

# Mentalist or functionalist grammar? The case of non-restrictive relative clauses in Arabic

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**Résumé :** *Cet article considère la distinction entre la proposition relative déterminative et non-déterminative par rapport à la théorie des universaux linguistiques. En s'appuyant sur des données de l'arabe, l'étude présente montre qu'on ne peut pas rejeter cette distinction. Il confirme, à cet égard, les positions mentalistes inspirées par l'école de Port-Royal (Chomsky 1966) et se détache des positions fonctionnalistes contemporaines (Comrie 1981). Il montre aussi que si l'on combine cette approche avec les découvertes récentes sur la proposition relative non-déterminative arabe, il résulte que la grammaire arabe peut être conçue d'une façon plus simple : dans cette perspective, la nature apparemment irrégulière du marqueur relatif llaqī répond en réalité à un schéma morphosyntaxique régulier et les propositions circonstancielle et explicative, traditionnellement censées être particulières à l'arabe, sont réinterprétées tout court comme des propositions relatives non-déterminatives. Cette interprétation révèle un parallélisme étroit entre la proposition relative non-déterminative arabe (sémitique) et somale (chamitique).*

**Mots-clés :** *Proposition relative non-déterminative, Ancien Arabe, Somali, proposition circonstancielle, copule, llaqī*

**Abstract:** *This paper deals with the distinction between restrictive and non-restrictive relative clauses within the theory of language universals. It brings evidence from Arabic in favor of the hypothesis that such a distinction cannot be dispensed with, contrary to what functionalist approaches à la Comrie (1981) hold, and in support of mentalist trends of research dating back to Port-Royal (Chomsky 1966). It is also shown that this theoretical move, if combined with recent findings on the Arabic non-restrictive relative clauses, leads to a more economical representation of the Arabic grammar. In this light, in fact, the (apparently) anomalous morphosyntactic behavior of the relative marker llaqī is reduced to a pattern of regularity and the adverbial and the explanatory clauses, usually regarded as language-specific, are here reinterpreted as two types of non-restrictive relative clause.*

*As a consequence, there emerges a close parallelism between the Arabic (Semitic) and Somali (Hamitic) non-restrictive relative clause.*

**Keywords:** *Non-restrictive relative clause, Old Arabic, Somali, adverbial clause, copula, llaqī*

## The topic and the problem

A non-restrictive relative clause (NONRERC) is a kind of relative clause (RC) that adds non-necessary information about an already identified (and hence definite) noun. It can be easily recognized in English by the presence of an intonational break (or a comma) which sets it off from the noun it refers to («head noun»), as shown in (1).

- (1) English (Comrie, 1981: 138)  
The man, who had arrived yesterday, left this morning

This intonational property is not found in the restrictive RC illustrated in (2), which basically serves to identify its head noun. Both the types of RC must contain a pronoun coreferential with the head noun («anaphoric pronoun»).

- (2) English (Comrie and Kuteva, 2005: 494)  
The girl we saw yesterday

Comrie (1981) and subsequent work (Comrie and Kuteva 2005, Heine and Kuteva 2007), however, contend that a functionalist theory of language universals, which relies upon a large empirical coverage, should dismiss such a distinction as «almost completely irrelevant. [...] most languages have either no formal distinction, or only an intonational distinction» (Comrie 1981: 139) .

Among the languages which do not distinguish between the two kinds of RCs - and thus appear to support Comrie's claim - is (Classical) Arabic (see (3)).

- (3) Classical Arabic (Wright, 1896: vol. II, 318)  
l-malik-u            llaḡī ya'dilu  
the-king-NOM (,) which acts.with.justice  
'the king (,) which acts with justice'

Thus, the functionalist approach prefers to classify RCs according to another criterion, namely the way (or «relativization strategy») by which a RC is associated with its head noun (Comrie and Kuteva 2005) - Heine and Kuteva (2007: 225), however, admit that this criterion is compatible with the restrictiveness-based distinction of RCs.

Crosslinguistically, four strategies are found, presented here in a form useful for the present discussion:

- (A) Relative Pronoun Strategy: a RC introduced by a «dedicated» pronoun, e.g. *who* in (1)  
(B) Non-reduction Strategy (paratactic subtype): a RC similar to a conjoined clause. A conjunction (Heine and Kuteva's (2007: 226) «relativizer») intervenes between the head noun and the RC, introduced by a covert or overt pronoun: see (4a), (5a)  
(C) Pronoun-retention Strategy: a RC introduced by a demonstrative-like element, e.g. *that* in *the man [that John saw]*. Also interpreted as a Complementizer, ie as a particle introducing a clause, as much as *that* in *I think [that John left yesterday]*.  
(D) Gap Strategy: no overt element introduces the RC, simply juxtaposed to its head noun (2)

- (4) Somali (Frascarelli and Puglielli, 2006: 310, 321)
- a. Cali oo Maryam la hadlayá waa walaalkay  
Cali and Maryam with speaking.is FOCUS MARKER brother-my  
'Cali, who is talking to Maryam, is my brother'
- b. Cali oo isbitaal-ka ku jira buu dhintay  
Cali and hospital-the in stayed FOCUS MARKER died  
'He died while he was in the hospital'
- (5) English (Ross, 1967: 435)
- a. Enrico, and he is the smartest of us all, got the answer in seven seconds
- b. Enrico, who is the smartest of us all, got the answer in seven seconds

Comrie also observes that the Chomskian theory of language universals («Universal Grammar»), which accepts the restrictiveness-based distinction of RCs, is not on the right path, since it mistakes a property typical of English for a linguistic universal.

The same criticism virtually applies to the Port-Royal Grammar (XVII c.), from which Universal Grammar inherits this distinction, as stated in Chomsky (1966). In fact, although Arnauld and Lancelot (1660) as well as Arnauld (1662) ascribe its universal nature to (semantic-)logical axioms, *de facto* the data they discuss are almost exclusively drawn from Indo-European languages and mention of Hebrew in Arnauld and Lancelot (1660: part 1, ch. 9) stands as an isolated case.

On the whole, Comrie's arguments would seem to leave no room for further discussion, were it not for one disturbing fact: diachronically, a scenario of non-distinction between RCs can develop out of a scenario in which this distinction exists, as documented for Arabic (Gensler 2004).

The later typology, in fact, is found in Classical Arabic, ie the variety of language codified by Arab Grammarians (VIII c. - XV c.), the earlier in Old Arabic (IV c. - VIII c. AD), the variety whose main source is Koran (Owens 2006).

### A broader perspective

The description of the RCs would be not complete if one failed to mention some constructions that native speakers regard as intuitively related to the just mentioned types of RC. Adopting American Structuralists' terminology, these constructions are referred to here as «transformations<sup>1</sup>».

Thus, before discussing the diachronic dynamics of the Arabic RC, it seems appropriate to list three transformations (= correlations) which have been observed in the «mentalist» paradigm:

I. Conjoined clause - NONRERC: the former (say, *and he*) undergoes deletion of the Anaphoric Pronoun (*and* → *who*), which, according to Arnauld and Lancelot (1660: part 1, ch. 9) carries out the same function. Arnauld (1662: part 1, ch. 8, part 2, ch. 6) regards the RC at issue as typically non-restrictive. Transformation also hinted at in the functionalist Non-reduction strategy (B) and illustrated in (5a, b).

II. NONRERC - Adverbial clause (ie a clause denoting time, place or manner): documented in Somali (contrast (4a) with (4b), having different meaning but identical structure) and discussed in the functionalist literature (Heine and Kuteva 2007: 251-254).

III. NONRERC - Apposition: the former undergoes deletion of the verb *be* and of the Relative Pronoun, e.g. *who* (Arnauld 1662: part. 1, ch. 8), itself a cover term for the sequence Conjunction + Anaphoric Pronoun, e.g. *and he* (see I)). The contrasts between (6a) vs. (6b) and (5a) vs. (6b) exemplify this state of affairs. Cp. also the traditional label «appositive RC» standing for NONRERC and the functionalist Gap Strategy (D).

- (6) English (Heringa, 2007: 76-77)  
a. His girl friend, who is a modest person, laughs about that  
b. His girl friend, a modest person, laughs about that

These transformations are hierarchically organized, since adverbial clauses and appositions imply a NONRERC, which, in its turn, implies a conjoined clause. In this perspective, the conjoined clause would be the most typical pattern of NONRERC, and Somali (4a) as well as English (5a) would manifest it. It is also worth noting in connection with the conjoined clause that the Conjunction it deploys, say *and* of (5a), sets in logical terms a relationship between a «substance» (e.g. the noun *Enrico* of (5a)) and an «attribute» (e.g. the modifier *he is the smartest of us all* of (5a)), ie the noun and its modifier clearly denote just one individual: this property is generally referred to as «intersectivity» and is not found in more familiar instances of conjunction like *and* in the phrase *John and Mary*, where *John* and *Mary* denote two different individuals, as De Vries (2006: 340) remarks.

He also points out that the relationship set by the conjunction *and* of (5a) is by its own nature unbalanced, because the modifier ascribes a property to a noun, while the opposite does not hold - a property referred to as «asymmetry». In an independent research program, Den Dikken (2006: 11-12, 16-17) assigns exactly the same properties to the copula (e.g. *is* in *The Earth is round*), which he admittedly characterizes in the same way of Arnauld and Lancelot's (1660: part 2, ch. 13) (abstract) «copule».

On these grounds, the Conjunction of the NONRERC and the copula turn out to be the same thing, ie a generalized connective introducing an intersective and asymmetric constituent.

In the spirit of Den Dikken (2006: 48) they only differ in their context of occurrence: the former is found in the Noun Phrase or «secondary predication», the latter in the sentence or «primary predication», where the distinctive feature between primary and secondary predication is the presence vs. lack of tense. A simple consequence of this scenario is the following observation, which will be useful later on: an element that in secondary predication syntactically behaves like the copula of primary predication is to be identified with the conjunction of the NONRERC.

### The categorial status of the relative marker *-llaqī*

According to Gensler (2004), in the Koran the non-restrictive meaning of the type of RC (3), associated with the marker *-llaqī*, is overwhelmingly more frequent (140 out of 225 occurrences) than the restrictive one (47 out of 225, 36 remainder cases being unclear). Moreover, the restrictive semantics is also realized by the construction *mā...min...* (which will be not discussed here). Thus, Gensler claims that in Old Arabic (3) is originally a NONRERC in complementary distribution with

the restrictive RC *mā...min...* mainly relying upon statistical evidence. The first proposal of this paper is that Gensler's hypothesis can be evidenced syntactically by extending to the NONRERC some diagnostics worked out by Arab Grammarians. Crucial to such a proposal is the analysis of *-llaḡī*, whose properties have been described in the literature as follows:

- It is of Hijazi origin and made up of an asseverative particle (*l*)*la* and of a former demonstrative base *ḡī* that has lost its original meaning (Brockelmann, 1910: 123, Rabin, 1955: 152).
- It does not bear case, except in the dual, which is however a late and analogical phenomenon (Garbini and Durand, 1994: 99-100).
- It has an ambiguous categorial status: like a complementizer, it introduces clauses other than the RC (see (C)), like a pronoun (A) it is agreed with its head noun. Hence, it cannot be univocally identified with neither of them (Mughazy, 2006: 62-64).

Remarkably, Arab Grammarians use the first two mentioned properties as syntactic diagnostics (see Peled 2006) to test whether the pronominal base *huwa* has turned into a copula (7) or not (8) in primary predication: only the copula (e.g. *kāna*), in fact, is indeclinable (by definition) and undergoes *la*-prefixation (for diachronic reasons<sup>2</sup>), as shown in (9).

(7) Classical Arabic (Yaaqoub, 2001: vol. II, 331; Peled, 2006: 559)

- a. *ḡanan-tu Zayd-an huwa l-qā'ima*  
 thought-I Zayd-ACC he the-standing-ACC  
 'I thought Zayd was the standing one'
- b. *'in kāna Zayd-un la-huwa l-'āqila*  
 indeed was Zayd-NOM *la*-he the-clever-ACC  
 'Indeed, Zayd was the intelligent one'

(8) Classical Arabic (Yaaqoub, 2001: vol. II, 331)

- a. *ḡanan-tu-ka 'iyyā-ka xayr-an min Zayd*  
 thought-I-you.ACC DUMMY SUPPORT-you.ACC good.ACC from Zayd  
 'I thought you, at least you, were better than Zayd'
- b. *\*ḡanan-tu-ka la-'iyyā-ka xayr-an min Zayd*  
 thought-I-you.ACC *la*-DUMMY SUPPORT-you.ACC good.ACC from Zayd  
 '\*I thought you, at least you, were better than Zayd'

(9) Old Arabic (Koran, XLVII: 21)

- law ṣadaq-ū !!āh-a la-kāna xayr-an la-hum*  
 if were.true-they God-ACC *la*-was good-ACC to-them  
 'if they were true to God, it would be better for them' (Arberry's transl.)

Since the marker *-llaḡī* manifests the same properties in secondary predication, it might be plausibly interpreted as the conjunction intervening between the NONRERC and its head noun, by virtue of the structural equivalence stated at the end of the previous Section.

A desirable consequence of this interpretation is that it straightforwardly accounts for the (apparent) ambiguous categorial status of *-llaḡī* (the third property listed above).

First, conjunctions in Arabic can introduce clauses as much as the complementizers do: a case in point is *fa-* in the construction *'ammā... fa-...*, (see Wright 1896: vol. I, 292) and in the apodosis of conditional constructions like (9), when it can replace *la*.

Second, *-llaqī* 's agreement with its head noun (= substance) is not surprising in the light of the fact that it is the secondary predication counterpart of the copula, which typically in Arabic (and crosslinguistically) agrees with its subject (= substance).

Finally, it should be added that Pennacchiotti (1968: 62, 84-85), on the basis of comparative considerations, assign *-llaqī* and the Somali conjunction of the NONRERC oo (4) the same categorial status of copula-like («non autonomous») elements, thus lending independent support to the proposal put forward here and hence, indirectly, to Gensler's hypothesis.

### Are *'atf al-bayān* and *wāw al-ḥāl* language-specific?

The just sketched account implies that the anaphoric pronoun typically embedded in the (non-restrictive) RC in Arabic is either covert, if subject (3), or overt, in all the other cases, a scenario along the lines of Arab Grammarians. In this respect, both the mentalist and the functionalist approaches agree in positing the following structure for the NONRERC (cp. (B) and (4a, 5a)):

(10) Antecedent<sub>i</sub> + conjunction + (overt or covert) anaphoric pronoun<sub>i</sub>

Of particular relevance here is that the configuration in (10) in Classical Arabic is also displayed by two constructions, the so-called explanatory and adverbial clauses, traditionally regarded as language-specific and illustrated in (11a, 12a), respectively:

- (11) Classical Arabic (Wright 1896: vol. II, 286-287)
- |    |                                |                     |         |      |
|----|--------------------------------|---------------------|---------|------|
| a. | jā'a-nī                        | 'ax-ū-ka            | wa-huwa | Zayd |
|    | came-me                        | brother-NOM-you.OBL | and-he  | Zayd |
|    | 'your brother Zayd came to me' |                     |         |      |
| b. | jā'a-nī                        | 'ax-ū-ka            | Zayd    |      |
|    | came-me                        | brother-NOM-you.OBL | Zayd    |      |
|    | 'your brother Zayd came to me' |                     |         |      |

- (12) Classical Arabic (Wright 1896: vol. II, 112, 330)
- |    |                        |          |            |             |
|----|------------------------|----------|------------|-------------|
| a. | qāma                   | Zayd-un  | wa-huwa    | bākin       |
|    | stood.up               | Zayd-NOM | and-he     | weeping-NOM |
|    | 'Zayd rose up weeping' |          |            |             |
| b. | jā'a                   | Zayd-un  | rākib-an   |             |
|    | came                   | Zayd-NOM | riding-ACC |             |
|    | 'Zayd came riding'     |          |            |             |

Non-trivially, the element that in both of them intervenes between the head noun and the anaphoric pronoun is clearly a conjunction, since it surfaces as *wa-*, the Arabic equivalent of *and* (cp. also the traditional terminology: *'atf al-bayān* and *wāw al-ḥāl*, respectively).

On the whole, these typological considerations strongly suggest that the clauses at issue are NONRERCs.

The second proposal of this paper is that syntactic and semantic evidence can be culled to corroborate this hypothesis.

Although the traditional description does not set the equivalence explanatory clause = NONRERC, it nevertheless recognizes that the explanatory clause «transforms» into an apposition (*badal*) via deletion of the sequence Conjunction + Anaphoric Pronoun (e.g. *wa-huwa*): see Wright, 1896: vol, II, 287 and contrast (11a) with (11b): but this is a transformation typically undergone by the NONRERC (III).

Moreover, the just mentioned sequence is sometimes translated in English as *which is* (Fareh, 1998: 308).

In a likewise fashion, the equivalence adverbial clause = NONRERC is not stated in the traditional literature, but the former is ascribed the three properties usually ascribed to the latter: non-necessary information, definiteness of the head noun, coreferentiality between the head noun and the clausal pronoun (Shartouni, 1989: 297, 298, 301).

The expected relative meaning associated with these properties is not clearly retrievable: even so, Cowell (1964: 531) observes that in Syrian Arabic the structure in (13) can be interpreted either as a conjoined clause or as an adverbial clause, and descriptively (see (I-II), (4), (5)), the structure at issue is associated with both these meanings only if the derivation: conjoined clause > NONRERC > adverbial clause takes place, ie only if the NONRERC is an intermediate transformational step.

- (13) Syrian Arabic (Cowell, 1964: 531)  
ša'hā ḥalab bānet w-'al'et-ha bi-n-niṣṣ  
see.there Aleppo showed.up and-citadel-her in-the-middle  
'See there, Aleppo has come into view, and its citadel is in the middle \\  
with its citadel in the middle'

This scenario partly dovetails with Heine and Kuteva's (2007: ch. 5) claim that on diachronic (rather than mental \ transformational) level there is an universal tendency to the drift: conjoined clause > RC > adverbial clause.

Moreover, Arab Grammarians (see Shartouni (1989: 301-302)) relate the subtype of adverbial clause featuring a nominal<sup>3</sup> predicate to a nominal adjunct (*ḥāl*): as shown in (12a, b), these constructions only differ in the presence vs. lack of the sequence Conjunction + Anaphoric Pronoun (e.g. *wa-huwa*), which is exactly the alternation found in the transformation NONRERC - Apposition (III). This discussion plausibly shows that *syntactically* the subordinate clauses marked by *wa-* are NONRERCs as much as that marked by *-llaḡī* and then the lack of NONRERC *meaning* in the former, far from being anomalous, naturally ensues from its presence in the latter (complementary distribution).

## Conclusions

The results of this paper are the following:

- The restrictiveness-based distinction of RCs advocated by the mentalist approach is empirically grounded for (Old) Arabic

- This is evidenced by Arab Grammarians' syntactic tests
- *llaḡī* is an (intersective, asymmetric, copula-like) Conjunction originally signalling a NONRERC
- Explanatory and adverbial clauses are syntactically NONRERCs in complementary distribution with the NONRERC marked by *-llaḡī*, which blocks their NONRERC meaning.

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## Notes

<sup>1</sup> Thus, the term «transformation» may but must not imply a formal account along the lines of Chomskian generativism.

<sup>2</sup> *la* cannot be prefixed to the noun (and hence to the pronoun) because, according to Testen (1998: ch. 4), in this context of occurrence it has evolved into the article *l*.

<sup>3</sup> Notice that also adjectives and participles are seen as nouns in the Arabic linguistic tradition: see e.g. Wright, 1896: vol. II, 174, 330.