

## THE STRUCTURE OF NON-FINITE RELATIVE CLAUSES IN ARABIC\*

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The function played by the non-finite relative clauses (RCs) is not free from ambiguous interpretations oscillating between attributive modification and predication. The same holds true of the syntactic contexts where these disputed linguistic constructions operate: simple sentences with embedded attributive phrases or complex sentences with autonomous RCs? The following text aims to show that the difference between these two interpretations results from arbitrary criteria and the duality of finite and non-finite RCs is a matter of different relative-clause-forming strategies.

**Key words:** category of finiteness, finite/non-finite relative clauses, prenominal/postnominal, full/split or divided agreement, clausal/phrasal classification, accessibility to relativization, sentence ender

1. Arabic, as presented in the study, identifies with all synthetic varieties of Arabic that comply, in principle, with the linguistic norm, worked out by the early Arab grammarians in the 8th and 9th centuries A.D. The latter constitutes the still clearly recognizable core of all modern grammars of Arabic, inclusive of those with scholarly aspirations. Due to the basic structural identity, no sharp distinction is made between Classical Arabic (CA), the language of the pre-Islamic poetry (6th cent.), the Qur'ān (7th cent.), that of the canonized scholarly and literary works of the Arab Middle Ages, and Modern Written Arabic (MWA), formed and progressively matured through the 19th and 20th centuries, the linguistic medium of the Arab world of today. The occasional distinction between data derived from any of the two linguistic entities has to indicate semantic and cultural rather than structural cleavage. The major part of structural niceties in which CA and MWA might differ from each other go

beyond the scope of the present inquiry. Arabic, defined in this way, will be referred to as Standard Arabic (SA).

1.1. In the search for universal structural properties of relative clauses (RCs) one soon discovers that the astonishing variety of language-specific structural features, bound in one way or another with relativization, leaves no space for a cross-linguistically valid generalizations. RC-related structural data, collected from different languages, are clearly incompatible with each other, as may be seen from the Downing's list compiled to this effect: 'A RC contains a finite verb. The verb of a RC assumes a distinctive non-finite form. A RC contains a pronoun coreferential with a noun that immediately precedes (or follows) the RC. No nominal in the RC is coreferential with a preceding (or following) noun'; etc.<sup>1</sup>

To overcome this obstacle, several attempts have been made with varying proportion of syntactic and semantic criteria. Almost exclusively semantic considerations, dominating Downing's<sup>2</sup> and Comrie's<sup>3</sup> RC definitions, contrast with less homogeneous starting points taking into account both syntactic and semantic aspects of relativization.

Downing's definition of restrictive<sup>4</sup> RCs (ibid.) involves the following three properties: (i) coreference (of a RC's nominal /Rel NP/ with another nominal /Ant NP/ outside of the RC); (ii) RC being an assertion about Rel NP that the latter is its theme; (iii) the relation of modification between a RC and its Ant NP (ibid. 380).

A relative clause, in de Vries' presentation (i) is subordinated (syntactic aspect), and (ii) is connected to surrounding material by a pivot constituent (semantic aspect). The pivot constituent is semantically shared by the matrix clause (MC) and the RC and, if explicitly expressed in the MC, it can be identified with the antecedent (Ant). Besides these defining properties, a RC is characterized by an 'additional essential property': the semantic and syntactic role the pivot has in the RC are in principle independent from its roles in the MC (de Vries 2001, in: Wouden and Broekhuis (eds.): 231–243; web pag.: 1–2).

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<sup>1</sup> DOWNING, B.T. *Some universals of relative clause structure*, p. 377.

<sup>2</sup> Ibid., 380.

<sup>3</sup> COMRIE, B. (in co-authorship with E.L. Keenan): Noun Phrase Accessibility and Universal Grammar. In Keenan, E.L. (ed.). 1987: *Universal Grammar: 15 Essays*, pp. 3–45; originally published in *Linguistic Inquiry*, vol. 8, no. 1.

<sup>4</sup> Since there is no noteworthy structural distinction between non-restrictive and restrictive RCs in Arabic, all types of RCs will uniformly be referred to in their generic term.

1.2. The semantically based notion of the relative clause, as formulated by Comrie,<sup>5</sup> indiscriminately assigns the RC status to both postnominal finite-verb clauses and to prenominal non-finite constructions whose clausal or non-clausal classification entirely depends on the criteria adopted (illustrated with German):

(a) *der Mann, der in seinem Büro arbeitet*

the man who in his study works

'the man who works in his study';

(b) *der in seinem Büro arbeitende Mann*

the in his study working man.

In traditional grammar, only the (a) variant is granted the status of a RC while its (b) parallel is mostly described as a multicomponential attribute.<sup>6</sup>

The dichotomy of finite and non-finite RCs currently occurs in numerous other languages, but the correlation *finite/postnominal* and *non-finite/prenominal* may widely differ across languages:

Arabic:

(a) *al-qaṣr-u llaḍī tuqīmu fī-hi l-'amīr-at-u* - finite: finite verb, postnominal

DFpalace N Rel/M resides in it DF prince F N

'the palace where the princess resides';

(b) *al-qaṣr-u l-muqīm-at-u fī-hi l-'amīr-at-u* - non-finite: participle, postnominal

DFpalace N DF residing F N in it DF prince F N

'the palace where the princess resides/is residing';

(morpheme glossing in recurring constructions or their parts will be neglected).

Japanese (finite RC: verb/SE /see 1.3 below/, prenominal):

*watakusi ga hon o ka- ita* 'I wrote a/the book' →

I S book O write PST/SE

*watakusi ga kaita hon* 'the book I wrote'.<sup>7</sup>

Korean (non-finite RC: participle, prenominal):

*nay-ka chayk-ul sse-ss-ta* (\**ssu-ess-ta*) (as in Japanese above) →

I S book O write PST/SE

*nay-ka ssu-n chayk* (as in Japanese above).

I write PP book

<sup>5</sup> In Keenan 1987: 3ff.

<sup>6</sup> HELBIG, G.-BUSCHA, J. *Deutsche Grammatik. Ein Handbuch für den Ausländerunterricht*, p. 599: *mehrgliedriges Attribut* or as expansion of adjectival and participial attribute: *Erweiterung des adjektivischen und partizipialen Attributs*.

<sup>7</sup> Modified from KUNO, S. *The structure of the Japanese language*, p. 234.

For Comrie, the difference between finite and non-finite constructions consists only in different relative-clause-forming strategies which further determine the accessibility of a given head NP to relativization. While, in the (a) variant of the German examples any major NP position in simple sentence can be relativized, in the (b) variant the accessibility is reduced to the subject position of the head NP in the restricting sentence.

Even beyond the scope of traditional grammar, the relative nature of non-finite prenominal constructions, like the German or Arabic (b) variant above, is not generally accepted. The cautious attitude towards these constructions is frequently adopted in languages whose primary relativization strategy is postnominal and finite. The essential problem of sentence hierarchy remains unsolved and the category of 'relative' did not put off its hypothetical ring. The question marks with the following Dutch constructions seem to confirm this state of affairs::

- (a) *de door Joop gewassen kleren* (participial relative ?)  
the by washed clothes  
'the clothes washed by Joop';
- (b) *de de kleren wassende man* (gerundial relative ?)  
the the clothes washing man  
'the man washing the clothes';
- (c) *de door Joop te wassen kleren* (infinitival relative ?)  
the by to wash clothes  
'the clothes to be washed by Joop'<sup>8</sup>

1.21. The head-noun in non-finite RCs, like the German b-variant quoted in 1.2 above (*der . . . Mann*), or in any of the Dutch constructions quoted (*de . . . kleren*; *de . . . man*, etc.), is not easy to identify. The subject in any of these constructions co-functions as its own head-noun in a sort of integrated Ant-subject (AS) construct that can be reanalysed and relabelled in very various terms. The lack of an autonomous head-noun makes the relative nature of similar AS constructions ambiguous and utterly theory-dependent.

The same problem reappears in the Arabic non-finite constructions classified, for all their ambiguity, in relative terms, as PXRCs in what follows (§ 3.3). Let us consider the difference between the subject and Ant-subject RCs:

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<sup>8</sup> de VRIES, M., without title, <<http://odur.let.rug.nl/pdf/2001-patterns-rc-lin.pdf>> pp. 1-33.

(1) subject RCs (classified in 3.1, 3.2 below):

*al-qaṣr-u l-muqīm-at-u fī-hi l-'amīr-at-u* 'the palace where the princess resides'

DF palace N DF residing F N in it DF prince F N

Ant P S

(compatible with an indefinite Ant)

or:

*'amīr-at-un qaṣr-u-hā ḥasan-un* 'the princess whose palace is beautiful'

prince F IDF/N palace N her beautiful IDF/N

Ant S P

and:

(2) Ant-subject (AS) RCs (see PXRCs in 3.3 below):

*al-qaṣr-u l-muqām-u fī l-madīna* 'the palace /which is/ erected in the city'

DF<sub>palace</sub> N DF erected N in DF city

AS P X (X equalling 'non-subject')

(compatible with an indefinite AS).

As already hinted at, PXRCs are reanalysable in terms of expanded head-modifier phrases in the structural frame a declarative sentence (DS):

*al-qaṣru l-muqāmu fī l-madīna* 'the palace erected in the city'

(compatible with an indefinite Ant).

1.3. The criterial role of the notion of finiteness is apparent in marking contrast between traditional approaches to the analysis of relative constructions and those offered by some recent syntactic theories. The classification of non-finite syntactic constructions, alternatively classifiable as relative clauses or as head-modifier phrases, ultimately depends on the application or non-application of the latter criterion to the analysis. It specifies the function of the non-finite constituent of the construction as that of attribute or predicate, and assigns the sentence its hierarchical value as a simple or a complex one.

Along with the semantically based definition of RCs, as presented by Comrie above, the critical non-finite constituent will be treated as equivalent to the finite verb. From now on, both constituents will be indiscriminately treated as predicates and the constructions involving them, as relative clauses.

The category of finiteness, formally represented by the finite-verb predicate, is not quite unambiguously delimited. Finite verbs are traditionally identified with verbs shaped by inflectional categories like person, number, gender, tense and mood, and charged with the ability to function as predicates. In recent syntactic theories, widely differing in denomination and orientation, some of these criterial features are given specific prominence. In Borsley's unified approach (Principles and Parameters theory & Phrase Structure Grammar), finite clauses are sentences containing a verb which is marked for tense, in

contrast to non-finite clauses which have no tense marking<sup>9</sup> In Chomskyan UG terms, finite clauses are sentences with tense and AGR as against non-finite clauses which have neither tense nor agreement<sup>10</sup> In some SOV languages with reduced paradigmatic diversity in the verbal domain, the criterial category of finiteness will be identified, in the present text, with the ability of a verb to operate as sentence ender (SE), irrespective of whether other cross-linguistically recognized finite-verb characteristics are present or not.

1.31. The ambiguity in treating the dichotomy of *finite* and *non-finite* RCs has long attracted the attention of scholars. Wilhem Wundt's claim of equivalence between 'nominal attributes' (*nominale Attribute*) and 'dependent /attributive/ clauses' (*Nebensätze*) seems to locate the former in the syntactic context of the simple sentence, and the latter in that of the complex sentence. Wundtian 'unifying power of integral ideas', in the early 20th-century psycholinguistic stylization, is certainly worthy of consideration:

Noch eine weitere . . . Erscheinung steht unter der Wirkung dieser unifizierenden Macht der Gesamtvorstellungen. Sie besteht darin, daß *Nebensätze und nominale Attribute als äquivalente Ausdrucksformen* erscheinen. Dabei können je nach den besonderen Bedingungen der Entwicklung entweder beide nebeneinander bestehen . . . oder es kann eine Umwandlung der attributiven in die prädikative oder endlich eine solche der prädikativen in die attributive Ausdrucksform stattfinden. Die allgemeine Richtung dieser Vorgänge bringt es mit sich, daß bei ihnen Wortbildungsprozesse und Satzumwandlungen ineinander greifen. . . . Die erste der erwähnten Erscheinungen, der Eintritt eigentlicher Verbalnomina für Satzglieder, die in der rein prädikativen Satzform durch Nebensätze ausgedrückt werden, ist innerhalb des indogermanischen Sprachgebiets in den älteren Sprachformen vorherrschend. . . . Sie (i.e., Verbalsubstantiven und Verbalnomina) verhalten sich demnach in ihrem Eintreten für die von uns heute durch Nebensätze ausgedrückten Satzteile wahrscheinlich genau ebenso wie die entsprechenden reich entwickelten Verbalnomina in jenen Sprachen der uralaltaischen Familie, die weder Relativpronomina noch unterordnende Konjunktionen entwickelt haben und daher überhaupt keine Nebensätze besitzen.<sup>11</sup>

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<sup>9</sup> BORSLEY, R. Syntactic theory. A unified approach, p. 86.

<sup>10</sup> COOK and NEWSON 1998: 52 ff.

<sup>11</sup> WUNDT, Wilhelm *Völkerpsychologie. Eine Untersuchung der Entwicklungsgesetze von Sprache, Mythos und Sitte*. Bd. ii: *Die Sprache*, Zweiter Teil. Leipzig, Verlag von Wilhelm Engelmann.

2. The Arabic non-finite relative clauses (NFRCs) may chiefly be identified with relativized nominal sentences involving nominal (adjectival) or verbonominal (participial) predicates:

(1) adjectives, such as *ḥasan* 'beautiful'; *kaṭīr* 'numerous'; *sayyi* 'bad, evil', etc.

(2) active and passive participles in the system of 1–10 classes of morpho-syntactic derivatives: *kātib* 'writing' /substantivized: 'writer', 'scribe'; *maktūb* 'written' /subst.: 'letter, message'; *murāsīl* 'entertaining correspondence' /subst. 'correspondent; newspaper reporter'; *muqīma*, fem. 'residing'; and the like (for particulars see reference grammars of Standard Arabic).

Arabic adjectives and participles, when operate as predicates or attributive modifiers, display full agreement with their subjects or head nouns, limited only by general agreement constraints briefly indicated in §3.3(2) below, and some construction-specific constraints, such as the divided agreement of the PSRC constructions analysed below.

2.1. The presence or absence of the relative pronoun, relativizer (Rel), depends on the definiteness state (the term is used in the sense of definitional status as inclusive of both definiteness values: definite and indefinite) of the head-noun (Ant), both in finite and non-finite RCs. The following correlations express this dependence:

(1) finite RC:

Ant definite: Rel present: *al-'amīrat-u llatī tuqīmu fī qaṣr-i-hā*  
 DF princess N Rel:F resides in palace G her  
 'the princess who resides in her palace';

Ant indefinite: Rel absent: *'amīrat-un tuqīmu fī qaṣr-i-hā*  
 princess IDF/N resides in palace G her  
 'a princess who resides in her palace';

(2) In non-finite relativization the absence of REL is invariable:

Ant definite: Rel-absent: *al-'amīrat-u l-ba'īd-u qaṣr-u-hā*  
 DF princess N DF remote N palace her  
 'the princess whose palace is far away';

Ant indefinite: Rel-absent: *'amīratun ba'īdun qaṣruhā*  
 princess IDF/N remote IDF/N palace N her  
 'a princess whose palace is far away';

2.2. The definiteness state of head-nouns, plays a decisive role in controlling the process of relativization. In nominal sentences, it marks the distinction between predication and attributive modification and, both in nominal and verbal sentences, it may be used to signal various deictic levels of utterance (see §§ 3.1(1) and 6 in what follows).

### 3. Asyndetic (Rel-less) non-finite RCs classified:

#### 3.1. NFRCs of nominal-sentence origin (adjectival RCs):

(1) SPRC<sup>12</sup>: RC with a subject-predicate order.<sup>13</sup> The relativization of nominal sentences to SPRCs is incompatible with the definite state of their subjects:

nominal sentence with a marked (topicalized) word-order → SPRC:

*al-ʿamīratu qaṣruhā ḥasanun* → *ʿamīratun qaṣruhā ḥasanun*

‘the princess’ palace /is/ beautiful’ → ‘a princess whose palace /is/ beautiful’

al- ʿamīr- at- u qaṣr- u- hā ḥasan- un\* → ʿamīr-at-un qaṣr-u-hā ḥasan- un  
DEF princess FEM NOM palace NOM her beautiful NOM/INDEF NOM/INDEF

\* (-un, a joint case-and-indefiniteness marker, indicates here an indefinite noun in nominative; the same for genitive: -in, and accusative: -an)

The equational sentence (1) *al-ʿamīratu qaṣruhā ḥasanun*, literally ‘the princess, her palace is beautiful’, is a marked variant of the discourse-neutral, *qaṣru l-ʿamīrati ḥasanun* ‘the princess’ palace is beautiful’, with the possessor (attribute) moved to the position of the subject.

The change of the definitional status from definite to indefinite, as indicated in transformation (1), leads to the change of the equational sentence with a definite subject to an attributive construction in the form of the relative clause introduced by an indefinite head-noun.

The SP order, specific to this type of RCs, will be used as their mark of identification: SPRCs, in contrast to RCs with a reversed SP order, hence PSRCs, described in what follows (see 2 below).

As shown in (1) above, the SPRC *ʿamīratun qaṣruhā ḥasanun* developed as a transform of the topicalized variant of the equational sentence *qaṣru l-ʿamīrati ḥasanun* whose subject corresponds to that of the SPRC. The co-reference between Ant and S in the SPRC is signalled by the referent pronoun (Ref; *ʿāʾ id* with the Arab grammarians).

For reasons just explained, no such straightforward transformation is possible to make the RC’s Ant definite. Under certain conditions, however, the

<sup>12</sup> As the context in which particular types of non-finite RCs are presented throughout this study regularly includes Ant from the matrix clause, it should properly be introduced as Ant + RC instead of just RC. For convenience of reference, however, the shorter signing has been preferred.

<sup>13</sup> DIEM, W. *fa-waylun li-l-qāsiyati qulūbuhum*, p. 10: indeterminierter Relativsatz; *Syntax* 2001, p. 35: /eingebetteter/ Attributsatz. For an alternative classification of non-finite syntactic constructions as either relative clauses or attributive phrases see also § 1.3.

definition of Ant is still possible without thereby altering basic sentential nature of the RC:

(2) PSRC, i.e. RC with a predicate-subject order.<sup>14</sup> The SPRC may serve as a starting point for creating the latter type of structurally close RCs with an inverted SP sequence. Sharing some distributional properties with adjectival modifiers, they are sometimes classified as adjectival clauses.

SPRC: *'amīratun qaşruhā ḥasanun* → PSRC: *'amīratun ḥasanun qaşruhā* 'a princess whose palace is beautiful'.

In contrast to the subject-predicate agreement in a nominal sentence or the head-modifier agreement in whatever syntactic environment, the integration of an extra-clausal constituent into the PSRC structure, that of the modified term or antecedent, created two agreement-assigning focuses targeting the RC's predicate (P): antecedent (Ant) and RC's subject (S). The resulting split agreement has the following pattern:

Ant > P agreement in case and definiteness state, and

S > P agreement in gender and number:

PSRC: *'amīratun ḥasanun qaşruhā*:

Ant > P: *'amīratun ḥasanun* - case: nominative; def. state: indefinite;

S > P: *ḥasanun qaşruhā* - gender: masculine; number: singular;

as against:

Ant > Ref: *'amīratun > -hā (qaşru-hā)* - full agreement subject only to general agreement constraints (2.33(2)): singular, feminine.

In contrast to SPRCs, formally marked by a single agreement pattern (full agreement), the inverted PSRCs display two distinct patterns (divided and full agreement).

Nevertheless, the most important difference between the two structural types resides in their definitional patterns: while the definition of the PSRC's head-noun does not affect the relative (attributive) nature of the clause that of the SPRC does.<sup>15</sup>

(2.1) The early Arab grammarians treated the non-finite relative constructions with inverted subject-predicate order under the heading of *naʿt sababī*, properly denoting an attribute that modifies a noun (Ant) indirectly, through modification of another noun (*ʿāʾid*-related subject of the PSRC). It is perhaps worthwhile noting that the term *naʿt*, synonymous to *waṣf*, 'attribute, epithet, adjective' primarily means 'description'. One of the early definitions of

<sup>14</sup> DIEM, W. 1998, 14: adjektivischer Satz; *Syntax* 2001, 35: Satzadjektiv.

<sup>15</sup> The divided agreement of the PSRC structural type coincides with Nurit Melnik's *hybrid agreement* (strategy 1): *iğtamaʿtu bi-l-marʿat-i\* l-ğālis-i zawğ-u-hā* 'I met the woman whose husband is sitting' or *raʾaytu mraʿat-an\*\* ġamīl-an wağh-u-hā* 'I saw a woman with a beautiful face' (Melnik 2006, www pag. 4).

\* corrected from *bi-l-marat-i* (L.D.); \*\* corrected from *mraʿa-t-an* (L.D.)

this construction, in later authors known as *naʿt sababī*, is due to Zamahšarī (d. 1143): *wa-qad nazzalū naʿta š-šayʿi bi-ḥālī mā huwa min sababihī manzilata naʿtīhi bi-ḥālīhi huwa naḥwa qawlika marartu bi-rağulin kaṭīrin ʿadūwuhu* ‘the description of a thing is achieved through the condition (*ḥāl*) of /another/ thing associated with the latter, in the same way as its own description is stated in terms of its own condition, as in . . . ’ (Diem 1998: 5 f.: *Mufaṣṣal* § 145). In grammars of Western provenance, the term is usually translated as *indirect attribute* (Wright 1898: 283).

The inverted structure of PS RCs has been extensively studied by Western scholars for more than a century under various headings: subtype of *Nominalapposition* Fleischer 1988: 36, quot. in Diem 1998: 8); the notion of *Attraction*, was used to describe these constructions since Caspari 1866: 335 f. and its English translation (Wright 1898: 283: *raʿaytu rağulan ḥasanan aḥūhu*); *Relativsätze mit Attraktion* (Reckendorf 1898; 1921: 421: *ğāʿ at imraʿatun ḥasanun wağḥuhā*, etc.), *attributive Rel.-Sätze mit adjektivischem Präd* (Fischer 2002: 194: *raʿaytu mraʿatan ḥasanan wağḥuhā*); Brockelmann treats these RCs in terms of *Attraktion im asyndetischen Relativsatz* (1913: 560); their adjective-like structure is reflected in Beeston’s conversion structure of an adjectival clause (1970: 94–95) and in some very recent terms *adjektivischer Satz* (Diem 1998: 12 ff.); *Satzadjektiv* (Syntax 2001: 35 f.). The early native term *naʿt sababī*, referring to the *Attraktion*-modelled structures, has been extensively used by some Western scholars, like Polotsky 1978: 159–173. Recently, Badawi et al. 2004: 114 ff.: *al-minṭaqaṭu l-maḥzūru ḥayarānuhu fihā* ‘the area in which it /the enemy/ is prohibited to fly’, etc.; and others.

3.2. Non-finite RCs may also have a verbal-sentence origin (participial RCs):

(1) PSRC, Ant indefinite (verbal sentence: Rel absent):

*qaşrun tuqīmu fihī l-ʿamīratu* → *qaşrun muqīmatun fihī l-ʿamīratu*  
 qaşr-un tuqīmu fī-hi l-ʿamīr-at-u → qaşr-un muqīm-at-un fī-hi l-ʿamīr-at-u  
 ‘a palace resides in it the princess’ → ‘a palace (is) residing in it the princess’  
 ‘a palace in which (where) the princess resides’;

(2) PSRC, Ant definite (verbal sentence: Rel present):

*al-qaşru llađī tuqīmu fihī l-ʿamīratu* → *al-qaşru l-muqīmatu fihī l-ʿamīratu*  
 ‘the palace in which (where) the princess resides’.

In the definite variant of the PSRC structural type (the same applies to the PXRC below), the definite article of the predicate is sometimes qualified as a coreferentiality marker (Rel), fulfilling at the same time its primary function as a definiteness marker subject to an Ant→P agreement (Cf. Reckendorf 1921: 425. *ar-rağulu l-maqtūlatu ʿummuhu* ‘the man whose mother is killed’).

3.3. RCs of the PSRC pattern where the S position is filled by a non-subject sentence member (X), hence PXRCs, resume the full Ant → P agreement. The contrast between the PSRC- and PXRC-type of what we classify as non-finite relative clauses is unambiguously signalled by the different agreement behaviour:

(1) PSRC marked by divided agreement:

P = passive + S:

*al-ʾistimārātu l-maṭlūbu tawqīʿuhā*

the forms required (is) their signature

‘the forms required to be signed’.

(2) PXRC marked by full agreement:<sup>16</sup>

P = active, transitive + X: direct object:

*al-maṣnaʿu l-muḡliqu ʾabwābahu*

‘the factory which is closing its gates’.

P = passive + X: adjunct: passive actor

*at-tawqīʿātu l-maṭlūbatu min(a) š-šarikati*

the signatures required from the company

‘the signatures /which are/ required from the company’.

The PSRC-type divided agreement simultaneously operates both in an interclausal context: Ant (matrix clause) > P (RC), and in an intraclausal context (RC): S > P.

The PXRC-type of full agreement operates in the intraclausal context only, since Ant is

being integrated in S, hence AS (see 1.21). The PXRCs formally coincide with non-finite head-modifier phrases and their RC identity is a mere matter of the theory adopted.

As might have been observed from previous examples, the agreement type, besides other distinctive features, such as transitivity/intransitivity, very frequently correlates with active-passive distinction in marking PS/XRCs:

(1) divided agreement + P: passive (reflexive) → PSRC:

*al-maṣnaʿu l-muḡlaqatu ʾabwābuhu* ‘the factory whose gates are closed’

the factory closed (are) its gates

<sup>16</sup> The full agreement does not invalidate general agreement constraints of the SA syntax that operate independently of the PSRC type divided agreement, such as impersonal reference of the governing element of the phrase or sentence (impersonal plural /ip/ → feminine singular /fs/: *buyūt /ip/ kabīra /fs/* ‘old houses’); the pre-subject position of the verbal predicate (agreement reduced to gender), as well as some other less powerful constraints.

(2) full agreement + P: active → PXRC:

*al-mašnaʿu l-muġliqū ʾabwābahu* 'the factory (which is) closing its gates'  
the factory closing its gates

3.31. An even more disputable NFRC type is presented by Polotsky<sup>17</sup> as 'Construction iii' (C iii, in what follows), illustrated with a curious example from a 1950's newspaper: *as-sarīru n-nāʾimatu ʿalayhi* 'the bed on which she is sleeping'. The empty subject slot of the construction:

*as-sarīru n-nāʾimatu ʿalayhi* [unexpressed subject]

Ant: bed P: sleeping on-it

The absence of a lexically identifiable subject (S<sup>ʿ</sup>) is compensated by a pronominal trace which is expressed by the gender-number inflection *-at* of the participial predicate: *an-nāʾim-at-u*, while the case ending *-u*: nominative, is irrelevant to the matter.

When filling the slot by a lexically expressed subject, Polotsky's C-iii, tentatively signed here as PZRC, where Z equals *zero-S*<sup>ʿ</sup>, will turn into PSRC:

PZRC: *as-sarīru n-nāʾimatu ʿalayhi* (see above) →

PSRC: *as-sarīru n-nāmiʾatu alayhi fātīmatu* 'the bed on which Fāṭima is sleeping'.

Both structural types are uniformly treated under the heading of *naʿt sababī* or indirect attribute.

PZRC: see above, as against:

PXRC: *fāṭīmatu n-nāʾimatu ʿalā sarīrihā* 'Fāṭima (which is) sleeping on her bed'.

3.4. NFRCs in classificatory survey (requoted with a unified transcription and without morphemic segmentation):

(1) SPRC:

*qiṣṣatun ʾabʿāluhā ma ʿrūfūna* 'a story with well-known heroes', lit. 'a story whose heroes are well known'<sup>18</sup>

*fawākihu ṭaʿmuḥā ḥulwun* 'sweet tasting fruits', 'fruits whose taste is sweet', lit. 'fruits - their taste /is/ sweet'.<sup>19</sup>

(2) PSRC:

<sup>17</sup> POLOTSKY, H.J., A point of Arabic Syntax: the indirect attribute. In *Israel Oriental Studies* 8, 159–173.

<sup>18</sup> Badawi Elsaid, Carter, M.G. and Gully, Badawi Elsaid, M.G. Carter, M.G. and A. Gully, A. 2004: *Modern Written Arabic. Comprehensive Grammar*. op. cit., p. 102: adjectival clause.

<sup>19</sup> *Syntax* 2001, p., 35: eingebetteter Attributsatz /embedded attributive clause/;

*fawākihu ḥulwun ṭaʿmuhā* 'sweet tasting fruits', lit. 'fruits - sweet /is/ their taste';<sup>20</sup>

*al-fawākihu l-ḥulwu ṭaʿmuhā* in e.g.: *uḥibbu l-fawākīha l-ḥulwa ṭaʿmuhā* 'I love the sweet tasting fruit';<sup>21</sup>

*ḡamīʿu t-taḡhīzātī l-maṭlūbi tawaffuruhā* 'all the equipment required to be available' (bold types in the source quoted);

*al-minṭaqatu l-maḥzūru ṭayarānuhu fihā* 'the area in which it /the enemy/ is prohibited to fly';

*fī nabʿin ḡāffīn māʿuhu* 'in a spring whose water is dry'.<sup>22</sup>

#### 4. PSRCs in sentential context.

As pointed out by Diem 1998:7, and comprehensively outlined in *Syntax* 2001: 35, the PSRC, apart from its primary attributive function, may enter other syntactic relationships, such as that of predicate and *ḥāl*.<sup>23</sup>

4.1. The PSRC may be transformed into the predicate of a declarative sentence (DS) and lose its attributive function: *aṭ-ṭāʾiru s-sarīʿu ṭayarānuhu* 'the bird whose flight is swift' → *aṭ-ṭāʾiru sarīʿun ṭayarānuhu* 'the bird's flight is swift'. The transformation involves the following structural changes:

Ant + PSRC → DS

Ant → S

PS → P

<sup>20</sup> *Syntax* ibid.: Satzadjektiv.

<sup>21</sup> *Syntax*, ibid.: Satzadjektiv als determiniertes Attribut.

<sup>22</sup> Badawi, Elsaid et al., op. cit., p.114 ff.: *naʿt sababī* as part of expanded attributive phrases. As already shown in 3.3. above, by substituting a non-subject sentence member for what we classify as RC's subject the ambiguous structural type of PXRC will be obtained, as in:

PSRC: *ḡamīʿu t-taḡhīzātī l-maṭlūbi tawaffuruhā* (see above) → PXRC: *ḡamīʿu t-taḡhīzātī l-maṭlūbatī min wizāratī d-difāʿī* 'all the equipment required from the Ministry of Defense', and the like.

The structurally close adjectival phrases specified by annexation (*iḍāfa ḡayr ḥaqīqīya*) provide competing constructions most of them being phraseologically or idiomatically stabilized:

*masʿalatun bālīḡatu l-ʾahammīyati* 'an extremely important question', rather than:

\* *masʿalatun bālīḡatun ʾahammīyatuhā*, or:

*quwwātun mutaʿaddidatu l-ḡīnsīyātī* 'multinational forces', rather than:

\* *quwwātun mutaʿaddidatun ḡīnsīyātuhā* (for asterisk-free examples see Badawi et al.

2004, 111–112)

<sup>23</sup> DIEM, W. op. cit.: *Zustandsakkusativ*; *Syntax* 2001: *predicament*; MOHAMMAD, M.A. Mohammad, M.A., n.d.: Anaphoric Agreement in Non-Finite Clauses in Arabic: *circumstantial nominal*; BADAWI et al. 2004: *circumstantial qualifier*); to separate *ḥāl* from both predication and circumstantial modification the tentative term pseudo-predicate will be used in the present text.

The process is formally marked by construction-specific definiteness patterns (d/efinite; i/ndefinite):

Ant + PSRC → DS

Ant/d → S/d

P/d, S/d → P/i

as in:

*aṭ-ṭā'iru sarī'un ṭayarānuhu*

S/d P/i

The indefiniteness state of the P/i cannot be invalidated by the impact of the P-expansion operating as a sort of atypical nominative specification (*ṭayarān-u-hu-*), with a Ref ('ā'id) in function of a connector to the topicalized S rather than a determiner.<sup>24</sup>

4.2. Another slot possibly filled by the PSRC is that of *ḥāl* or pseudo-predicate (PP). Since PP is a sentence member with double reference: to a verb in the position of predicate and to a noun in whatever syntactic position compatible with the shared qualifying action of PP, a finite verb will be incorporated into the following considerations:

*ḡā'a l-waladu šātīman 'aḥāhu* 'the boy came abusing his brother' where the reference of the PP (*šātīm-an*) to the verb (*ḡā'a*) is marked by a constant indefinite accusative (*-an*), while its reference to the noun (*al-waladu*), by an agreement in gender (masculine) and number (singular).

This structural model, applied to a PSRC with the finite verb added, will be presented in terms of the following transformation into declarative sentence (DS) with PP:

Ant + PSRC: → DS where RC > PP:

Ant: definite S: definite

P: definite, nominative PP: indefinite accusative

*aṭ-ṭā'iru s-sarī'u ṭayarānuhu* → *ṭāra ṭ-ṭā'iru sarī'an ṭayarānuhu*

'the bird whose flight is swift' → 'the bird flew (away) swiftly' (lit. '...swiftly flying; in his swift flight').

<sup>24</sup> The competing annexion-structured specifying genitive (*Syntax* 2001, 175 ff.: Genitivannex, spezifizierender Genitiv), such as: *ṭā'irun sarī'u ṭ-ṭayarāni* 'a bird swift as to the flight' seems to be a more common construction type.

4.21. A more immediate relationship might apparently be established between the predicate of a PSRC-correlated DS (see 4.1) and a PP. The transformation will be one-step shorter (the avoided attributive starting point enclosed in brackets):

(PSRC: *aṭ-ṭā'iru s-sarī<sup>c</sup>u ṭayarānuhu* (see 4.2 above))

DS's P: *aṭ-ṭā'iru sarī<sup>c</sup>un ṭayarānuhu* (see 4.1 above) →

DS's PP: *ṭāra ṭ-ṭā'iru sarī<sup>c</sup>an ṭayarānuhu* (see 4.1 above).<sup>25</sup>

5. Agreement-based approach to the classification of NFRCs.

The remarkable distinctive property of agreement patterns may be efficiently used in the classification of the construction examined.

5.1. Full agreement

5.11. At the level of SPRCs the full agreement (see 3.2) marks (1) the relationship between Ant and Ref ( *'ā'id*) and (2) between S and P, as in *ṭā'irun ṭayarānuhu sarī<sup>c</sup>un* 'a bird whose flight is swift', lit. 'a bird his flight (is) swift'.

(1) Ant-SM → Ref-SM: *ṭā'ir- un ṭayarān-u- hu*  
 Ant:bird-SM IN flight DN Ref: his-SM

(2) S-SMN → P-SMN: *ṭayarān-u- hu sarī<sup>c</sup>- un*  
 S-SM DN P-swift-SM IN<sup>26</sup>

5.12. With PSRCs, irrespective of whether (i) *ṭā'irun sarī<sup>c</sup>un ṭayarānuhu* or (ii) *aṭ-ṭā'iru s-sarī<sup>c</sup>u ṭayarānuhu*, the full agreement signals the relationship between Ant and Ref, as in 5.1 (1) above: Ant-SM → Ref-SM. In the definite variant the agreement in definiteness further extends over Ant-def: *aṭ-ṭā'ir-u* → P-def: *(a)s-sarī<sup>c</sup>-u*.

5.121. As far as deriving constructions of the PXRC type (see 3.3 above) from PSRCs, the subject slot of the latter may be regarded as being filled by a non-subject while the PXRC's subject shares the position of a virtual Ant (see AS in 1.21):

<sup>25</sup> Structural closeness between the two sentence members is particularly apparent in the case of *kāna*-predicates and PPs in the finite-verb DSs where the difference between them consists solely in semantic characteristics of the respective verbs (presence or absence of the lexical meaning) and in the unequal ability of double reference (see 4.2) resulting therefrom:

*kāna*-predicate: *kāna l-waladu šātīman 'aḥāhu* 'the boy was abusing his brother'

PP: *ḡā'a l-waladu šātīman 'aḥāhu* 'the boy came abusing his brother'.

<sup>26</sup> Symbols used:

SM-singular masculine; DN: definite nominative; IN: indefinite nominative; D-I: definite-indefinite; N: nominative; G: genitive; A: accusative; S: subject; P: predicate; ImpPl: impersonal plural; SF: singular feminine.

PSRC: *al-ma<sup>c</sup>had-u l- ma<sup>c</sup>rūf- at-u mašārī<sup>c</sup>- u-hu* →

DEF institute N DEF well-known SF N ImpPl:projects N Ref  
Ant P S

‘the institute whose projects are well-known’

PXRC: *al-ma<sup>c</sup>had-u l-mu<sup>c</sup>lin-u mašārī<sup>c</sup>-a-hu*

‘the institute which is publicizing its projects’ or, viewed as a head-modifier phrase: ‘the institute publicizing its projects’.

5.2. Divided or split agreement in PSRC constructions, like *al-ma<sup>c</sup>hadu l-ma<sup>c</sup>rūfatu mašārī<sup>c</sup>uhu* (see 5.121 above), involves two different agreement patterns:

Ant → P: definitional status (Ant: def → P: def), case (Ant: N → P: N): *al-ma<sup>c</sup>had-u l-ma<sup>c</sup>rūf-at-u*;

S → P: gender, number: on the strength of general agreement constraints, the impersonal plural of *mašārī<sup>c</sup>* imposes a constant singular-feminine agreement pattern, irrespective of the actual number and gender value of the governing term (see 3.3(2) above):

S: ImpPl: *mašārī<sup>c</sup>-u-hu* → P: SF: (*al*)-*ma<sup>c</sup>rūf-at-u*.

For Ant → Ref, see 5.12 above.

6. The definiteness-based approach to the classification of NFRCs.

In accord with the definiteness (short for definitional status) motivation, the correlation of definite (d) and indefinite (i) state of particular NFRC’s members, referred to as definiteness patterns, may belong to one of the following two types:

(1) deictic definiteness patterns (anaphoric, contextual or situational definiteness motivation) are patterns formally marked by a grammatically free equivalence of Ant and P definiteness states either in the sense of definiteness or indefiniteness: Ant-d—P-d or

Ant-i—P-i; the interchange of definiteness-state identity of deictic patterns does not affect the underlying grammatical function thereof.

(1.1) NFRCs identified in terms of deictic definiteness patterns:

(1.11) PSRC: (a) Ant-i—P-i and (b) Ant-d—P-d:

(a) PSRC-i: *ma<sup>c</sup>hadun ma<sup>c</sup>rūfatun mašārī<sup>c</sup>uhu* ‘an institute whose projects are well-known’;

(b) PSRC-d: *al-ma<sup>c</sup>hadu l-ma<sup>c</sup>rūfatu mašārī<sup>c</sup>uhu* (definite version of the latter, see 5.121);

(1.12) PXRC: where Ant equals AS: (a) AS-i—P-i and (b) AS-d—P-d:

(a) PXRC-i: *ma<sup>c</sup>hadun mu<sup>c</sup>linun mašārī<sup>c</sup>ahu* ‘an institute (which is) publicizing its projects’;

(b) PXRC-d: *al-ma<sup>c</sup>hadu l-mu<sup>c</sup>linu mašārī<sup>c</sup>ahu* ‘the institute (which is) publicizing its projects’; the non-subject member of the (1.12) constructions is the direct object;

(2) grammatical definiteness patterns identify with any grammatically bound definiteness correlation between their constituents irrespective of whether in the sense of equivalence or non-equivalence:

(2.1) NFRCs supported by grammatical definiteness patterns:

(2.11) SPRC-i: Ant-i—P-i: *ṭā'irun ṭayarānuhu sarī'un* 'a bird whose flight is swift'

Ant-i                      P-i

or: *ma'āhidu mašārī'uhā ma'rūfatun* 'institutes whose projects are well-known'; SPRC-d (Ant-d—P-i) is available at the RC level unless resorting to the coreferentiality marker Rel: *aṭ-ṭā'iru llaḍī ṭayarānuhu sarī'un* 'the bird whose flight is swift' or *al-ma'āhidu llatī mašārī'uhā ma'rūfatun* 'the institutes whose projects are well-known', etc. The absence of Rel in the Ant-d—P-i construction would convert the RC into DS in tune with the grammatical nature of the underlying Ant-i—P-i definiteness pattern.<sup>27</sup>

The grammatically bound Ant-i—P-i of the SPRCs contrasts with the deictic Ant-i—P-i typical of the PSRCs listed in (1.11) above.

## Appendix

PSRCs in selected Classical Arabic sources:

(1) PSRCs of nominal background:

P = *kaṭīr-in* (gen.) 'numerous': *marartu bi-raḡulin kaṭīrin* *ʿadūwu-hu*

I passed by a man numerous (are) enemies his

'I passed by a man whose enemies were numerous' (Zamahšarī: *Mufaṣṣal*, § 145, in: Diem 1998: 5, 43 f. / *ʿadūwuhū*/- generic singular);

<sup>27</sup> The reduction of definiteness patterns to only two types was due to the exclusion of patterns involving generic definiteness (GD) whose interpretation is entirely dependent on extralinguistic aspects with no or only indirect structural support. Formally, the identity of GD may only be attested by deviations from grammatical patterns at the phrasal or sentential levels in a context with sufficiently transparent semantic contours. To some extent, this context-dependence is also shared by deictic patterns, but their identity and deictic variability is, in their predictable contrast to grammatical patterns, easily detectable.

Some GD-motivated deviations

(d—d) instead of (d—i), predication instead of attributive modification: *hādā l-ḡunūnu (wa-laysa bil-ʿišq)* 'das ist Besessenheit und nicht Liebe' (Reckendorf, H. *Arabische Syntax*, p. 282: *Ag.* iii, 100), or *al-mawtu r-rawāhu* 'der Tod ist die Befreiung' (ibid.), etc.;

(i—i) instead of (d—i): formally unsupported predication, as above: *'ahlun qarībun* 'Leute sind nahe' (ibid.), etc.

P = *karīm-in* (gen.) 'generous': *marartu bi-rağulin karīmin aḥū-hu*  
 I passed by a man generous (is) brother his  
 'I passed by a man whose brother was generous';<sup>28</sup>

P = *šadīd-atun* 'menacing, ominous (fem.)': *qawmun šadīdatun nikāyatu-hum*  
 men menacing (is) harm their  
 'men whose harm is menacing'.<sup>29</sup>

P = *ḥasan-an* (acc.) 'beautiful': *ra'aytu mra'atan ḥasanan wağhu-hā*  
 I saw a woman beautiful (is) face her  
 'I saw a woman with beautiful face', etc.

(2) PS RCs of verbal background:

P = *fāqi-un* (nom.) 'brilliant, radiant': *inna-hā baqaratun šafrā'u fāqi-un lawnu-hā*  
 behold, she (is) a cow yellow brilliant (is) color her

'She is a yellow cow (whose) colour is brilliant' (Q 2, 64); '... a fawn coloured cow, rich yellow' (Ali 1988);

P = *al-ğālibu* 'alayhim 'overwhelming them':  
*al-muttaqūna l-ğālibu 'alayhim dikru llāhi*  
 the godfearing (is) overwhelming them invocation of God  
 'the godfearing overwhelmed by the invocation of God'.<sup>30</sup>

In some cases, Ant in the form of a personal pronoun P1 or P2 may be coreferential with the referent pronouns by way of person agreement, as in:

P = *ma'rūf* 'well-known': *'anā š-šā'iru l-ma'rūfu wağh-ī*  
 I (am) the poet well-known (is) face my  
 'I am the poet whose face is well-known';<sup>31</sup>

P = *zālim* 'oppressing; oppressor':  
*rabbānā aḥriğnā min hādīhi l-qaryati z-zālimi aḥluhā*  
 O Lord get us out of this city oppressing (are) its people  
 'get us out of this city, O Lord, whose people are oppressors' (Q 4: 75;  
 Ali 1988).

<sup>28</sup> Sībawayhi: *Kitāb* 1 §107. In Diem, W., p. 44.

<sup>29</sup> RECKENDORF, H. *Arabische Syntax*, p. 421.

<sup>30</sup> BROCKELMANN, C., *Grundriß der vergleichenden Grammatik der semitischen Sprachen*. ii. *Syntax*. p. 561.

<sup>31</sup> RECKENDORF, H. *Arabische Syntax*, p. 443.

(1.21) The process of transforming SPRCs with an Ant invariably indefinite to the structural type of PSRCs (2.31(2)) whose Ant is no longer subject to the latter definiteness constraint, can result in a subclass of invariably definite Ant-less constructions which compensate this formal loss by a substantivized definite predicate:

P = /min(a)/ *I-qāsiyati* (gen., plur.) 'from/ those who are hard, harsh':

*lā taṭlub-hu min(a) I-qāsiyati qulūbu-hum* 'don't ask it from those whose hearts are hard';  
neg ask it from the hard (are) hearts their.<sup>32</sup>

The process of transition may be described as consisting of two distinct stages:

(1) invalidating the definitional-state constraint of the SPRC's Ant by inverting the subject-predicate order of the underlying SPRC (2.1(1)) into PSRC (2.1(2)):

SPRC: *nāsun qulūbuhum qāsiyatun* 'people whose hearts are hard' →

PSRC (i): *nāsun qāsiyatun qulūbuhum* 'idem; hard-hearted people',  
structurally compatible with:

PSRC (ii): *an-nāsu I-qāsiyatu qulūbuhum* 'the people whose hearts are hard; the hard-hearted people';

(2) transferring the identity-marking function of the deleted Ant to the PSRC's predicate and compensating the loss by an invariable definiteness of the latter, henceforward operating as a substantivized entity term:

PSRC (ii): *an-nāsu I-qāsiyatu qulūbuhum* (see (1) above) →

Ant-less PSRC (ii): *al-qāsiyatu qulūbuhum* 'those whose hearts are hard; the hard-hearted'<sup>33</sup>

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<sup>32</sup> BROCKELMANN, C., *Grundriß der vergleichenden Grammatik der semitischen Sprachen*. ii. *Syntax*, p. 561.

<sup>33</sup> For the underlying sequence and the example quoted, see Diem, W., op. cit., p. 10.

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### **Abbreviations:**

Ant – antecedent, head noun, noun of reference; A or ACC – accusative (see O); AS – Ant-subject CA – Classical Arabic; CQ – circumstantial qualifier (*ḥāl*); DF or def – definite, definiteness marker, determiner; DS – declarative sentence; F – feminine; FRC – finite relative clause; G – genitive; GD – generic definiteness; IDF or indef – indefinite, indefiniteness marker; currently occurring with integrated case marker (*tanwīn*): IDF/N – indefinite nominative, IDF/G – indefinite genitive, and IDF/A – indefinite accusative; IE – Indo-European; I or indef – indefinite; ImpPl – impersonal plural; IN – indefinite nominative; M – masculine; MC – matrix clause; MWA – Modern Written Arabic; NFRC – non-finite relative clause; N or NOM – nominative; NP – noun phrase (in some quotations); O – object marker, in languages examined identifying with accusative; P – predicate; P1, P2 – personal pronouns of the first, second person; PL – plural; POS, poss – possessive marker; PP – past participle (Korean); PSRC – non-finite RC with a predicate-subject order; PXRC – relative clause with a non-subject sentence member in the S position; RC relative clause; Ref – referent or resumptive pronoun (*ʿā'id*); Rel – relativizer, relative pronoun; S – subject; as subject marker coinciding with

nominative in the examples quoted; SA – Standard Arabic; SG – singular; SPRC – non-finite RC with a subject-predicate order.

A number of *ad hoc* symbol clusters, like DN, IN, SF, SM, SMN, related to illustrative data beyond the main line of systematic description are defined outright in the text.

Sources abbreviated:

*Syntax* 2001 = El-Ayoubi Hashem et al. 2001;

*Syntax* 2003 = El-Ayoubi Hashem et al. 2003;

Q - *al-Qurʾān, Koran.*

Quotation:

Unless explicitly stated, the sources quoted for textual data do not involve their interpretation that may differ from that of their authors. The hyphenation of textual examples is unorthographic and serves explanatory purposes; previously segmented structures, when requoted, are often written unhyphenated.