

A Non-Canonical Diachronic Formation of Raising Predicates

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Abstract

While copy raising structures have been discussed for Arabic, it is sometimes claimed in the literature that SUBJ-to-SUBJ raising in the context of lexical predicates such as perceptual report verbs does not occur. With data from an array of vernaculars we argue that such structures do exist, and we demonstrate how they do not necessarily involve what we would take to be typical lexical verbal predicates. SSR constructions are more likely to be expressed through the use of non-canonical predicates. We discuss the grammaticalisation path of the N *šakl* ‘form, shape’, and the P ‘like, as’ which we hypothesise to have led to their development as verbal perceptual report predicates, and ones which appear in SSR constructions. We argue that the presence of a Prominent Internal Possessor is an enabling factor in the diachronic development of *šakl*. As for the P ‘like’, in addition to its complementising role in marking copy-raising predicates in some varieties of Arabic, we suggest that it has also emerged as a perceptual report predicate in its own right in at least one dialect.

1 Introduction

This paper looks at lexical elements which we argue have grammaticalised into raising predicates of a particular sort in the Arabic dialects. In doing so we aim to contribute to (i) grammaticalisation in identifying non-canonical sources of raising predicates, and (ii) to the study of the synchronic syntax of verb complementation in Arabic, where much previous work, especially on control and raising, has been concerned with Modern Standard Arabic (MSA) and has focussed on rather typical (crosslinguistically canonical) instances/sources of raising predicates. We here particularly focus on the vernacular varieties, rather than MSA, and focus our attention on the grammaticalisation of **lexical** raising predicates, rather than the formation of raising constructions involving TAM-type auxiliaries. Here we highlight two routes/sources that have led to the formation of lexical SUBJ-to-SUBJ raising structures from unusual sources, and we use LFG to encode our hypotheses about the diachronic changes which must have taken place.

2 Raising

2.1 Background

In its core instances, a raising construction involves a predicate that occurs with a non-thematic (term) syntactic argument (SUBJ or OBJ) which is a thematic argument (a SUBJ) of an embedded predication (an XCOMP). The relationship between the ‘higher’ (non-thematic) syntactic argument and the ‘lower’ (thematic,

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except in cases of chained raising predicates), is expressed in a functional control equation such as $(\uparrow \text{SUBJ}) = (\uparrow \text{XCOMP SUBJ})$, which in turn accounts for the structure in (1a), as in (1a). Typically, a raising predicate will also allow non-raised truth-conditionally equivalent constructions in (1c) in which a dummy or expletive element occurs as the non-thematic syntactic argument. In these instances, the equation in (1b) does not figure in (1d). Predicates with non-thematic subjects do not always permit raising alternatives (English *probable* does not, for example).

- (1) a. Chris seemed to enjoy the marathon. SSR
 b. *seem* $(\uparrow \text{PRED}) = \text{'SEEM} < \text{XCOMP} > \text{SUBJ}'$
 $(\uparrow \text{SUBJ}) = (\uparrow \text{XCOMP SUBJ})$
 c. It seems that Chris enjoyed the marathon. *it*-expletive structure
 d. *seem* $(\uparrow \text{PRED}) = \text{'SEEM} < \text{COMP} > \text{SUBJ}'$

However, apart from structure-sharing, as in (1b), raising structures may alternatively involve the mechanism of anaphoric binding (Asudeh and Toivonen, 2012) in copy raising (CR) constructions such as (2a), in which a resumptive pronoun occurs in the ‘lower’, thematic argument position (see Asudeh (2012) and Asudeh and Toivonen (2012) for a semantic analysis in which the additional resource contributed by the pronominal is managed away in semantic composition). Copy-raising predicates such as English *seem* or *appear* also have expletive (non copy-raised) counterparts, as in (2b-c).

- (2) a. Chris_i seemed as if/like/as though he_i enjoyed the marathon.
 CR: Asudeh and Toivonen (2012, 120)
 b. It seems like Harry fell. Asudeh (2012, 328)
 c. It appears as if Alfred hurt Harry. Asudeh (2012, 328)

Beyond the presence of a pronoun in the embedded clause, which gives the name to this construction, two key characteristics of copy raising are (i) the occurrence of a *like*, *as though*, *as if* complement which mediates the relationship between the raising predicate and the embedded predication, where *like*, and *as though* are analysed as prepositional in Maling (1983); and (ii) an entailment that the SUBJ in the matrix is understood as an (individual) perceptual source (PSOURCE), i.e. where it is something about the very nature of the SUBJ, rather than anything in the eventuality that is what helps us infer the proposition in the embedded clause. Note that PSOURCE is merely a semantic role, and not a thematic role, and indeed Asudeh (2012) takes examples such as (2b-c) as empirical evidence that the raising predicate does not take a thematic subject.

2.2 Raising and Arabic

Discussions of raising in Arabic mainly focus on Modern Standard Arabic (MSA), although they often make somewhat sweeping statements about Arabic varieties in general. There would appear to be no general consensus: authors such as Mohammad (2000) and Soltan (2007) argue that raising does not occur, while others such as Salih (1985) claim that it does. The arguments against the availability of raising come mainly from the fact that verbs such as *yabdū* and *yadhhar* ‘seem’, which are typically raising predicates crosslinguistically, are said to always take an expletive subject expressed as default 3SGM morphology on the verb, along with a sentential complement introduced by the complementiser *ʔanna*+ACC pronoun.

Evidence that (3a) corresponds to an *it*-expletive construction, where the matrix involves a default 3SGM form of the verb rather than agreement with the SGM ‘teacher’ comes from the fact that changing the embedded SUBJ to SGF does not permit 3SGF agreement to appear on the matrix *bada* ‘seem’.

- (3) a. **ya-bdu** ʔanna l-muʔallim-a
 3SM-seem.IPFV.SG.INDIC that DEF-teacher.SGM-ACC
 saraha l-qasīdat-a
 explain.PFV.3SGM DEF-poem.SGF-ACC
 It seems that the teacher explained the poem. MSA: Salih (1985, 326)
- b. *aṭ-ṭalib-at-u **ta-bdū** ʔanna-ha qad
 DEF-student-SGF-NOM 3F-seem.IPFV.SG.INDIC that-3SGF.ACC QAD
 qar-at al-kitāb
 read.PFV-3SGF DEF-book
 intended: The student (F) seems to have read the book.
 *SSR MSA: Mohammad (2000)

Notwithstanding this evidence of the unavailability of SSR, Salih (1985) discusses structures of the type in (4), where the matrix clause involves the NP subject ‘the girl’, with the *seem* predicate displaying 3SGF agreement with it, which is also the SUBJ of the embedded predicate ‘write’. The embedded verb ‘write’ shows 3SGF agreement, and the complementising element *kāʔanna* also shows 3SGF pronominal inflection.

- (4) **bad-at-i** l-bint-u_i **kaʔanna-hā_i**
 seem.PFV-3SGF-INDIC DEF-girl-NOM as if-3SGF.ACC
 katab-at-i r-risālat-a
 write.PFV-3SGF-INDIC DEF-letter-ACC
 The girl seemed as if she wrote the letter. MSA: Salih (1985, 138)

Camilleri et al. (2014) argue that structures such as (4) are in fact instances of **copy raising** constructions. In this case we are dealing with a SUBJ-to-SUBJ

anaphoric dependency. As well as the anaphoric copy pronoun, in (4) we find the complementiser *kaʔanna*, onto which the SUBJ pronoun attaches (in ACC form). This complementiser is in a complementary distribution with *ʔanna* in MSA, and it appears to be that which enables the availability of a copy raising construction and its interpretation. As in English, it seems that the SUBJ in the matrix is understood as a PSOURCE, in such constructions.

Beyond MSA, ElSadek and Sadler (2015, 89-91) argue that the use of *kaʔinn*, the ‘as if’ complementiser in Egyptian Cairene Arabic, similarly results in the availability of a copy raising structure that involves an (individual) PSOURCE reading of the matrix SUBJ. The contrast in (5) is meant to demonstrate that while the use of the complementiser *ʔinn* (in this case with an attached pronoun), allows an expletive, non-raising, structure, the use of the complementiser *kaʔinn*, which obligatorily takes an attached pronoun, makes available a raising construction, and more precisely, a copy raising one. It is thus specifically the choice of the complementiser that determines a number of semantic and syntactic factors. This in turn suggests that in this construction, the functional category of C plays a key role in semantic interpretation.¹

- (5) a. *bāyen* (**ʔinn-ik**) *mabsūt-a*
 show.ACT.PTCP.SGM that-2SG.ACC happy-SGF
 It seems you (F) are happy.
it-expletive structure, Egyptian: ElSadek and Sadler (2015, 89)
- b. *mona_i bāyn-a* **kaʔinn-ha_i** *mabsūt-a*
 mona show.ACT.PTCP-SGF as though-3SGF.ACC happy-SGF
 Mona seems to be happy. CR, Egyptian: ElSadek and Sadler (2015, 90)

Examples such as those in (6), where the role of the SUBJ as PSOURCE is brought out rather clearly through the choice of the matrix predicate, provide further support for the idea that these sorts of examples in ECA are indeed copy raising structures. Observe once again the presence of the complementiser *kaʔinn*+pronoun, or its phonological variant *akin*+pronoun, which links the two clauses and hosts the copy raising pronominal itself.

- (6) a. *ḥassē-t* *akin-ni* *wiʔiʔ-ti* *min sābiʔ dōr*
 feel-PFV-1SG as though-1SG.ACC fall.PFV-1SG from seventh floor
 I felt as though i fell from the seventh floor.
- b. *adī-ni* *wāʔif* *kaʔin-ni* *fil-ʔutubīs*
 still-1SG.ACC stand.ACT.PTCP.SGM as though-1SG.ACC in.DEF-bus
 I’m still standing as though I am on the bus.
 Egyptian: Woidich (1989, 124)

¹Examples marked as Egyptian are Cairene Egyptian throughout.

2.3 Comparative (pseudo)-gap(s) in the Arabic raising system

To summarise, so far we have observed the following for Arabic, for the relevant class of matrix predicates:

1. expletive subject structures, with the *seem* predicate in default 3SGM form (or SGM form if the morphological nature of the predicate itself does not support PERS marking). If a complementiser is present at all it will be *?inn*;
2. copy raising constructions, in which the *seem* predicate occurs with a referential SUBJ and shows agreement with that subject. The choice of complementiser is *ka?inn* and a pronominal copy coindexed with the matrix SUBJ occurs in the embedded predication.

Given this, there seems to be a distributional gap, with the absence of canonical SSR raising type constructions for this class of predicates. This does not mean that SSR is completely absent from the syntax of Arabic. Canonical SSR structures are widely available in the context of auxiliaries which may occur as c-structure functional categories and express a range of typically temporal, aspectual and modal type meanings. Phasal auxiliaries such as inceptive *bada?a* ‘start’ or proximal *karaba* ‘be about to’, and others have been looked at descriptively in Mitchell and Hasan (1994), Maas (2009), Firanesu (2010), Saddour (2010), Naïm (2016), *interalia*), and have been analysed as raising predicates in Alotaibi et al. (2013), Wurmbrand and Haddad (2016), Camilleri (2016), and ElSadek (2016). Other auxiliaries which have also been analysed as having an f-structure PRED value with a non-thematic SUBJ and permitting a SSR construction are a range of pseudo-verbal sorts of auxiliaries which express aspectual as well as modal meanings. These auxiliaries are non-canonical in the sense that, while functioning as auxiliaries, they are usually themselves grammaticalisations out of Ps (hence the label ‘pseudo-verb’). Examples of these include the pseudo-verbal auxiliary *il*+pronoun ‘have’ (Hallman (2016), Camilleri (2016), Camilleri and Sadler (2018)) (< P ‘to’), and *ba?ad/?ad*+prn ‘just, still’ (< P ‘after’), etc.

In fact the broad-brush observation above, that SSR constructions are limited to the more ‘functional’ (i.e. non-lexical) type of meanings, and are not found with predicates of perceptual report (such as *seem*), is not quite correct, and we will revise it further in §3.1 below. At this point, two further observations are in order. The first concerns the nature of the predicates used to express perceptual reports. In dialectal Arabic, canonical verbal predicates are **not** typical (although as we have illustrated above, such verbal predicates *do* occur in MSA). The second is that some of these non-verbal predicates in the vernaculars do in fact permit SSR. for Egyptian Cairene Arabic ElSadek and Sadler (2015) list the following:

1. *bāyēn* ‘show.ACT.PTCP.SGM’ (< *bān* ‘show, appear’) +/- *ʕala*+Prn/NP ‘on’ - used in expletive and copy raising structures (as in (5a) and (5b), respectively);

2. The definite agent participle form: *ʔiz-zāher* ‘the apparent’, which is only used in expletive constructions. It is the derivationally-related counterpart of the raising predicate *yaḏhar* ‘seem, appear’ in MSA;
3. The pseudo-verbal form derived from the N *šakl*+pronoun/NP lit. ‘shape, form’, available in SSR contexts with either individual or eventuality PSOURCE readings (as we will see in §3.1), as also illustrated for Jordanian in Jarrah and Alshamari (2017), and in copy raising constructions in the presence of *kaʔinn*+pronoun.

To this list of non-canonical means, we can add:

4. The passive participle counterpart of the active participle *bāyen*: *mbāyen*, which can be used in the same way, along with the optional presence of the PP *ʔala*+Prn, as in (7)-(8).

(7) *mā* *m-bāyen* *ʔlay-k* *el-kebr*
 NEG PASS.PTCP-appear.SGM on-2SGM.GEN DEF-oldness
 You don’t seem old. Lebanese: Feghali (1928, 6)

(8) *m-beyyen* (*ʔeley-k*) *ğōʔān* / *bidd-ak*
 PASS.PTCP-appear.SGM on-2SGM.GEN hungry.SGM / wish-2SGM.GEN
t-rūh
 2-go.IPFV.SGM
 You seem (lit. it appears (on you)) as though you (M) are hungry / as though you (M) want to go. Tulkarem Palestinian

Notwithstanding their generally restricted nature, canonical verb forms for perceptual reports which are the counterpart of MSA *yaḏhar* ‘3M-seem.IPFV.SG’ *do exist* in some vernaculars. The data in (9), from Moroccan, Tunisian and Syrian, illustrate these usages, in which the verbal predicate appears to be constrained to expletive constructions, as in MSA.

(9) a. ***ta-y-dher*** *belli kan-u* *hna*
 HABIT-3SGM-seem.IPFV that be.PFV.3-PL here
 It seems that they were here. Moroccan: Benmamoun (2000, 125)

b. ***yu-dhur*** *illi l-mṭar* *bāš t-ṣub*
 3M-appear.IPFV.SG that DEF-rain.SGF FUT 3F-pour.IPFV.SG
 It seems that it is going to rain. Tunisian: Halila (1992, 243)

c. *l-wlad* ***yə-zhar*** *ənnu ḥak-u* *maʔ nawal*
 DEF-boy.PL 3M-seem.IPFV.SG that talk.PFV.3-PL with nawal
 The boys, it seems that they talked to Nawal. Syrian: Farhat (1991, 164)

It is important to add that (9) are indeed true instances of *it*-expletive constructions, and that the use of the default 3SGM form of the verb here is a constraint associated with the construction itself, and not due to deficiencies in the morphological paradigm. Such evidence comes from the fact that *dher* in its other lexical (non-clause embedding) uses takes the usual full inflectional range, as illustrated through the inflected perfective 3PL (distinct) ‘appear’ forms in (10) below, based on data in Qwaider et al. (2018, 2):

- (10) a. ?āhla šiy ?innu aš-šabāba kill-uwn **dahar-uwā**
 best thing that DEF-guy.PL all-3PLM appear.PFV-3PLM
 ʕas-sāhīh
 on.DEF-scene
 The best thing is that all the guys have appeared on the scene. Lebanese
- b. aš-šabāb hallaʔa kullu-hum **dahar-uwā** ʕas-sāhīh
 DEF-guy.PL now all-3PLM.GEN appear.PFV-3PLM on.DEF-scene
 All of the guys have now appeared on the scene. Jordanian
- c. ?āhla šiy ?innu aš-šabāb kill-uwn **bayan-uwā**
 best thing that DEF-guy.PL all-3PLM appear.PFV-3PLM
 ʕas-sāhīh
 on.DEF-scene
 The best thing is that all the guys have appeared on the scene. Syrian

This difference is consistent with viewing the distinct use in an *it*-expletive, perceptual report construction as further along a grammaticalisation cline than the non-clause embedding use of this verb, in line with Kuteva et al. (2019, 10): ‘de-categorialization has the effect that the element concerned loses morphosyntactic properties characteristic of its less grammaticalized (e.g. lexical) source, such as the ability to take modifiers or inflections, and it shifts from a form class having many members (e.g. an open class) to one having only few members (a closed class).’

Even this is not the whole story as far as cross-dialectal microvariation is concerned. One of the ways in which Maltese expresses the meaning of ‘seem, appear’ is with the verb *deher* (*jidher* in the imperfective), the counterpart of the verb employed in (9) for other dialects, and *yadhar* in MSA. As the data in (11) shows, the lexical verb in Maltese allows for all of the available constructions, *it*-expletive, SSR and copy raising structures, which can in turn all appear with or without the complementiser *li* ‘that’.

- (11) a. **j-i-dher** (li) (it-tfal) sejr-in
 3M-FRM.WVL-appear.IPFV.SG that DEF-children go.ACT.PTCP-PL
 tajjeb
 good
 It seems that the children are doing well. *it*-expletive structure

- b. (it-tfal) **j-i-dhr-u** (li) sejr-in
 DEF-children 3-FRM.VWL-appear.IPFV-PL that go.ACT.PTCP-PL
 tajjeb
 good.SGM
 the children seem to be doing well. SSR: Camilleri (2018, 172)
- c. **t-i-dher** (li) ġà ta-w-**ha**
 3F-FRM.VWL-appear.IPFV.SG that already give.PFV.3-PL-3SGF.ACC
 xebgħa xogħol x't-a-ghmel
 smacking work what.3F-FRM.VWL-do.IPFV.SG
 she seems as though they already gave her a lot of work to do. CR:
 Camilleri et al. (2014, 192)

While the *verbal* predicate corresponding to *yaḍhar* in MSA permits only the expletive construction, the synchronic situation across the Algerian dialects appears to be that they employ the verb-form *bēn* ‘seem, appear’, which is the verb associated with the active and passive participles *bāyen* (5) and *mbāyen* (7), in all three constructions, i.e. expletive, SSR and copy raising structures, as in (12).

- (12) a. **y-bēn** billi/?innu štī-t-u
 3M-appear.IPFV.SG that love.PFV-3SGF-3SGM.ACC
 It seems that she loved him. *it*-expletive structure
- b. **kun-t-i** **t-bēn-i** ~ **bēyn-a**
 be.PFV-2-SGF 2-appear.IPFV-SGF ~ appear.ACT.PTCP-SGF
 ti-by-i t-ruḥ-i / rāki ḡayyān-a
 2-want.IPFV-SGF 2-go.IPFV-SGF / COP.2SGF tired-SGF
 You seemed to want to go. / You seemed (to be) tired. SSR
- c. **t-bēn-i** **killi** rāki ḡayyān-a
 2-appear.IPFV-SGF as though COP.2SGF tired-SGF
 You seem like you’re tired. SSR oblig. individual PSOURCE reading
- d. **t-bēn-i_i** **killi** darb-u-**ki_i**
 2-appear.IPFV-SGF as though hit.PFV.3-PL-2SGF.ACC
 You seem like they’ve hit you. CR: S. Rouabah PC

What has not been previously observed (to our knowledge) is that an individual PSOURCE reading necessarily arises, whether in a SSR structure (as in (12c)) or a copy raising structure (as in (12d)) in the presence of the complementiser *killi*, which is both the structural and semantic counterpart to *kaʔanna* in other dialects.

Beyond the use of these ‘seem’ verbal predicates across the different dialects, South Western Saudi dialects have grammaticalised their own idiosyncratic verbal expression of perceptual reports. In this case, the entire semantics of the verb *talaʔ*,

differs most notably in that it involves at the onset verbal predicates with a more elaborate argument-structure, whereby it is as a result of a suppression of the perceiver argument that a distinct argument-structure - functional-structural mapping results. Coupled with the presence of secondary predication and bleached semantics, a new meaning is lexicalised, and a raising construction grammaticalised.

The paths we choose to consider here involve the formation of new lexical items, which we take to be synchronically verbal although their source is clearly in other lexical categories. Of course they can be completely verbal in terms of f-structure subcategorisation and still maintain categorial and morphological vestiges of the diachronic source. Moreover, they don't have to be at the same stage in every dialect, with transitions further along a grammaticalisation path in some, rather than in others. In the rest of this paper we discuss two paths which we argue have in turn resulted in the development of a clausal (raising) predicate of perceptual report from a N and a P respectively.

Before delving into the individual paths, we make reference to the fact that as commonly present in the context of grammaticalisation trajectories, the N under analysis is concurrently maintained in the system as a canonically-behaving lexical N, over and above the distinct use it has developed through time. The result is an instance of a **functional split**, whereby the grammaticalisation path of change undertaken by this particular lexical item has not resulted in the item's loss. Rather, the effect is such that a second function complements its existing use in the grammar, giving a *layering effect* (Hopper and Traugott, 2003). This is also true of the use of *dher* in dialects such as Jordanian and Lebanese, illustrated in (10), where we seem to have alternate argument-structures (<SUBJ,(OBL)> vs. <XCOMP>SUBJ) with accompanying morphosyntactic differences. The same does not hold of the P under analysis. It is not anymore in use as a lexical preposition, in the variety we will be looking at.

3.1 *šakl*+prn > raising lexical V

The use of the N *šakl* lit. 'shape, form' as a lexical raising predicate embedding a clausal argument, described and analysed for Egyptian in ElSadek and Sadler (2015) is commonly found in the dialects from Libya eastwards. When used with this function, the predicate takes on the meaning of 'seem, appear'. We start by establishing the lexical behaviour of *šakl* as a noun.

- (15) a. *šakl id-daerah mdawwar/mdawwar-ah*
 shape.SGM DEF-circle.SGF round.SGM/round-SGF
 The shape of the circle is round.

- b. *id-daerah, šakl-aha mdawwar/mdawwar-ah*
 DEF-circle.SGF, shape.SGM-3SGF.GEN round.SGM/round-SGF
 The circle, its shape is round.

- c. ana miš ʔaǧib-nī iš-šakl il-kbīr
 I NEG please.PFV.3SGM-1SG.ACC DEF-shape.SGM DEF-big.SGM
 la-l-bayt
 to/for-DEF-house.SGM
 I do not like the big shape of the house. Palestinian: Al-labadi, PC

Notice in (15) the alternative agreement forms possible on the predicative adjective ‘round’. The syntactic head of the SUBJ is the N *šakl* ‘shape, form’ which is SGM, and the grammatically expected form for a predicative adjective agreeing with a SGM subject would be SGM. The occurrence of SGF indexing on the predicative adjective suggests that in this case, it is agreeing with the dependent argument within the NP SUBJ, *id-daerah* ‘the circle’, which is SGF, and which together with the head *šakl* forms a construct state construction. The f-structure corresponding to (15a) is shown in (16), where we represent the dependent argument as a POSS GF subcategorised by the head noun in SUBJ GF. We suggest that the availability of this (otherwise unexpected) agreement pattern is suggestive of **prominent internal possessor** behaviour (see Nikolaeva et al. (2019), and more below), and we argue is key to the reanalysis which underlies the development of this lexical item into a raising predicate.

- (16) [PRED ‘MDAWWARAH<SUBJ>’
 TENSE PRESENT
 SUBJ [PRED ‘ŠAKL<POSS>’
 PERS 3
 NUM SG
 GEND M
 POSS [PRED ‘ID-DAERAH’
 PERS 3
 NUM SG
 GEND F
 DEF +]]]]

We now turn to examples illustrating the use of *šakl* as something other than a simple noun. In an example such as (17), *šakl* is not a dependent nominal argument, but is the matrix predicate of the sentence, occurring with a SUBJ (*Morsi*) and a clausal complement. The *form* of (non-canonical) agreement with the SUBJ (which is glossed here as 3SGM.GEN) reflects the nominal origin of this pseudo-verbal predicate.

- (17) Morsi šakl-u riǧiʔ
 Morsi shape-3SGM.GEN return.PFV.3SGM
 Morsi seems to have come back. Egyptian: ElSadek and Sadler (2015, 96)

As argued in ElSadek and Sadler (2015), pseudo-verbal *šakl* is a raising predicate. In (18) it occurs with a (raised) non-thematic weather-verb SUBJ, as seen by the presence of the pleonastic 3SGF form selected by weather predicates. This in turn suggests that the bound GEN pronoun on *šakl* can no longer be associated with the POSS GF it marks in nominal examples such as (15).

- (18) *šakil-ha* *ʔib-ti-šti*
 shape-3SGF.GEN B-3F-rain.IPFV.SG
 It seems to be raining. Jordanian: Jarrah and Alshamari (2017, 33)

In the SSR construction, the raising predicate *šakl* allows both individual and an eventuality PSOURCE readings of the matrix SUBJ. In the actual context of utterance for (17), *Morsi* was in fact dead, and hence the perceptual source is the eventuality, not the individual, and in (19), as illustrated by the authors, the context involves an inference from a phone conversation, and thus not a direct perception of the individual in question.

- (19) *šakil-ak* *ma haḍḍar-it-š* *malih*
 shape-2SGM.GEN NEG prepare.PFV-2SGM-NEG well
 You seem to not have prepared well (for the exam). (Inferred from a description during a phone conversation).
 Jordanian: Jarrah and Alshamari (2017, 32)

An individual PSOURCE reading, on the other hand, is possible with both SSR and copy raising constructions which have *šakl*+pronoun as a matrix raising lexical predicate, and in fact an individual PSOURCE SUBJ is obligatory in the latter structure.

- (20) a. *kān/kon-t-i* *šakl-ik*
 be.PFV.3SGM/be.PFV-2-SGF shape-2SGF.GEN
bi-t-ḥib-ī-h
 B-2-love.IPFV-SGF-3SGM.ACC
 You seemed to love him. SSR, Egyptian: ElSadek and Sadler (2015, 97)
- b. *šakl-ak* *mrīḏ*
 shape-2SGM.GEN sick.SGM
 You seem sick. SSR, Benghazi Libyan: Saad (2019)
- c. *šakl-ak* *kaʔinn-ak* *mabsūt*
 shape-2SGM.GEN as though-2SGM.ACC happy.SGM
 You seem as if you are happy. CR, Egyptian: ElSadek and Sadler (2015, 99)

- d. *šakl-aha_i kaʔinnu-hum_j deħk-u_j ʕalē-ha_i*
 shape-3SGF.GEN as though-3PL.ACC laugh.PFV.3-PL on-3SGF.GEN
 She seems as if they've fooled her. CR, Egyptian: ElSadek and Sadler
 (2015, 99)

The synchronic end result is the formation of a **pseudo-verbal form**, which in the literature on Arabic (Ingham (1994), Vanhove (1993), Brustad (2000), Comrie (2008), Ingham (2008), Peterson (2009), and Vanhove et al. (2009)) refers to a class of forms, be they prepositions, nouns, quantifiers, etc. that have taken on a verb-like function, and express the reanalysed SUBJ GF via non-canonical inflectional forms, since these items maintain their erstwhile GEN pronominal forms/inflection. As well as having very different semantics and functions, the nominal and pseudo-verbal forms participate synchronically in distinct structures, with the development of the 'seem, appear' meaning from the original 'shape, form' also resulting in the availability of a new, raising construction. The f-structure associated with (21), repeated from (18) above is provided below.

- (21) *šikil-ha ʔib-ti-šti*
 shape-3SGF.GEN B-3F-rain.IPFV.SG
 It seems to be raining. SSR - Jordanian: Jarrah and Alshamari (2017, 33)

PRED	'ŠIKIL<XCOMP>SUBJ'
TENSE	PRESENT
SUBJ	[1]
XCOMP	[1]

3.2 Diachronic Trajectory

We hypothesise that the development of *šakl* as used in a structure such as that in (15a), where its semantic form is '*šakl*<POSS>', to one where it functions as a raising predicate, as in (21), with the semantic form '*šakl*<XCOMP>SUBJ' progressed primarily out of a predicative construction of the type in (15a), where the adnominal possessor appears to exhibit properties that trigger behaviours associated with prominent internal possessors (PIP). For Arabic, there is clear and uncontroversial evidence that these nominal examples and other adnominal/NP-internal possessive constructions in general involve an internal possessor/distinguished argument. In Arabic, the possessor and the possessed together form a tightly-knit and inseparable morphosyntactic unit, often called a construct state construction (after the

form of the head noun, which occurs in a particular form if SGF) or annexation structure. Although not a ‘direct’ argument of the PRED, as it is not selected by the construction’s predicate but rather by the predicate *šakl* in SUBJ position, the internal possessor nevertheless may optionally trigger agreement/indexing on the clausal predicate, which in this case was *mdawwar* ‘round’, as if it were a direct dependent of this predicate. The hypothesis we suggest here is that the status of the internal possessor as a PIP is an enabling or triggering factor for the development of a verbal raising predicate out of the N *šakl*. Nikolaeva et al.’s (2019) typological investigation demonstrates that PIPs ‘are most likely to stand in an alienable relation with the possessed noun’ (p. 26), and this is precisely the case with *šakl* vis-à-vis the possessor. Nikolaeva et al. (2019, 8) discuss possibilities as to how such non-canonical agreement effects with prominent possessors can be resolved synchronically, including the entertaining of syntactic loosening of the notion of locality, as well as the functional prominence of PIPs, which they consider to be partly semantic and partly associated with information-structure associated prominence effects (p. 24). Referential features of the possessor, including its salience with respect to prominence and the Animacy Hierarchy, as well as its affectedness and involvement in the event, all contribute to the likelihood of PIP behaviour. An LFG treatment which combines both syntactic and information-structure mechanisms in accounting for the properties of PIPs, such as serving as agreement controllers, is developed in Ritchie (2016). In this account, the PIP essentially also serves as a secondary topic, and hence, as an agreement controller (Dalrymple and Nikolaeva, 2011). It is not our task here to discuss the motivations for the PIP properties present in structures such as (15a), or how they should be accounted for or motivated, but we take it to have been a contributory factor at the **diachronic onset** in the development of a SSR across a number of Arabic vernaculars. We argue that as the possessor θ -role stands higher (in terms of saliency) than the possessed counterpart, the θ -role - GF mapping displays something distinct, with the lower θ -role being mapped onto a more prominent GF. This in turn creates a tension, giving rise to PIP-associated behaviours for the POSS, superseding the most prominent GF in these aspects. We believe this to be true especially in contexts where the possessor is expressed as a pronominal form (which is in turn higher on the Animacy scale than a NP), as in fact this is very much the key property of the use of *šakl* in the raising structures that have developed. Gradually these PIP behaviours grammaticalise, at least in certain contexts (structural or semantic), such that the possessor starts being reinterpreted as the SUBJ. This in turn causes ripples not merely to the morphosyntactic dimension of the structure, where the bound GEN pronominal form on *šakl* is reanalysed as a non-canonical SUBJ exponent, but additionally to the organisation of the entire f-structure itself (even if the c-structure may remain totally unchanged). Given the reinterpretation of the GEN pronominal form as the SUBJ exponent, which is otherwise a behaviour attributive of verbal PREDs, as these are the categories that canonically allow for bound pronominal SUBJ GFs, the N *šakl* takes on a pseudo-verbal function, which is a common place grammaticalisation and lexicalisation process across the Arabic macrosystem, where it

ends up as the structure's highest PRED as some sort of V, to which the original structure's PRED, i.e. the predicative adjective becomes subordinated. This newly formed pseudo-verb now not only takes the SUBJ GF in its scope, which was the original POSS, but it additionally takes the former PRED as an argument, reanalysed as an XCOMP).² An open clausal argument must be assumed to allow for the persistence of the dependency that existed between the original predicative adjective (now the reanalysed XCOMP) and the SUBJ or the SUBJ POSS. Once the XCOMP GF established itself, this then paved open the way for that clausal argument's mapping onto different constituents at the c-structure, following which, changes at the c-structure are observed. As noted by an external reviewer, whom we thank for sharing with us this insight, while the grammaticalisation just exemplified above involves a striking development entailing a **categorial shift** from a N to a V, the **semantic trajectory** finds parallels in other languages. One such parallel is the predicate *sembler* 'seem' in French, which in turn is derived from the Latin verb *simulare* 'copy, pretend', which is itself related to the noun *simulacrum* 'shape, form, copy'.

3.3 P 'like' > raising lexical V

The P that seems to have led to the general evolution of raising, not solely in the context of the SSR we are exploring here, which is *specific* to a particular vernacular, but also to the copy raising constructions found in the Arabic macrosystem (including MSA) is the P 'like, as', as demonstrated rather extensively and in detail, in Taine-Cheikh's (2004) descriptive study of this element. Here we argue that the grammaticalisation of this P leads to the formation of raising structures from this source. Moreover, although we do not make this argument in detail here, part of the picture motivating and supporting our view is the fact that the CR structures which we illustrated in 2.2 involve the complementisers *kaʔanna* or *killi* (depending on the variety - see for example the Algerian copy raising constructions in (12c-d)) which are themselves the fusion of two items, the P *ka, kif* 'like' + the complementiser *ʔann* or *(il)li*, in a diachronic process of **univerbation**.³ In this respect, this aligns Arabic very much with typologically unrelated copy raising structures such as those found in English, which in turn obligatorily require the use of *like* or *as* as mediating Ps between the matrix and embedded clause.

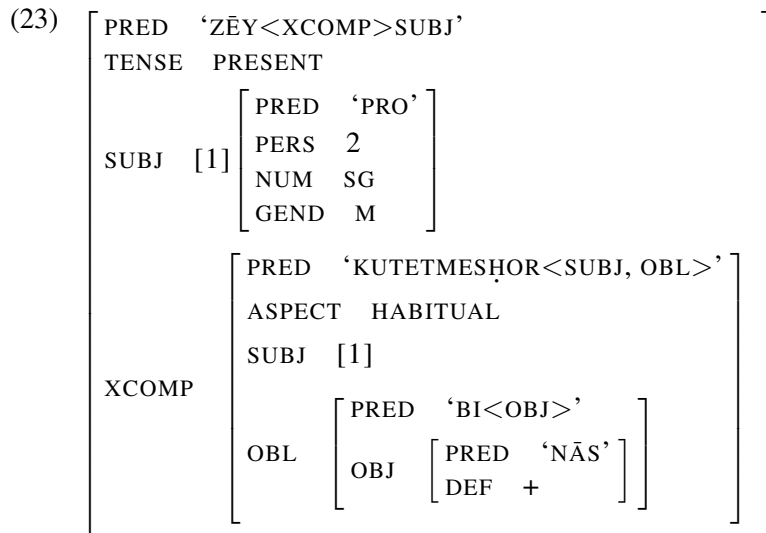
Here we present data in which (another) P 'like' appears to have resulted in the grammaticalisation and development of a SSR construction. Such unconventional, yet straightforward examples which suggest the development of a P 'like' into a lexical raising predicate are the pseudo-verbal uses of *zēy* 'like' + pronoun in

²This development we can take to constitute the instantiation/formation of a secondary predication, which according to Barron (1997); Barron (2001) is one of the conditions that allows for perception verbs to become raising predicates.

³The fusion that produced the complementiser *billi* 'that', illustrated in (9a) and (12a), for Moroccan and Algerian, respectively, follows the same sort of diachronic process with a different preposition.

Algerian, which are translated in the original text as: ‘*il paraîtrait que, il a l’air de, il semble*’. The structures below *might* be analysed as SSR constructions; in which case, the f-structure associated with (22b) would be as shown in (23).

- (22) a. **zēy-u** nsā-na
 like-3SGM.GEN forget.PFV.3SGM-1PL.ACC
 He seems to have forgotten us.
- b. **zēy-ik** ku-te-t-meshor b-en-nās
 like-2SG.GEN HABIT-2SG-REFL-mock.IPFV with-DEF-people
 You seem to be making fun of people.
- c. **zēy-na** mberrd-în
 like-1PL.GEN cold-PL
 We seem cold. Djidjelli Algerian: Marçais (1954, 524)



Given the lack of additional data, this is necessarily somewhat speculative and while there is evidence for a control relation, we do not have evidence that bears directly on the question of whether the SUBJ is thematic or non-thematic in the *zēy* clause, and hence, these could instead be instances of equi-type structures with obligatory SUBJ control.

The pseudo-verbal strategy using *zēy* (originally a P, and still functioning as such in other dialects), which we suggest may be another instance of a pseudo-verbal SSR construction, is synchronically a receding, if not a completely archaic strategy. Young Algerian speakers find the use of *zēy* rather archaic, or only associated with Egyptian market sellers (personal communication, Algerian colleagues). The synchronic P meaning ‘like’ is *kif*, which as we have seen above, also occurs fused with the declarative complementiser to mark copy raising constructions. Nevertheless, some further evidence of the P *zēy* is available for distinct dialects of Algerian, as it is found in Bedouin Algerian dialects documented in 1908.

- (24) *lābes* *zēy el-myārba*
 wear.ACT.PTCP.SGM like DEF-Moroccan.PL
 He was wearing (i.e. dressed) like Moroccans. Saïda Algerian: Marçais
 (1908, 175)

Synchronically, across the different Algerian dialects, it is the lexical raising verbal predicate *bēn* ‘appear, seem’ that is used instead of *zēy* for perceptual reports, as illustrated above in (12).

We can offer only some highly speculative remarks concerning possible grammaticalisation paths from the P ‘like’ to a perceptual report predicate heading a SSR construction, with concomitant changes in lexical meaning and argument-structure as *zēy* shifted from a P to a V. We take it that at the outset we have a non-verbal predicative construction headed by the P *zēy* ‘like’. In uses corresponding to *He is like me*. the P would have a PRED ‘*zēy*<SUBJ, OBJ>’. It is possible that (as a reviewer suggests) the P predicate might have also allowed a more abstract sense in which the non-subject argument is a COMP, along the lines of *It/the situation is like/as if we will be leaving*, with the closed COMP developing over time into an open XCOMP with subject re-entrancy. Two further issues would arise in relation to such a trajectory. The first is that elsewhere in Arabic (i.e. with other predicates), we seem to find rather the reverse development, in as much as we find instances where a predicate has (additionally) developed COMP uses (with default 3SGM agreement on the predicate) after the establishment of XCOMP uses. The second is that a question arises as to why/how what would be the SUBJ of the COMP is realised as though it were the OBJ of the P *zēy*, which is then in turn reanalysed leading to the emergence of a quite prototypical case of a pseudo-verb with the attached pronoun reanalysed as the (non-canonical) exponent of the SUBJ of *zēy* itself. Given the lack of a historical record and our current state of knowledge, we cannot be more concrete at this stage.

4 Conclusion

In this paper we have looked at the development of non-canonical predicates of perceptual report from two distinct non-verbal lexical items, a N and a P, which have given rise to subject-to-subject raising constructions. Diachronically, the processes which have given rise to the development of these verbal raising predicates do not involve the emergence of a functional (featural) meaning through loss of content and bleaching, although this is something which is common place, and the normal domain of grammaticalisation. Rather, what can be observed in each case is a semantic development in which a lexical shift from a concrete to a more abstract sense is involved, in parallel to the observation Barron (1997, 12); Barron (2001, 73) makes with respect to physical visual perception verbs in a number of languages as they grammaticalise into raising predicates, where what we find is a ‘cognitive shift from a physical to a mental process’. In the case of the vernacular

Arabic data set presented here, the concrete > abstract sense shift is coupled with a concomitant emergence of a more elaborate argument- and functional-structure. This is distinct from the diachronic account provided by Barron. In the data she discusses, the change that results in a raising predicate primarily involves predicates that take a full argument-structure themselves, and which over time undergo a reanalysis triggered via a suppression of one of the relevant arguments. In each of the two case studies considered here, the semantic and functional changes that take place are what lead to the creation of a construction involving a N or a P that becomes solidified and fixed in its meaning to such an extent that it begins to get reanalysed as encoding perceptual reports— a meaning which is then invested in the lexical nexus of that construction. In the case of the nominal source, *šakl* ‘shape, form’, we suggest that a key role is played in these diachronic developments by the presence of a prominent internal possessor. The result is an uncommon categorial shift, but which displays a semantic trajectory that is found elsewhere. The same is holds in the case of the development of the P, whereby while the path from P to V might be unusual, the development of a perceptual report predicate from ‘like’ is semantically very natural, and consistent with other developments in Arabic and beyond, notably in marking copy raising constructions themselves.

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