IMPF-see
 Almost nothing does he see.

The PPs/DPs that alternate with $-\dot{s}$ are those of the logical form $\forall x.[\neg S(x)]$, (where S represents the assertion), where the PP/DP must leave the sentence at LF in all language, and has been argued in Beghelli (1995) to take scope at, precisely, SpecNegP even if it appears lower at PF. What is remarkable about the AA case is simply that – unlike English, or indeed CA – it allows this movement to take place overtly rather than covertly, allowing direct validation of this hypothesis.

2.3 Focus and preverbal subjects: distinguishing SpecAgrSP, SpecFocP

As noted above, subjects are normally preverbal when a non-clitic object is present, and commonly preverbal otherwise:

64. *t-təlba mazal-hūm yə-qrā-w tamma*
 the-students still-them 3IMPF-study-PL there
 The students are still studying there.
 65. *haḍu kaml-in y- həḍr-u- ha*
 these all-PL 3IMPF- speak-PL- it.F
 These all speak it.
 66. *haḍu y-həḍr-u l-`ərbīyya*

forgot-1Sg all with-whom? went_down-1Sg to-the-sea. -
ana wiyya-k hbət-na l-əl-bħəɾ.
I and-you.SG went_down-1Pl to-the-sea.

I've totally forgotten who I went to the sea with. - **You and me** went to the sea.

71. *wlid-ək gana lukan t-səbg-i-h y-wəlli rumani*
son-your.SG too if 2IMPF-dye-F-him 3IMPF-become Roman
Your son too, if you dyed him, would become Roman. (context: discussing the blond hair on actors playing Romans)

However, considering focalised non-subjects provides evidence for differentiating focus from a preverbal subject position. Sporadic cases of focalisation of other arguments, in which no resumptive pronoun is left behind, are observed:

72. *`ənd sumiyya ra-ki rayħ-a?*
at Soumiya are-2F going-F
 It's **to Soumiya's place** that you're going?
 73. *w-əl-xmīra jəb-ti?*
 and-the-yeast brought-2F? (generic use of definite article)
 And did you bring **yeast**?

While this is sufficiently uncommon that judgements of the phenomenon may not be entirely reliable without context, this position appears to be identical to the WH-word position described below; I therefore label both SpecFocP. For example, both the following were rejected as ungrammatical without resumptive pronouns:

74. **w-əl-`nəb aškun šra?*
 and-the-grapes who bought? (generic use of definite article)
 *And who bought grapes?
 75. **w-aškun əl-`nəb šra?*
 and-who the-grape bought?
 *And who brought grapes?

Moreover, preverbal subjects appear to be questionable but not impossible after it:

76. *?w- əl-`nəb xaləd šra.*
 and-the-grape Khaled bought.
 And the grapes Khaled bought.

Much the commonest means of explicitly marking focus, however, is with cleft sentences using relative clauses:

77. *aškun šra l-ktab?* - *əz-zubir li šra l-ktab*
 who? bought the-book? **the-Zoubir** Rel bought the-book
 Who bought the book? **Zoubir** bought the book.
78. *ana lli nə-ħkūm*
I Rel 1IMPF-judge
I'm the one who decides.
79. *ami-h li kbir, əs-sbə` wəlla n-nmər?* - *awa, əs-sbə` li kbir.*
 which-it.M Rel big, the-lion or the-tiger? - oh, the-lion Rel big.
 Which is bigger, a lion or a tiger? - Oh, a lion is bigger.

2.4 WH-movement: SpecFocP revisited

The principal use of wh-words in Algerian Arabic, as in English, is for forming questions; for the principal alternative usage, in free relative clauses, see below. They are normally fronted to before the verb and SpecAgrSP. No resumptive pronoun marks their trace.

80. *aš qal-lu baba-h?*
what? told-to_{him} father-his?
What did his father tell him?
81. *aškun šəb-ti?*
who? found-2F
Who did you find?
82. *kifaš y-səmm-u-ħūm bə-l-`ərbiyya?*
how? 3IMPF-name-PL-them in-the-Arabic
How do you call them in Arabic?
83. *waš rabəħ kla?* (marked order)
what? Rabah eat.3PF?
What did *Rabah* eat?

As in English, it is, however, possible to leave the question word in situ, particularly to maintain parallelism:

84. *t-tilifuni li-mən?*
 2IMPF-phone to-**whom?**
 You will phone to **whom?**
85. *əlbəšir kla l-baṭaṭa, u rabəḥ kla wašən?*
 the-Bachir eat.3PF the-potato, and Rabah eat.3PF **what?**
 Bachir ate potatoes, and Rabah ate **what?**

Prepositions governing the wh-word are pied-piped with it:

86. *f-ah jəb-t-u?*
 in-**what** brought-2M-him
What did you bring him in?
87. *m-`ənd-mən šrit?*
 from-at-**whom?** bought-2M
Who did you buy from?

Movement may optionally be of quantifiers only:

88. *šhal šri-t k^orasa?*
 how.many? bought-2SG chairs
How many chairs did you buy?
89. *šhal šri-t mən kürsi?* (more traditional phrasing)
 how.many? bought-2SG from chair
How many chairs did you buy?
90. *šhal mən kürsi šri-t?* (movement of whole WH-phrase)
 how.many? from chair bought-2SG
How many chairs did you buy?

The question word is often optionally placed in a focus cleft construction:

91. *waš li `ənd-ək?*
 what? **Rel** at-you.SG?
 What do you have? / What is it that you have?

Topics (see 2.5) precede the WH-word:

92. *əl-qəhwa š-šnin-a b-aš məxdum-a?*
 the-coffee the-thin-F with-**what?** made-F
 Thin coffee, **what's** it made with? / What's thin coffee made of?
 [note that the question word is fronted: an answer would be along the lines of *əl-qəhwa š-šnin-a məxdum-a b-ət-təlwə* (with the grounds), with the PP placed after the verb.]

93. *wlad-ək win ra-hūm?*
 children-your.SG **where?** are-3PL?
Where are your children? / Your children, where are they?

AA's WH-movement is directly inherited from CA, where, as in AA, WH-words are fronted, leaving no resumptive pronouns:

94. *maadaa y-unfiq-uu-na*
what? 3IMPF-spend-MPI-INDIC
What shall they spend? (2:215)
95. *man xalaq-a s-samaawaat-i wa-l-'ard-a?*
who? create-3MSgPf the-heavens-ACC and-the-earth-ACC
Who created the heavens and the earth? (31:25)
96. *kayfa ta-kfur-uu-na bi-llaah-i*
how? 2IMPF-disbelieve-M.PL-INDIC in-God-GEN
How can you disbelieve in God? (2:28)

As in AA, prepositions are pied-piped:

97. *li-man `uqbaa d-daar-i*
to-who? ultimate the-home-GEN
For whom will the ultimate abode be? (13:42)

And, as in AA, movement may be of quantifiers only:

98. *kam 'aatay-naa-hum min 'aayat-i-n bayyinat-i-n*
how.many? brought-1PIPF-them.M from sign-GEN-INDEF clear-GEN-INDEF
How many clear signs have We given them? (2:211)

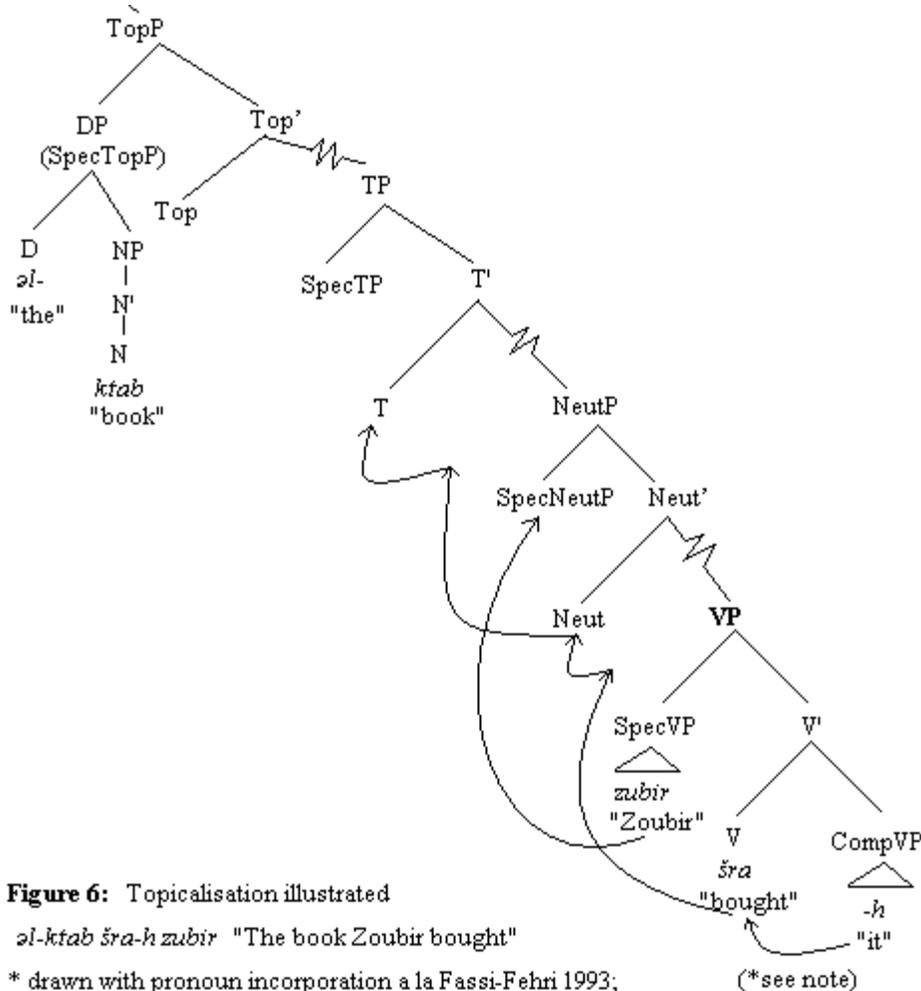
The position to which WH-words move is commonly labelled SpecCP; however, it is clearly lower than certain complementisers (compare English “because who would do a thing like that?”). For this and other reasons, Rizzi 1997 postulates two complementiser positions, one above the topic (ForceP) and one below (FinP); WH-words would appear to move to SpecFinP.

2.5 Topicalisation: SpecTopP

In AA, topics, defined as old or backgrounded information (cf. Rizzi 1997), may be placed in initial position, with a resumptive pronoun/subject-marking *pro* agreeing in person, number, and gender in the clause proper. This is most elegantly illustrated in answers to questions; however, old information is normally omitted from answers. This can be prevented by taking a question ranging over a set of objects each of which individually needs a different answer, forcing the respondent to enumerate them in replying. In the following case, for example, the objects in question are presumed to be in front of the speaker, and thus a natural referent for the demonstrative “these”. In each case, the old information – the topic – is placed initially. Where it co-refers with the subject, it is naturally indicated by *pro*; otherwise, if governed by a verb, possessed noun, or preposition, it is indicated by a resumptive clitic pronoun. In this, topics differ from WH-movement and negative quantifier raising, which leave no resumptive pronoun and force pied-piping. If the topic is adverbial, it leaves no resumptive pronoun behind (see under multiple topics below for an example.)

99. *aškun šra haðu?* -
 who? bought these? -
əl-ktab šra-h zubir, w-əl-ḥalu šra-h sa`id.
the-book bought-it.M Zoubir, and-**the-ball** bought-it.M Said.
 Who bought these? – **The book** Zoubir bought, and **the ball** Said bought.
100. *sa`id u-zubir waš šra-w?* -
 Said and-Zoubir what? bought-PL?
sa`id šra l-balu, u-zubir šra l-ktab
Said bought the-ball, and-**Zoubir** bought the-book.
 What did Said and Zoubir buy? - **Said** bought the ball, and **Zoubir** bought the book.
101. *aškun šra l-ktab?* - *əl-ktab šra-h əz-zubir*
 who? bought the-book? - **the-book** bought-it.M the-Zoubir.
 Who bought the book? – **The book** Zoubir bought.

102. *kan ʿand-ək əl-fəlfəl, win ra-hu dūrək?* - **əl-fəlfəl** ər-rajəl šrah / əlfəlfəl šrah ərrajəl
 was at-you the-pepper, where is-3M now? - **the-pepper** the-man bought-it.M / the-
 pepper bought-it.M the-man
 You had the pepper, where is it now? **The pepper** the man bought.



Topicalisation is, of course, exemplified in broader contexts, as a way to background previously mentioned items:

103. *əz-zawya wəlla-w fəth-u-ha*
the-madrassa returned-PL opened-PL-it.F
The madrassa, they've reopened it. (school mentioned immediately previously)
104. *pila hadik, y-jib-u-ha mə-r-rus*
battery that.F, 3IMPF-bring-PL-it.F from-the-Russia
That battery, they bring it from Russia. (battery mentioned immediately previously)

105. *ət-tum t-akl-u?*
the-garlic 2IMPF-eat-it.M?
Garlic, do you eat it? (context: said while holding out a piece of garlic)

All topics precede SpecFocP and SpecNegP:

106. *ana hađik əl-fikra kiš jəb-t-ha...*
 I this.F the-idea **how** brought-1Sg-it.F...
How did I come up with that idea!
107. *xaləd, walu ma šaf* (requires pause)
 Khaled, **nothing** not saw
 Khaled, he didn't see **anything**.

It is possible to have two successive topics, supporting Rizzi (1997)'s claim that TopP is recursive, but such sentences strictly require a pause between the initial topic and the second one, without which the sentence is heard as ungrammatical – and, in attested examples, the first of the two topics is always the subject of the clause:

108. *xaləd jəwwəz əl-bak hađa l-`am?* - *xaləd hađa l-`am ra-hu fi iřlanda.*
 Khaledpassed the-Bac this the-year? - Khaledthis the-year is-3M in Ireland
 Did Khaled pass the bac this year? - This year Khaled's in Ireland.
109. *xaləd, kwağt-u layəm-hüm kaml-in*
 Khaled, papers-his gathered-them all-PL
 Khaled, his *papers* he gathered them all.
110. * *xaləd əl-ktab šra-h* (without pause)
 Khaled the-book bought-it.M
 * Khaled the book bought.
111. *yəxxi rəbb-i, əl-ħaja lli y-qəddər-ha y-qəddər-ha*
 after_all Lord-my, the-thing Rel 3IMPF-decree-it.F 3IMPF-decree-it.F
 After all, the Lord, what He decrees, He decrees.
112. *ana, huwa `əmbal-i ma y-šūrb-u-š*
 I, he thought-my not 3IMPF-drink-it.M-Neg
 Me, I thought *he* wouldn't drink it. (no direct English equivalent)

Resumptive pronouns must be clitic:

113. * *xaləd, ma šəf-t-u-š huwwa*
 Khaled, not saw-1SG-him-Neg he
 Khaled, I haven't seen him.

114. *xaləd, (*huwwa) rah*
 Khaled, (*he) went
 Khaled, he went.

2.5.1 Topics and contrastive focus in Classical Arabic

Both topicalisation and contrastive focus in CA behave almost identically to topicalisation in AA, involving left dislocation with resumptive clitic pronouns.

As in AA, topicalised subjects need take no resumptive pronouns:

115. *wa-llaah-u xalaq-a kull-a daabbat-i-n min maa'-i-n*
 and-God-NOM create-3MSgPF every-ACC animal-GEN from water-GEN-INDEF
 And God has created every animal from water (24:45) - the previous verse, “God turns over the night and the day...”, establishes “God” as topic.
116. *aš-šaytaan-u ya-`id-u-kumu l-faqr-a*
 the-devil-NOM 3IMPF-promise-INDIC-you.MPI the-poverty-ACC
 The devil promises you poverty. (2:268) – followed by “God promises...”, so in contrastive focus.

and objects of prepositions obligatorily do:

117. *wa-đ-đaalim-iina `a`add-a la-hum `adaab-a-n `aliim-a-n*
 and-the-evildoer-M.PL.GEN prepared-3MSgPF to-them.M torment-ACC-INDEF painful-ACC
 -INDEF
 And the evildoers – He has prepared for them a painful torment. (76:31) – contrastive focus with preceding “He brings whom He will into his mercy”.

However, unlike AA, CA makes having a resumptive pronoun optional in the case of direct objects. Contrast:

118. *fa-`ammaa l-yatiim-a fa-laa ta-qhar*
 so-as_for the-orphan-ACC so-not 2IMPF-oppress
 So as for the orphan, do not oppress him. (93:9) – contrastive focus with following “and as for the beggar...”
119. *wa-rabb-a-ka fa-kabbir*
 and-Lord-ACC-your.MSg so-magnify
 And your Lord magnify! (74:3)

with:

120. *wa-l-'arḍ-a ba`da ḍaalika daḥaa-haa*
 and-the-earth-ACC after that.MSG extended.3MSg-it.F
 and the earth He extended after that (79:30) – contrastive focus with preceding “... the heaven – He made it...”
121. *wa-s-samaa`-a rafa`-a-haa*
 and-the-sky-ACC lifted-3MSgPF-it.F
 And the sky He uplifted (55:7) – contrastive focus with preceding “the stars and the trees...”

A noteworthy difference between CA and AA is in case: in CA, topics sometimes, but not always, appear to retain the case marking that their resumptive pronouns’ position would be assigned¹³, while in AA, no case marking exists to be maintained.

2.6 Overview

The hierarchy of DP-related functional projections I have just shown for Algerian Arabic main clauses may be summarised as:

¹³ Contrast the almost identical sentences below, one with case agreement in the topic, one without:

2. *wa-ḍ-ḍaalim-iina`a`add-a la-hum`adaab-a-n`aliim-a-n*
 and-the-evildoer-M.PL.GEN prepared-3MSgPF to-them.M torment-ACC-INDEF painful-ACC
 -INDEF

And the evildoers – He has prepared for them a painful torment. (76:31)

3. *wa-l-kaafir-uuna la-hum`adaab-u-n`aliim-u-n*
 and-the-unbeliever-M.PL.GEN to-them.M torment-NOM-INDEF painful-NOM-INDEF
 And the unbelievers – for them is a painful torment. (42:26) – contrastive focus with preceding “He answers those who believe and do good deeds”.

In this instance, the commentaries of aṭ-Ṭabari (d. 923) and al-Qurṭubi (d. 1273) both pass over the disagreeing case without comment, and treat the agreeing case as exceptional. Aṭ-Ṭabari notes the possible existence of an alternate reading (*qiraa`ah*) *wa-li-ḍ-ḍaalim-iina`* “and for the evildoers...” for the former, noting that preposition doubling of this sort was sometimes practiced by “the Arabs”; al-Qurṭubi suggests that it occurs by ellipsis of a verb governing *aḍ-ḍaalim-iina`*, effectively emending it to “and He punishes the evildoers – He has prepared for them...” For the cases of object topicalisation without resumptive pronouns above (79:30, 55:7), Al-Qurṭubi notes alternative readings for both of these latter with the topic in the nominative case. Clearly this phenomenon requires deeper examination than is feasible here; the multiple possibilities are suggestive of dialect variation. But the case regarded by commentators as regular – lack of agreement – is consistent with base generation of the topic.

SpecTopP	for old information; \approx Beghelli and Stowell's RefP
SpecFocP	for WH-words and focalised arguments
SpecAgrSP	for preverbal subjects
SpecNegP	for negative quantifiers
SpecNeutP	for backgrounded arguments – objects by default
VP	where verbal arguments are base-generated

Of these, at least SpecTopP and SpecFocP display identical behaviour in CA, where SpecNegP is left empty at PF.

This complicated functional hierarchy has been justified only for main clauses so far. Can independent evidence for it be found elsewhere in the grammar? Furthermore, the traditional contrast of IP to CP reflected an intuitively plausible difference between elements internal to the statement proper and “interface” elements situating the clause relative to its broader discourse context or superordinate clause. With CP split into at least four positions (cf. Rizzi 1997), such a division might semantically be expected to run between TopicP – containing old information from the discourse context – and FocP, containing new information specific to the clause. But is such a division syntactically meaningful, or should this intuition simply be dropped along with the idea of a single-projection CP?

Both questions can be answered in the affirmative by considering relative clauses. As we shall see in the next section, relative clauses, both in AA and CA, allow only part of this hierarchy, cutting it off at FocP; and, like topic-comment structures, relative clauses use resumptive pronouns rather than traces to link back to the head noun. Examination of the properties of resumptive pronoun constructions (chapter 4) then allows us to see that, in

AA and CA, these are diagnostic of base generation, and hence that positions above FocP may be characterised by their inaccessibility to DP movement, rendering the postulated division syntactically meaningful.

3 Relative clauses

An examination of some of the basic properties of relative clauses in AA and CA both provides a testing-ground for the functional hierarchy outlined previously and allows better understanding of the nature of resumptive pronouns.

3.1 Relative clauses with WH-words

In both AA and CA, certain WH-words can be used to form free relative clauses (so can *li*, for which see section 4.2.) In this case, wh-movement is obligatory, and no resumptive pronouns are found:

AA:

122. *haḍa waš t-ħəbb ənta-ya.*
this **what?** 2IMPF-like you-FOC
This is **what** you like.
123. *haḍa f-aš jəb-t-u*
this **in-what?** brought-1Sg-it.M
This is **what** I brought it **in**.
124. *win kayən əz-zawya ta` sidi mhəmməd əssə`di*
where? exist the-madrasa of Sidi Mohamed es-Saadi.
Where the madrasa of Sidi Mohamed es-Saadi is.

CA:

125. *'illaa man 'ādin-a la-hu r-rahmaan-u*
except **who?** allowed-3MSgPF to-him the-Merciful-NOM
Except whomever the Merciful has given permission to (78:31)
126. *bi-maa 'unzil-a `alay-ka*
in-what? bestowed.PASS-3MSgPF on-you
in what was bestowed (literally “brought down”) upon you (2:4)

Note that in AA pied-piping is at least sometimes acceptable here, whereas in CA, as in English, it appears to be blocked, as 130, where a resumptive pronoun is used, illustrates (*bi-* in 131 originates outside the relative clause, modifying the head noun.) As in English and other languages, these free relatives are unambiguously interpreted as

definite.

WH-words are also used to form the superficially identical but semantically distinct Modal Existential Clausal Construction (MECC: cf. Grosu 2002, who regards them as bare CPs, and hence more like interrogative clauses than relative ones). In this construction, they act as free variables, with an indefinite interpretation. For example, the following sentence would be interpreted as $\neg\exists x.(x \text{ guard you})$, with *aškun* not itself carrying any definiteness or quantification.

127. AA:

makaš *aškun* *y-`əss-ək*
there.is.not **who?** 3IMPF-guard-you
There's no one to watch you.

128. CA:

fa-min *an-naas-i* *man* *ya-quul-u* ...
and-from the-people-GEN **who** 3IMPF-say-INDIC ...
And among people there are those **who** say ... (2:201)

3.2 Relative clauses with relative marker

In Algerian Arabic, most relative clauses are formed with a “relative marker” (to use a neutral term¹⁴): *li/əlli* (for definite heads) or \emptyset (for indefinite heads.) The position in the relative clause corresponding to the head is indicated by a resumptive clitic pronoun (obligatory for the complements of verbs or prepositions) or by agreement morphology (for subjects); in either case, the resumptive pronoun/morphology agrees in gender, number, and person.

In Classical Arabic, the situation is similar; however, while the indefinite marker is again null, the definite one agrees with the head noun in number, gender, and (for duals only)

¹⁴ While its position suggests a complementiser, it is perhaps better analysed as a determiner (cf. Ouhalla 2004); its syntactic nature is immaterial here.

case:

Table 7: Relative markers

AA: (invariant)	Definite <i>li/əlli</i>	Indefinite Ø	
CA:	masculine	feminine	
Singular	<i>allađii</i>	<i>allatii</i>	
Dual Nominative	<i>allađaani</i>	<i>allataani</i>	Ø
Dual Oblique	<i>allađayni</i>	<i>allatayni</i>	
Plural	<i>allađiina</i>	<i>allaatii</i>	

3.2.1 Relative clauses with marker (*li/Ø*) in Algerian Arabic

Relative clauses display the same default internal word order as other clauses:

129. VO:

lūxr-in li y-hədr-u l-q^obayliyya
 other-s Rel **3IMPF-speak-PL** the-Kabyle
 Others who **speak Kabyle**

130. VS for clauses with object clitics:

hađu li kan-u yə-ddi-w-hūm əl-jma`a hađuk
 these Rel **were-PL 3IMPF-take-PL-them** the-group those
 These ones that **that group had been taking**

131. VS for intransitive verbs:

əš-šə`ba lli taħ-ət fi-ha s-səjra
 the-valley Rel **fell-3F** in-it.F the-tree
 The valley that **the tree fell** into

132. SVO:

rabəh əlli [mwələf] naşar yə-şri l-luħ m-`ənd-u
 Rabah Rel [accustomed] **Naser 3IMPF-buy** the-wood from-at-him
 Rabah who **Naser [usually] buys wood** from

The subject position, moreover, varies just as it does in main clauses. When the relative clause contains no non-clitic object, even though VS is strongly preferred, SV is entirely acceptable. When the head of the relative clause is oblique and both the subject and the object are expressed as separate words (which is exceedingly rare – I have never noticed an example in natural speech), any of the orders SVO, VSO, VOS are accepted by native

speakers.

133. SV:

əl-fālfāl əlli ər-rajəl šra-h mə-s-suq
the-pepper Rel **the-man** **bought-it.M** from-the-market
The pepper that the man bought from the market

134. SV:

əššə`ba lli ssajra .tahət fi-ha
the-valley Rel **the-tree** **fell-3F** in-it.F
the valley that the tree fell into

135. VSO:

rabəh əlli yašri naşər l-luḥ m-`ənd-u
Rabah Rel **3IMPF-buy** **Naser** **the-wood** from-at-him
Rabah who **Naser** **buys wood** from.

136. VOS:

əl-ḥanut əlli šra mənnu əl-ḥut r-rajəl
the-shop Rel **bought** from-it.M **the-fish** **the-man**
The shop that **the man** **bought the fish** from

SV order, however, is significantly less acceptable when the relative marker is null:

137. *šəf-t šə`ba .tah-ət fi-ha səjra*
saw-1Sg valley **fell-3F** in-it.F **tree**
I saw a valley that **a tree** **fell** into.

138. *??šəf-t šə`ba səjra .tahət fiha*
saw-1Sg valley **tree** **fell-3F** in-it.F

Just as in topicalisation, a resumptive clitic pronoun is required if the operator position is governed by a verb (example 136), or preposition (137), or is in the possessive:

139. *ər-rajəl li šri-t daṛ-u*
Khaled Rel saw-2SG house-his
the man whose house you bought

The resumptive pronoun can only be a clitic:

140. *xaləd li ma šəf-t-u-š* (*huwwa)
Khaled Rel not saw-1SG-him-Neg (*he)
Khaled whom I haven't seen (*him)

141. *ər-rajəl li (*huwwa) raḥ*
the-man Rel (*he) went
The man who (*he) went

Thus, if the head is adverbial, no resumptive pronoun is found:

142. *nhar y-fiḏ*
 day 3IMPF-overflows
 the day when it overflows
143. *nhar li jəb-na-h*
 day Rel brought-1PI-it.M
 the day we brought it

Likewise, the head leaves no resumptive pronoun behind if extracted from a copular sentence with null copula (phonetically empty extraction site marked with Ø):

144. *əl-xəddam-a lli Ø tamma*
 the-worker-s Rel Ø there
 The workers that are there
145. *haḏa huwa lli rəḏwan qal-li Ø ma-ši hərr*
 this 3M Rel Redouane said-to_me Ø not-Neg spicy_hot
 This is the one that [Redouane told me [wasn't spicy hot.]]

or a sentence with a morphologically prepositional verb (see Souag 2000) that cannot take object clitics:

146. *əs-səl`a lli `ənd-hūm Ø*
 the-goods Rel at-them Ø
 The goods that they have
147. *qərfa li ma `ənd-u-š Ø*
 cinnamon Rel not at-him-Neg Ø
 Cinnamon is what he doesn't have.

Negative quantifier fronting is permitted inside AA relative clauses:

148. *ər-rajəl əlli walu ma šaf*
 the-man Rel nothing not saw
 the man who **saw nothing**

and, to some extent, so is fronting of a PP:

149. *??əl-mra əlli mə-s-suq šra-t l-fəlfəl*
 the-woman Rel **from-the-market** bought-3F.PF the-pepper
 ?the woman who **from the market** bought the pepper

Object focus, however, is simply not acceptable:

150. **əl-mṛa ʔalli l-fālfāl šra-t mə-s-suq*
 the-woman Rel **the-pepper** **bought** from-the-market
 *the woman who **the pepper bought** from the market

As in English, but unlike in Italian (Rizzi 1997), topicalisation is impossible within a relative clause. Sentences such as:

151. **ər-rajəl ʔalli l-fālfāl šra-h mə-s-suq*
 the-man Rel the-pepper bought-3MSg from-the-market
 *The man who **the pepper** bought from the market

152. **ər-rajəl li k^otab səllaf-hu-li*
 the-man Rel book lent-it.M-to_me
 *The man who **a book** lent me

are judged impossible.

In sentences with non-clitic objects, as in CA, raising a resumptive pronoun and whatever is attached to it to just after the complementiser is entirely acceptable:

153. *əs-suq ʔalli mənn-u šra r-rajəl əl-fālfāl*
 the-market Rel **from-it.M** bought the-man the-pepper
 The market from which the man bought the pepper

3.2.2 Relative clauses with marker (*allādii* etc.) in Classical Arabic

In CA, as in AA, resumptive clitic pronouns are obligatory for objects of prepositions:

154. *šahr-u ramāḍān-a allādii ʔunzil-a fii-hi l-qurʔaan-u*
 month-NOM Ramadan-GEN Rel.MSg revealed.PASS-3MSgPF in-it.M the-Qurʔan-NOM
 The month of Ramadan, in which the Qurʔan was revealed (2:185)

Also as in AA, relativisation on adverbs does not leave any resumptive pronouns:

155. *yawm-a ta-rjuf-u r-raajifat-u*
 day-ACC 3FImpf-quake-Indic the-quaker-Nom
 On the day on which the quaker shall quake (79:6)

Unlike in AA, however, CA allows resumptive subject pronouns (of verbs and copulas alike) – and, unlike fuller DP subjects but like pronominal subjects in general, these fall

preverbally:

156. *wa-llaḏii huwa y-ut`im-u-nii wa-ya-sqii-ni*
and-Rel.MSg **he** 3Impf-feed-Indic-me and-3Impf-water-me
and He Who feeds me and waters me. (26:79)
157. *allatii hiya `aḥsan-u*
Rel.FSg **it.F** best-NOM
That which is best (17:53)

Also unlike AA, resumptive object pronouns are optional (at least where overt relative pronouns are present), just as for topics (2.5); in fact, in the Qur'an, they are typically dropped. Contrast:

158. *an-nafs-a llatii ḥarram-a llaah-u*
the-soul-ACC Rel.FSg forbade-3MSgPF God-NOM
The soul that God has forbidden (17:33)

with the rarer type exemplified by:

159. *al-jannat-u llatii `uurit-tumuu-haa*
the-garden-NOM Rel.FSg inherit.Caus.Pass-2MPIPF-**it.F**
The Garden which you have been made to inherit (17:33)

As in AA, resumptive pronouns are allowed to (and frequently do) raise, pied-piping their prepositions with them:

160. *huwa llaḏii `ilay-hi t-uḥṣar-uu-na*
He Rel.MSg **to-him** 2Impf-gather.Pass-Pl-Indic
He is the one unto Whom you will be gathered. (6:72)

In a language with no native speakers, proving a negative – that preverbal fronting, including both topicalisation and focalisation, was not permitted in CA relative clauses – is difficult. However, I have gone through all relative clauses in the Qur'an formed with the definite relative marker, and in these, severe limits on the optional alternative word orders were observed. In fact, within the Qur'an, the only elements observed to intervene

between the various forms of *allādii* and [Neg] [T] V are pronouns co-referential to the relative head, prepositions governing them, and subordinate clauses with “if/when” (eg 2:156). SVO order – that is, topicalisation or focalisation of the subject – may not be impossible in Classical Arabic relative clauses, but is unattested in the Qur’an.

3.3 Relative clauses and the left periphery

How much of the functional hierarchy outlined above fits inside a relative clause? The relative clause proper has widely been assumed to be CP (Alexiadou et al. 2004), although others have argued that, in Arabic, it is headed by D and only contains IP (Ouhalla 2004). But with both CP and IP split, a more detailed account is necessary.

Free relative clauses, given that they display WH-movement, would seem to contain a FocP; in relative clauses with the marker, as noted above, focus is blocked and WH-movement impossible:

161. **əl-mṛa* *əlli* *l-fālfāl* *šra-t* *mə-s-suq*
 the-woman Rel **the-pepper** **bought** from-the-market
 *the woman who **the pepper bought** from the market

However – particularly in light of the CA data, in which the resumptive pronoun and its pied-piped governor readily climb to preverbal position – this may readily be explained by Demirdache (1997)’s proposal that resumptive pronouns are simply the phonetically realised equivalents of null operators¹⁵, and rise obligatorily at LF to the same positions that relative pronouns in, for example, English do. In other words, FocP needs to be occupied by the resumptive pronoun at LF, and hence is not open to other purposes. This permits a unified analysis of free and non-free relative clauses, and is hence desirable –

¹⁵ This can be made to dovetail nicely with Shlonsky’s analysis (cf. 1.6) – in which case the null operator really is filling the relevant DP position, and a phonetically empty position there forces Agr to be filled by a clitic pronoun.

although it requires the absence of island constraints in clauses with resumptive pronouns to be explained through homophonous intrusive pronouns (Sells 1984).

Topics, on the other hand, are consistently blocked, as noted previously:

162. * *ər-rajəl əlli l-fəlfəl šra-h mə-s-suq*
the-man Rel the-pepper bought-3MSg from-the-market
*The man who **the pepper** bought from the market

This immediately suggests that TopP does not fall within the relative clause. If so, we would expect conjunctions in Rizzi's ForceP to also be blocked, which is true in AA as in English:

163. * *ər-rajəl li xqtaš səlləf-hu-li*
the-man Rel **because** lent-it.M-to_me
*The man who **because** he lent it to me

Thus I conclude that relative clauses in AA, and indeed CA (cf. 3.2.2), contain FocP and what is below it, but not TopP nor ForceP. This provides independent confirmation of part of the functional hierarchy deduced from main clauses, and allows simple characterisation of cross-linguistic variation. AA, like English, does not allow topicalisation in relative clauses, whereas Italian does; the difference can be characterised simply in terms of what portion of the clausal hierarchy the relative marker takes as its complement.

4 Resumptive pronoun dependencies contrasted with movement

A comparison of topic and relative constructions between AA and CA in resumptive pronouns shows extensive common properties, requiring a common explanation. In both constructions, as we have seen above, AA requires resumptive pronouns after the verb, while CA makes them optional; by contrast, both languages require resumptive pronouns after prepositions¹⁶. In both constructions in both languages, resumptive pronouns are not permitted for adverbs, and are not required for subjects. In both languages, resumptive pronouns do not occur in WH-movement. In AA, resumptive pronouns must be clitic in both constructions.

But more telling are the syntactic properties of resumptive pronoun constructions, which contrast strongly with those of movement. These can much more readily be exemplified for AA than CA, due to the inherent difficulty of obtaining unequivocal evidence of ungrammaticality in a language with no native speakers.

4.1 The lack of crossover

In clear cases of DP movement, the DP behaves for binding purposes as if it was still in its lower position:

164. *aškun_i šaf baba-h_i*
who? saw father-his
Who_i saw his_i father?

165. **aškun_i baba-h_i šaf*
who? father-his saw
*Who_i did his_i father see?

166. *ħəttə wəħəd ma šaf baba-h*

¹⁶ This may plausibly be linked to the differences noted in 1.2 and 1.3 holding between CA and AA object clitics, but not between other CA and AA clitics.

no one not saw father-his
 No one_i saw his_i father. (without SpecNegP-raising)
 His_i father saw no one_{*i}. (with SpecNegP -raising)

However, topics and the head nouns of relative clauses, instead, bind as would be expected if they were generated in situ:

167. *baba-h_i šaf xaləd_{*i}*
 Khaled saw father-his
 His_i father saw Khaled_{j/*i}
168. *xaləd_i li baba-h_i šaf-u*
 Khaled Rel father-his saw
 the Khaled_i whom his_{i/j} father saw (“the” impossible in AA in this context)
 / Khaled_i, whom his_{i/j} father saw
169. *xaləd_i, baba-h_i šaf-u*
 Khaled, father-his saw-him
 Khaled_i, his_{i/j} father saw him.

Similarly, possessive pronouns attached to either can bind only to what their position in the main clause would allow, not to what their logical position in the relative clause should allow:

170. *xaləd_i šaf baba-h_i*
 Khaled saw father-his
 Khaled_i saw his_i father
171. * *baba-h_i li xaləd_i šaf-u*
 father-his Rel Khaled saw-him
 * His_i father that Khaled_i saw
172. * *baba-h_i šaf-u xaləd_i*
 father-his saw-him Khaled
 * His_i father Khaled_i saw.
173. * *baba-h_i xaləd_i šaf-u*
 father-his Khaled saw-him
 * His_i father Khaled_i saw.

Moreover, reflexive pronouns cannot occur in topic position (and pronouns in general are not found as relative heads):

174. *xaləd šaf ruħ-u f-əl-mraya*

- Khaled saw soul-his in-the-mirror
 Khaled saw himself in the mirror.
175. *šaf ruḥ-u xaləd f-əl-mraya*
 saw soul-his Khaled in-the-mirror
 Khaled saw himself in the mirror
176. * *ruḥ-u xaləd šaf-u f-əl-mraya*
 soul-his Khaled saw-it.M in-the-mirror
 * Himself Khaled saw in the mirror
177. * *ruḥ-u šaf-u xaləd f-əl-mraya*
 soul-his saw-it.M Khaled in-the-mirror
 * Himself, Khaled saw in the mirror.

4.2 Island constraints

In Algerian Arabic, just as in Moroccan Arabic (Lalami 1996), the relation between the topic and the resumptive pronoun is not subject to island constraints, again suggesting in situ generation:

178. *karim nə-`rəf əl-muḥami lli dəfə` ʿli-h*
 Karim 1IMPF-know the-lawyer Rel defended on-him
 Karim, I know the lawyer that defended him.
179. *karim əl-bənt li wəkkəl-at-u raḥ-ət*
 Karim the-girl Rel fed-3F.PF-him went-3F.PF
 Karim, the girl that fed him went.
180. *karim səqsa-w-ni aškun li dərb-u*
 Karim asked.3PF-PL-me who Rel hit-him
 Karim, they asked me who hit him.

Precisely the same is true in relative clauses:

181. *hadək ər-rajəl li šaf-na əl-muḥami lli dəfə` ʿli-h*
 that the-man Rel saw-1PIPF the-lawyer Rel defended on-him
 that guy_i who we saw the lawyer that defended him_i.
182. *hadək ər-rajəl li qūl-t-li bəlli əl-bənt li wəkkəl-at-u raḥ-ət*
 that the-man Rel told-1SGPF-to.me that the-girl Rel fed-3F.PF-him went-3F.PF
 that guy_i who you told me that the girl that fed him_i went.
183. *hadək əl-wləd li səqsa-w-ni aškun li dərb-u*
 that the-boy Rel asked.3PF-PL-me who Rel hit-him
 that boy_i who they asked me who hit him_i.

Both contrast strongly with, for example, WH-movement, where the equivalent sentences are so ungrammatical as to be found incomprehensible:

184. ****li-mən tə-`rəf əl-muḥami lli dafə`?*
 on-whom? 2IMPF-know the-lawyer Rel defended
 **Whom do you know the lawyer that defended?
185. ****aškun əl-bənt li wəkkəl-ət raḥ-ət*
 who the-girl Rel fed-3F.PF went-3F.PF
 ***Whom did the girl that fed went?

4.3 Movement, dislocation, and the functional hierarchy

We have seen that dependencies involving DPs in AA and CA fall naturally into two categories: movement proper, subject to subjacency constraints and leaving no traces; and what might be called dislocation (following Cinque 1983¹⁷), leaving resumptive clitic pronouns and disrespecting subjacency constraints. The dividing line between these two types can be stated simply: DPs cannot climb higher than SpecFocP¹⁸. This syntactically relevant dividing line is higher than the traditional SpecCP that WH-phrases have been claimed to occupy, but lower than the traditional C that complementisers such as “because” were meant to occupy.

¹⁷ Note that this cannot be identified with his Clitic Left Dislocation, which, though similar in other respects to AA dislocation, is constrained by subjacency.

¹⁸ Note that this applies irrespective of whether one accepts the traditional base-generation hypothesis for relatives (summarised in Alexiadou et al. 2000:3) or Kayne 1994’s promotion analysis; in either case, the determiner is base-generated outside the relative clause, just as the binding data would seem to imply. The implications of the clear grammaticality of subjacency violations in this context for the correct analysis of relative clauses falls beyond the scope of this paper, but would seem more easily reconcilable with the base-generation hypothesis.

5 Conclusion

In this thesis, I have, for the first time, outlined the principal positions open to subjects and objects in Algerian Arabic, while placing them in historical and theoretical perspective. This offers striking cross-linguistic confirmation, not only of the need for multiple subject and object positions, but also of their relative placement and their interpretative and semantic motivations. Furthermore, through a detailed examination of the properties of resumptive pronouns, it suggests the existence of a syntactically relevant dividing point, equally relevant to Algerian or Classical Arabic, between a CP-like higher portion of the hierarchy – inaccessible to DP movement – containing “interface” elements situating the clause relative to its broader context, and an IP-like remainder containing the clause proper. However, much research remains to be done. Some points that would merit examination in future work are the placement of adverbs; the question of verb movement and the nature of, and conditions triggering, VSO and VOS orders; further analysis of the common ground of topic and relative constructions; and more detailed diachronic comparison of the structure of the split IP.

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∞ Appendix

∞.1 Transcription notes

For writing Algerian Arabic sentences in this essay, I use a phonemic Latin transcription conforming to the norms of Semitic linguistics. The following table of equivalences may be useful:

<i>Transcription</i>	'	b	t	ṭ	j	h	x	d	ḏ	r	
<i>Arabic</i>	ء	ب	ت	ث	ج	ح	خ	د	ذ	ر	
<i>Phonetic IPA</i>	ʔ	b	t	θ	dʒ	ħ	χ	d	ð	rʕ	
z	s	š	ṣ	ḍ	ṭ	ḏ	ʕ	g	f	v	q
ز	س	ش	ص	ض	ط	ظ	ع		ف	پ	ق
z	s	ʃ	sʕ	dʕ	tʕ	ðʕ	ʕ	ɣ	f	v	q
g	k	l	m	n	h	w	y	a	i	u	ə
غ	ك	ل		ن	ه	و	ي	أ	إ	و	أ، إ
g	k	l	m	n	h	w	y	ɛ: ~ a:	i:	u:	ɪ ~ ʌ
ũ	o	r		z		p	b	ũ			
ُ	و	راء مرقق		زاي مفخم		پ	ب مفخم	ضممة ممدودة بالغنة			
ū ~ o	w	r		zʕ		p	bʕ	ũ			

There is variation between dialects on the presence/absence of interdentalals: Dellys, for example, has them, while in Algiers they have merged with the dental stops. Kaye's 1990 analysis of schwa/zero alternations in Moroccan Arabic is largely applicable to Algerian Arabic, with the exception of conditioned gemination, a specifically Algerian phenomenon which, however, is largely optional in the dialects under discussion.

∞.2 Abbreviations and glosses

For ease of reading, I have glossed perfects as English past tenses, left untranscribed the implicit 3MSG of AA perfects, and glossed 3rd person singular pronouns with inanimate referents as it.M/it.F.

Abbreviations:

AA	Algerian Arabic
CA	Classical Arabic
IC	immediate constituent
LF	logical form
PF	phonetic form

Word orders:

VS	verb-subject
SV	subject-verb

VSO verb-subject-object
SVO subject-verb-object
VOS verb-object-subject

Morphology:

IMPF imperfect
PF perfect
M masculine
F feminine
SG singular
PL plural
INDIC indicative
1 1st person
2 2nd person
3 3rd person
INDEF indefinite
NOM nominative
ACC accusative
GEN genitive
Caus causative
Pass passive
Neg negation marker –š
FOC focus
Rel relative complementiser

Phrases:

Spec Specifier
Comp Complement
P Phrase
Top Topic
Foc Focus
AgrS Subject agreement
Neg Negative
Neut Neutral
V Verb
D Determiner
P Preposition

∞.3 Chi-squared test

A chi-squared test was applied to the subject position data. Expected values are calculated on the basis of H_0 – that the odds of postverbal subjects are identical irrespective of the presence or absence of a non-clitic object. In both cases, there are four categories, and hence three degrees of freedom. VS and SV represent the sum of the non-clitic object cases.

For Algiers:

	Observed (O)	Expected (E)	(O-E) ² /E
VSO	0	2.51	2.51
SVO	6	3.49	1.80
VS	23	20.49	0.31
SV	26	28.51	0.22
Total = χ^2			4.84

For Biskra:

	Observed (O)	Expected (E)	(O-E) ² /E
VSO	2	5.19	1.96
SVO	15	11.81	0.86
VS	27	23.81	0.43
SV	51	54.19	0.19
Total = χ^2			3.44

The minimum χ^2 value necessary for significance at the 5% level with three degrees of freedom is 7.82; from this, I conclude that the corpus examined, while consistent with the claim, is insufficiently large to rule out the null hypothesis (no difference in the probability) at a 5% significance level; a larger corpus would be required to verify the claim to this degree of confidence.