EGYPTIAN ARABIC PERCEPTUAL REPORTS

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Abstract

This paper offers what is to our knowledge the first discussion of the encoding of perceptual reports in Egyptian Cairene Arabic (henceforth ECA). We build on the analytic framework offered by Asudeh and Toivonen (2012) (henceforth AT), in particular their discussion of *individual* and *eventuality* type PSOURCEs, and also on the account of perceptual reports in different varieties of Arabic which is given in Camilleri et al. (2014). We show that a range of different syntactic constructions are used to encode perceptual reports in the *seem/appear* category. ECA does not make productive use of the verbs (such as *yabdū* 'seem') which are used for perceptual reports in Modern Standard Arabic, instead the range of forms used include the active participle *bāyen* and the noun *ʃakl*. This paper offers a description of the main means used for perceptual reports in ECA, illustrating a number of issues which arise for an eventual formal analysis. We consider how the distinction between individual and eventuality type PSOURCE introduced in Asudeh (2012) and Asudeh and Toivonen (2012) plays out across these constructions.

1 Background

1.1 Perceptual Reports

Asudeh (2004, 2012) and Asudeh and Toivonen (2012) develop an account of perceptual reports in LFG in which they distinguish two main classes of verbs in which an individual rather than some aspect of the eventuality serves as the directly perceptible source (PSOURCE) for the report: copy raising perceptual report verbs and perceptual resemblance verbs with thematic subjects.

They argue that in the English copy raising (CR) construction, illustrated in (1) and (2), the subject of the perceptual report verb is necessarily interpreted as the visible source of perceptual evidence: this requirement is absent from subject raising (SSR) and expletive (EXPL) uses of English subject raising verbs.

(1) Chris seemed **like he** enjoyed the marathon.

(2) John seems **like** Mary defeated **him**.

In English, the copy raising clause is mediated by *like/as though/as if*, and the subject of *seem* is associated with an obligatory pronominal copy in the embedding clause. Asudeh and Toivonen (2012) argue that the *individual* PSOURCE requirement (holding of the subject) means that the English copy raising construction with *seem* will be infelicitous if (some aspect of) this individual cannot be directly perceived.[1] Thus SSR and EXPL uses of perceptual report verbs such as English *seem* may be used in a wider set of circumstances: suppose that Kim, an incorrigible

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[1] But see e.g. Landau (2011) for a different view. Landau argues that having an individual PSOURCE is not a necessary requirement for English CR structures. What is important for our pur-

user of pungent aftershave, has just left the room. Entering soon after, a colleague might remark *Kim seems to have been in here*, but *Kim seems like he's been in here* would be infelicitous because the source of the perception is just some aspect of the *eventuality*, in this case, a lingering characteristic odour. Asudeh and Toivonen (2012) argue that PSOURCE is not a *thematic argument* of the CR verb, but is an entailed participant *in the state that the verb denotes* , and therefore they introduce a type distinction. In non-expletive CR the PSOURCE is of type *individual* while in other perceptual reports the PSOURCE is of type *eventuality*. While in English, the individual PSOURCE is expressed as the subject of the CR predicate, with the Swedish verb *verka* 'seem', it may be expressed by means of a PP in the *verka* 'seem' clause.

1.2 Perceptual Resemblance Verbs

Perceptual resemblance verbs, such as English *look, sound, smell* are very similar, except that the individual PSOURCE is expressed as a thematic SUBJ, and hence a copy pronoun is not required in the embedded clause. As in CR, the embedding is introduced by *like/as though/as if* , and the subject (or an aspect associated with it) is interpreted as the individual PSOURCE.

(3) John looked/sounded/smelled **like** Bill had served asparagus.

(4) John looked/smelled **like** he'd been running.

1.3 English Copy Raising

The syntactic analysis of English copy raising presented in Asudeh and Toivonen (2012) maintains the syntax of standard SSR, treating the PSOURCE as a non thematic argument of *seem*. Although Asudeh and Toivonen (2012) do not provide argument structures in their PRED values (hence for them, the PRED value of *seem* is simply 'SEEM'), we assume the more complex semantic forms here for increased clarity and consistency with standard LFG accounts of subcategorisation.
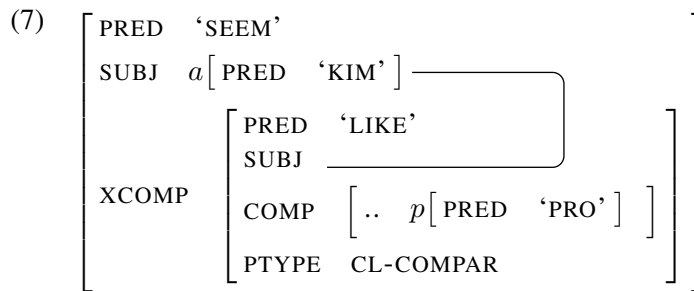
(5) *seem* ($\uparrow$ PRED) = 'SEEM$<$ XCOMP$>$ SUBJ'
 ($\uparrow$ XCOMP SUBJ) = ($\uparrow$ SUBJ)

The intervening predicate *like* (equivalently, *as though* and *as if*) is treated as a predicative element which heads an XCOMP and itself subcategorises for a COMP argument:

(6) *like* ($\uparrow$ PRED) = 'LIKE $<$ SUBJ, COMP$>$'

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poses here is less the details of any one analysis but rather the investigation of the distinction between *individual* and *eventuality* type PSOURCEs in constructions in ECA which have not received attention in the literature to date. We leave the development of a theoretical account of the patterns we see to subsequent work.

There is a standard anaphoric binding relation between the subject of the CR verb and the obligatory pronominal copy in the embedded clause. In semantic composition the pronominal resource is subsequently removed by a manager resource (as in resumption): since these details of the analysis are not important for our discussion here, we will not illustrate these aspects of their approach here. (7) illustrates the essence of the syntactic aspects of their analysis of English copy raising.

(7)
$$\begin{bmatrix} \text{PRED} & \text{`SEEM'} \\ \text{SUBJ} & a\begin{bmatrix} \text{PRED} & \text{`KIM'} \end{bmatrix} \\ \text{XCOMP} & \begin{bmatrix} \text{PRED} & \text{`LIKE'} \\ \text{SUBJ} & \\ \text{COMP} & \begin{bmatrix} .. & p\begin{bmatrix} \text{PRED} & \text{`PRO'} \end{bmatrix} \end{bmatrix} \\ \text{PTYPE} & \text{CL-COMPAR} \end{bmatrix} \end{bmatrix}$$

1.4 Modern Standard Arabic

Taking this work as a starting point, Camilleri et al. (2014) looked at the expression of perceptual reports in Modern Standard Arabic (MSA) and Maltese. They show that MSA *yabdū* 'seem, appear' is a perceptual report verb which takes expletive subjects and complements introduced by the complementising particle *ʔanna* 'that' but does not permit SSR. In addition to the expletive construction, they argue that *yabdū* in fact exhibits a CR construction when the complement is introduced by the complementising particle *kaʔanna* 'as if' in place of *ʔanna*. The pronominal copy which is anaphorically related to the SUBJ of the perceptual report verb may occur in a wide range of nominal GF functions in the embedded clause. The following examples illustrate the expletive and the copy raising constructions respectively.[2]

(8) yabdū   ʔanna l-ʔawlād-a   qad ḥaḍar-ū
    seem.IPFV.3SGM that   DEF-boys-ACC PTL come.PV-3PLM
    It seems that the boys have come.   EXPL

(9) bad-at-i   l-bint-u   kaʔanna-hā
    seem.PV-3SGF-INDIC DEF-girl-NOM as-if-3SGF.ACC
    katab-at-i   r-risālat-a
    write.PV-3SGF-INDIC DEF-letter-ACC
    The girl seemed as if she wrote the letter.   CR Salih 1985: 138

In (9), the subject represents the PSOURCE, and the complement is introduced by *kaʔanna*. The pronominal copy (which is expressed by the verbal inflection and

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[2]Note that both the complementising particles *ʔanna* and *kaʔanna* must be immediately followed by a nominal element, or take a pronominal inflection.

also as a pronominal inflection on the complementising particle *kaʔanna*) functions as the subject of the embedded clause. Camilleri et al. (2014) suggest when the perceptual report verb *yabdū* occurs in a non-expletive construction with *kaʔanna* the matrix subject is necessarily interpreted as the PSOURCE.

To summarise, this perceptual report verb in MSA shows an expletive subject construction and a copy raising pattern with an individual PSOURCE requirement, the latter occurring only in the presence of the complementising particle *kaʔanna* introducing the embedded clause.[3]

1.5   ECA ʔiz-zaher

The closest equivalent to the MSA use of the predicate *yabdū* in an expletive construction in ECA is most likely the definite N *ʔiz-zaher* 'the apparent', followed by a sentence introduced by the complementiser *ʔin* 'that', a frequent and invariant usage. Like the use of *seem* with an expletive subject, this lacks any individual PSOURCE requirement.

(10) ʔiz-zāher   ʔin mona gat
    DEF-apparent that Mona come.PV.3SGF

    It seems that Mona came.

In the following sections we discuss in detail two alternative means by which perceptual reports may be expressed in ECA. It is these two construction types which are the focus of the current paper.[4]

2   ECA bāyen

2.1   Expletive Pattern

First consider examples such as (11)-(12), in which we see the form *bāyen*. This is the active participle of the verb *bān* 'show/appear' in the default MSG form and is followed by a sentential complement introduced by the complementiser *ʔin* 'that'. The complement clause can in fact be introduced by either *ʔin* or *kaʔin*. These complementising particles are amongst those which require the NP subject (if non-pronominal) to be immediately adjacent. If the subject is pronominal, the complementiser appears in inflecting form as shown in examples (11)-(13), and others. In the presence of the affixal material, the final consonant of the complementising particle geminates. In (11) the embedded sentence has an adjectival (participial) predicate while (12) contains a finite (bi-imperfective) verbal predicate.[5]

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[3]Although in principle such examples could involve a thematic use of *yabdū* in the presence of *kaʔanna*, Camilleri et al. (2014) reported that none of the examples used in the sources they consulted lacked a copy pronoun.

[4]Glosses used in this paper include AP 'active participle', BI.IPFV 'bi-imperfective, INDIC 'indicative', IPFV 'imperfective', PV 'perfective', PSP 'passive participle'.

[5]The bi-imperfective forms (glossed BI.IPFV) are finite forms, while the 'bare' imperfective (glossed IPFV) may be used in modal and what we take to be non-finite contexts.

(11) bāyen   ʔinn-ik   mabsūt-a
     show.AP.SGM that-2SGF happy.PSP.SG-F
     It seems that you (f) are happy.

(12) bāyen   ʔinn-ik   bitiʃrabi   sagāyir
     show.AP.SGM that-2SGF drink.BI.IPFV.3SGF cigarettes
     It seems that you (f) smoke.

A perceptual report may be temporally located in the past by adding the tense auxiliary *kān* as in (13).

(13) kān   bāyen   ʔinn-ak   mabsūt/bitiʃrab
     be.PV.3SGM show.AP.SGM that-2SGM happy.PSP.SGM/drink.BI.IPFV.3SGF
     sagāyir
     cigarettes
     It seemed that you're happy/It seemed that you smoke.

In these examples, the construction is not subject to an individual PSOURCE requirement — rather, the source of the perception could be any aspect of the event. Note also that the AP occurs in the invariant default MSG form, which is in contrast with other deverbal uses of the active participle, in which it inflects for gender and number of the subject. This observation supports the idea that the examples in (11)-(13) are expletive subject uses.

In order to collect a wider set of examples covering a range of possible structures for the expression of perceptual reports with *bāyen*, we compiled a corpus of ECA using the web crawling tools available within Sketchengine[6]. By directing the web crawl towards blogs, twitter feeds and other websites (such as magazine sites) known to originate with ECA speakers, a 1.5M word corpus of texts containing *bāyen* was constructed and manually checked for authenticity by the native speaker author. A corpus example showing the expletive use of *bāyen* is (14). Throughout this paper, the indicator SE-BYN shows that an example comes from our Sketchengine corpus.

(14) bāyen   kont   ba-ħeb   ʔatfarrag   ʕala ʔaflām
     show.AP.SGM be.PV.1SG BI-love.IMPV.1SG watch.IMPV.1SG on   movies
     el-ʔakʃen
     DEF-action
     It seems that I used to love watching action movies.   SE-BYN

Note that although (14) does not contain a complementiser, one can be added with no change in meaning:

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[6]http://www.sketchengine.co.uk

(15) bāyen   ʔinn-i kont   ba-ħeb   ʔatfarrag   ʕala
       show.AP.SGM that-I be.PV.1SG BI-love.IMPV.1SG watch.IMPV.1SG on
       ʔaflām el-ʔakʃen
       movies DEF-action
       It seems that I used to love watching action movies.

In these examples, as with the previous constructed examples, the PSOURCE is not the individual, but rather some aspect of the event. A plausible context for (14) might be one in which the speaker is going through his old stuff and finds lots of action movies. Note that in (14) the auxiliary follows *bāyen*, and is in the embedded clause (in construction with *ba-ħeb* 'used to love') and hence does not situate the 'seem' predication in the past. This is in contrast with example (13) where the auxiliary precedes *bāyen* and therefore the whole perceptual report is in the past tense (and hence the translation is 'it seemed').

2.2 Possible SSR Pattern

There are also cases in which the AP is not in the default SGM form, but in an agreeing form. This is the case in (16), where the AP is SGF, potentially indicating that *mona* is the subject of the AP. In such cases, it is again possible to use either *ʔin* or *kaʔin* to introduce the sentential complement.

(16) mona bayn-a   kaʔinna-ha mabsūt-a
     mona show.AP.SG-F that-3SGF   happy.PSP.SG-F
     Mona seems to be happy.

The perceptual report may be temporally located in the past by adding (a subject-inflected form of) the tense auxiliary *kān*, as in (17) and (18).

(17) kont   bāyen   ʔinn-ak   mabsūt
     be.PV.2SGM show.AP.SGM that-2SGM happy.PSP.SGM
     You (m) seemed happy.

(18) kont-i   bayn-a   ʔinn-ik   mabsūt-a
     be.PV.2SG-F show.AP.SG-F that-2SGF happy.PSP.SG-F
     You (f) seemed happy.

In such examples, it seems possible that *Mona* and *you* are subjects of the matrix (perceptual report) predicate (this is consistent with both the surface position of *Mona* in (16) and with the agreement inflection on the participle and the tense auxiliary). They are also most naturally interpreted as the PSOURCE, where the perceptual report is based on observation of some aspect of the individual. However, although these *may* be cases of SSR, we have found no parallel examples in our corpus data, and native speakers consulted judge them to be infrequent or unusual, although not ungrammatical.

The example in (19) is attested in our corpus: it shares with (16) the initial positioning of the NP. However this complementiser-less example clearly is not associated with an individual PSOURCE requirement, and corresponds very closely to the (constructed) example in (20).

(19) sāħeb el-ʃerka   bāyen   ʔeʃtara   moʕzam ʔilli
     owner DEF-company show.AP.SGM buy.PV.3SGM most   that
     ʔantag-u
     produce.PV.3SGM-3SGM
     It seems that the owner of the company bought most of what he produced.
     SE-BYN

This example seems rather to involve a misplacement (or very unusual placement) of the AP, where it's possible to have the AP initially, in the default SGM form followed by the complementiser, with no change in meaning, as in:

(20) bāyen   ʔinn sāħeb el-ʃerka   ʔeʃtara   moʕzam ʔilli
     show.AP.SGM that owner DEF-company buy.PV.3SGM most   that
     ʔantag-u
     produce.PV.3SGM-3SGM
     It seems that the owner of the company bought most of what he produced.

2.3 PP Pattern

In a further set of data, *bāyen* (in the default SGM non-agreeing form) co-occurs with a PP headed by *ʕala* 'on', which expresses the (individual) source of perception and usually corresponds to some (pronominal) function within the embedded CP.[7]

An example of this sort is shown in (21): note that the complementiser *kaʔin-* would be equally grammatical. (22) and (23) are corpus examples.

(21) kān   bāyen   ʕalē-ki ʔinn-ik mabsūt-a
     be.PV.3SGM show.AP.SGM on-2SGF that-2SGF happy.PSP.SG-F
     You seemed happy.

(22) bāyen   ʕal-ēh ʔinn-u taʕbān   giddan
     show.AP.SGM on-3SGM that-3SGM tired.AP.SGM very
     He seems to be very tired.   SE-BYN

(23) kān   bāyen   ʕal-ēh ʔinn-uh masdūm
     be.PV.3SGM show.AP.SGM on-3SGM that-3SGM shocked.PSP.SGM
     He seemed to be shocked.   SE-BYN

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[7]Arabic is a language with inflecting prepositions. Pronominal objects of such prepositions are expressed inflectionally, while non-pronominal objects appear with the uninflected (default) form of the preposition. In all of examples (21)- (25) the preposition *ʕala* has a pronominal (inflectional) object while (26) illustrates a non-pronominal objects to *ʕala*.

Example (24) shows that although the AP is invariant (in default form), rather surprisingly the temporal auxiliary may optionally agree with the PSOURCE:

(24) konti   bāyen   ʕalē-ki ʔinn-ik   mabsūt-a
     be.PV.2SGF show.AP.SGM on-2SGF that-2SGF happy.PSP.SG-F

     You seemed happy.

The object of *ʕala* 'on' within the matrix PP may correspond to a pronominal copy with a range of different grammatical functions in the embedded clause: in (25) it corresponds to the embedded object.

(25) bāyen   ʕalē-ha ʔinn-ohom darab-ū-ha
     show.AP.SGM on-3SGF that-3PL   beat.PV-3PL-3SGF

     She seems like they've beaten her.

It is also possible to have no copy pronoun in the complement clause, as in (26) below:

(26) bāyen   ʕala el-modarreb ʔin el-Ahli   keseb   el-matʃ
     show.AP.SGM on   DEF-coach   that DEF-Ahli win.PV.3SGM DEF-match

     Lit: It seems on the coach that Ahli (football team) won the match. =
     The coach seems like Ahli won the match.

2.4   Summary and Discussion

This section has illustrated a range of constructions involving the AP (active participle) *bāyen* to express perceptual reports in ECA. The AP *bāyen* can be used as the main predicate of perceptual reports in ECA. It exhibits three main behaviours and complementation patterns which might suggest different syntactic analyses. The first is the expletive variant which involves an invariant AP and a COMP introduced by *ʔin* or *kaʔin*. In this case, *bāyen* places no particular PSOURCE restriction, and hence the PSOURCE does not have to be the individual represented by the matrix subject, but can be any aspect of the event.

The second structure is the PP + CP variant, where the AP is followed by a PP which expresses the (visible) individual PSOURCE, irrespective of choice of the complementiser, which can be either *ʔin* or *kaʔin*. The AP must be in default form but a temporal auxiliary may agree with the nominal (PSOURCE) in the PP.

There is also the putative SSR variant, where the AP agrees in gender and number with the subject. This structure possibly has individual PSOURCE interpretations which may be associated with the choice of complementiser (*kaʔin* instead of *ʔin*) for the embedded complement. However this structure was much less frequent than the other two and appears to be of questionable grammaticality for some native speakers of ECA. We found no clear corpus examples representing this structure.

These data raise a number of interesting issues for further investigation. First, what is the nature of and significance of the use of the AP form?

A number of distinct uses of the AP can be distinguished in ECA and other vernaculars. Some are lexically specified as nouns where they have broken plural rather than sound plural forms[8]: for example, the plural AP *ʕummāl* 'workers' is related to the singular AP *ʕāmil* 'worker':

(27) ʔabelt   el-ʕummāl
     meet.PV.1SG DEF-workers

     I met the workers.   Mughazy 2004: 3

APs also occur in clearly adjectival function, occurring postnominal in the NP and showing concord in number, gender and definiteness with the head noun.

Beyond these cases, some APs, such as *lāzim* 'be necessary' and *gāyiz* 'be possible' are clearly modal. These occur with a single clausal argument and are always in default SGM form:

(28) lāzim   ʔamʃi   dilwaʔti
     be necessary.AP leave.IMPV.1SG now

     I must leave now.   Mughazy 2004: 4

However although themselves always in default SGM form, such modal APs may be accompanied by default or agreeing forms of the temporal auxiliary.[9]

(29) kān   lāzim   tidʕi   ʕali
     be.PV.3SGM must.AP invite.IMPV.2SGM ali

     You should have invited Ali (i.e. you did not).   Azer 1980: 23

(30) kunt   lāzim matballaġḥūs   el-χabar da
     be.PV.2SGM must.AP inform.IMPV.2SGM.NEG DEF-news this

     You shouldn't have told him this news.   Azer 1980: 64

The use of an active participle as the main sentential predicate is completely standard in ECA, as in other contemporary vernaculars. The temporal/aspectual interpretation of the AP in such a deverbal usage depends on a number of factors which include the lexical aktionsart of the root verb and the presence or absence of temporal auxiliaries and adverbials: a very broad brush generalization is that APs from stative and motion verbs give rise to a range of meanings (including present progressive and various perfective meanings) while other (eventive) verbs give rise to perfective (typically, present perfect) meanings (see Mughazy (2004) for a very detailed discussion of how the range of interpretations can be accounted for). The following are typical examples of APs functioning as the main sentential predicate.

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[8]The broken plural is formed by internal ablaut processes (as in English *mouse*, *mice*), while the sound plural involves regular suffixal morphology.

[9]To avoid confusion, these examples from Azer (1980) have been reglossed and re-transliterated to conform with the practice in this paper. We thank an anonymous reviewer for asking a question that caused us to provide these examples.

(31) mona lissa miχallaṣ-a el-wāgib
mona just finish.AP-SGF the-homework
Mona has just finished the homework. Mughazy 2004: 6

(32) ʕali sākin f-el-bēt da
Ali live.AP.SGM in-DEF-house this
Ali lives in this house. Mughazy 2004:6

As the example in (31) shows, a deverbal AP agrees in number and gender with its subject, which is different behaviour from what we have observed with the cases of *bāyen* in perceptual reports. The fact that the AP *bāyen* appears in default form in all the cases discussed above (with the exception of the potential SSR pattern illustrated in (16)-(18)) is therefore consistent with the idea that these perceptual report examples have expletive subjects (or no subject). Note further that the optional agreement of *kān* in the expletive subject (or no subject) modal examples such as (30) is also parallel to what we observe with *bāyen*.

Secondly, what is the status of the PP?

Asudeh and Toivonen (2012) show that the PSOURCE may be expressed with the Swedish verb *verka* 'seem' in one of two ways, either as a (raised) subject or as a PP (adjunct) with the expletive construction. The examples in (33) have the same meaning (where *Tom* and *han* are coreferential):

(33) a. Tom verkar som om han lagar mat
Tom seems as if he makes food
Tom seems as if he's cooking.

b. Det verkar på Tom som om han lagar mat
it seems on Tom as if he makes food
Tom seems as if he's cooking.

We have seen in the data discussed above that the ECA *ʕala*-PP also expresses the PSOURCE in an expletive construction.

Thirdly, what is the significance of agreement on the temporal Aux *kān?* Among the main possibilities to consider are that it represents a case of what we might call 'miscreant' or 'parasitic' agreement with a non-subject but prominent participant (the PSOURCE) or alternatively, that the PP (PSOURCE) is in fact the subject of the main predication.[10] In relation to the former possibility, we note that in other cases too *kān* can (optionally) show agreement with a prominent element which is not a clause-mate subject. In (34), for example, *kān* may optionally agree with the clause-mate object of the preposition (which is co-referential with the embedded subject).

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[10]The term 'parasitic' agreement (or morphology) occurs in various places in the literature, including in discussion of some long-distance agreement effects (such as those in Hindi) in which agreement on an embedded infinitival is 'parasitic' on agreement expressed on the embedding predicate Boeckx (2008, 68). We also use the term here to denote agreement on a target which appears not to stand in a canonical agreement relationship with the controller.

(34) kont/kān   maʕrūf   ʕann-ak   ʔinna-k   kaddāb
     be.PV.2SGM/PV.3SGM know.PSP.SGM about-2SGM that-2SGM liar

     It was known about you that you're a liar/ you were known to be a liar.

But note that here too, the participle cannot show agreement:

(35) kānit   maʕrūf/*maʕrūf-a   ʕanna-ha   ʔinna-ha
     be.PV.3SGF know.PSP.SGM/know.PSP.SG-F about-3SGF that-3SGF
     mabsūt-a
     happy.PSP.SG-F

     It was known about her that she was happy/She was known to be happy.

3 ECA ʃakl

3.1 ʃakl and Predicate

The following examples are both very natural and frequent as expressions of perceptual reports.

(36) ʃakl el-walad taʕbān
     form DEF-boy tired.AP.SGM

     The boy seems tired.

(37) ʃakl-ohom mestaneyīn ħāga mohemma
     form-3PL   wait.AP.PL thing important

     They seem to be waiting for an important thing =
     It seems they're waiting for an important thing.

They involve the noun *ʃakl* (MSG) which means 'form, shape' heading a construct state or *iḍāfa* construction (CSC) (in (36) above, the NP *ʃakl el-walad*), together with a following predicative phrase. The construct state is a common structure in ECA, and all other varieties of Arabic, in which a head noun, which cannot be inflected for definiteness, is immediately followed by a definite or indefinite nominal dependent, which is inflectionally expressed when pronominal. The CSC is the most common means of expressing possession (as in (38)) and a range of other associated relations such as part whole relations between head and dependent NP.

(38) a. kitāb   mona
        book.SGM mona

        Mona' s book

     b. kitab-ha
        book.SGM-3SGF

        her book

The status of the CSC as definite or indefinite depends on the definiteness of the (most deeply embedded) dependent nominal. There is a tight syntactic link between the head noun and the nominal dependent, such that adjectival modifiers (or complements of the head noun) may not intervene between them, but occur after the nominal dependent: adjectives agree with the noun (head or dependent) which they modify (note that in (39) the adjective is definite because the CSC as a whole is definite since the dependent nominal is definite):

(39) kitāb   mona el-ʔadīm
    book.SGM mona DEF-old.SGM
    Mona's old book

(40) kitāb   el-bint   el-gamīla
    book.SGM DEF-girl.SGF DEF-beautiful.SGF
    the beautiful girl's book

Impressionistically, this structure with *ʃakl* is very frequently the usage of choice for the expression of perceptual reports. Nevertheless, the majority of instances of *ʃakl* which came up in our corpus searches were cases which the noun was being used simply in its standard meaning of 'form' or 'shape'. Having discounted these as irrelevant to our present concerns, it emerged that the vast majority (and perhaps all) of the corpus examples remaining contained an attached pronoun rather than a NP dependent, as in (37) or (41) (the latter contains an initial NP doubling the attached pronoun).

(41) Morsi ʃakl-u   rigiʕ
    Morsi form-3SGM come.back.PV.3SGM
    It seems that Morsi came back.

It is rather clear that in (41) the PSOURCE is not of type *individual* as the Morsi in question is the ousted president of Egypt. The PSOURCE here is some aspect of the eventuality - something which is happening in the country that gives rise to this observation.

There are a number of interesting aspects to this perceptual report construction, which has not been discussed in any previous literature we are aware of.

The first issue concerns the nature of the (predicative or propositional) element which co-occurs with the CSC *ʃakl* NP. In examples (36) and (37) we see adjectives and verbal participles, which may head predicative complements, but example (41) exhibits a finite (perfective) verb (and hence potentially a full finite IP). Finite verbal complements are only possible provided the subject of the finite verb is co-referential with the dependent NP. This is illustrated by the contrast between (42) and (43).

(42) ʃakl el-welād etdarabo
    form DEF-boys beat.PV.PASS.3PL
    The boys seem to have been beaten.

(43) *ʃakl el-welād   darabet-hom
     form DEF-boys beat.PV.3SGF-3PL

     The boys seem as if she's beaten them.

Note that in an example such as (42), the finite verb *etdarabo* beat.PV.PASS.3PL necessarily agrees with the dependent NP (within the CSC, that is the 'possessor' or 'whole'). This is a behaviour which is not found in other CSC, where it is the head noun (possessed element) which controls NP external predicate agreement. Similarly, it is the dependent NP which dictates the plural number on the deverbal AP in (37). In the adjectival case in (44), however, the dependent pronoun (or NP) only optionally controls agreement on the (embedded) predicate.

(44) ʃakl-ik   mabsūt-a/mabsūt
     form-2SGF happy.PSP.SG-F/PSP.MSG

     You (f) seem happy.

As shown in (44) above, the dependent NP may control agreement on the predicate, a behaviour which is not found in other CSC, where it is the head noun (possessed element) which controls predicate agreement. Consider now (45)- (48): these examples show that when the dependent NP controls agreement on the predicate, it may also optionally control agreement on a temporal auxiliary in initial position.

(45) kān   ʃakl-ik   mabsūta
     be.PV.3SGM form-3SGF happy.PSP.SG-F

     You seemed happy.

(46) konti   ʃakl-ik   mabsūta
     be.PV.3SGF form-2SGF happy.PSP.SGF

     You seemed happy.

(47) kān   ʃakl-ik   bitħibī-h
     be.PV.3SGM form-2SGF love.BI.IPFV.2SGF-3SGM

     Your form seemed to love him= You seemed to love him.

(48) konti   ʃakl-ik   bitħibī-h
     be.PV.2SGF form-2SGF love.BI.IPFV.2SGF-3SGM

     You seemed to love him.

If the temporal auxiliary appears after the CSC NP (between the subject and the predicate) agreement with the dependent (annexed) NP within the CSC becomes obligatory.[11]

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[11]These examples correspond to normal word order in ECA, which is SVO.

(49) *ʃakl-ik   kān   mabsūt-a
    form-2SGF be.PV.3SGM happy.PSP.SG-F

    Your form seemed happy/ You seemed happy.

(50) ʃakl-ik   konti   mabsūt-a
    form-2SGF be.PV.2SGF happy.PSP.SG-F

    You seem as if you were happy.

(51) ʃakl el-welād kānu   biyitderbo
    form the-boys be.PV.3PL beat.BI.IPFV.PASS.3PL

    The boys seem to have been (being) beaten.

(52) ʃakl el-welād kānu   tūl el-sana biyitderbo
    form the-boys be.PV.3PL all the-year beat.BI.IPFV.PASS.3PL

    The boys seem to have been (being) beaten all year.

Although the dependent NP (within the CSC headed by *ʃakl*) can (and sometimes must) control predicate agreement, it is not necessarily interpreted as the PSOURCE. In terms of the distinction drawn by Asudeh and Toivonen (2012) the PSOURCE is not of type *individual* in these cases, but just some aspect of the wider *eventuality*. Consider the following corpus example in this connection.

(53) ʃakl-ena   keda ħa-nedxol   ʕala ʕamaleyyet ʔalb maftūħ
    form-1PL this FUT-enter.1PL on   operation   heart open.PSP.SGM

    It seems that we'll get into an open heart operation.   SE-SKL

Here the first interpretation that comes to mind is **not** the one in which 'we' refers to the group of doctors commenting on what they are actually doing. A plausible context is one in which the speaker is observing the operation or the patient or drawing a conclusion from the fact that the doctors are taking so long discussing options: the 'we' in such scenarios refers rather to people related to the patient in some way, perhaps those who might be affected by him having this operation. The same is true of (54), in which the annexed pronoun (dependent NP within the CSC) and the embedded subject are co-referential, referring to those who will make the arrest, but they do not have to be visible to the speaker (the speaker may, for example, be reporting on a rumour which is currently circulating). Hence, the PSOURCE is not required to be of type *individual* for (54).

(54) ʃakl-ohom ħayaʕtaqilū-h
    form-3PL arrest.FUT.3PL-3SGM

    It seems that they're going to arrest him.
    They seem to be going to arrest him.   SE-SHL

Another rather interesting structure is shown in (55), where the embedded verb is an OBJ-PSYCH verb (hence literally 'They were lacking to you') and the 'possessor' in *ʃakl-uhum* corresponds to the theme argument **not** the experiencer argument, while it is plausibly the appearance/behaviour of the experiencer which gives rise to the reported perception.

(55) ʃakl-uhum   waħaʃū-k
      form-POSS.3PL lack.PV.3PL-2SGM

      It seems like you missed them!   SE-SHL

The key points shown in this section are (i) the dependent NP/pronoun in the *ʃakl* CSC may (and sometimes, must) control agreement of a temporal auxiliary and of the predicate but (ii) is not obligatorily interpreted as the PSOURCE. In the following section, we consider a structure in which the embedded predicate is a CP introduced by a complementising particle.

3.2 kaʔin Complements

We have now seen examples in which the CSC headed by *ʃakl* is followed by an adjectival or deverbal participial predicative phrase, and cases in which it is followed by a finite predication. It may also occur with a sentential (CP) complement, which must be introduced by the complementising particle *kaʔin*. Notice that in this case, there is no requirement of co-reference between the dependent nominal inside the CSC and the subject of the (embedded) predication.

(56) ʃakl-aha   kaʔinn-uhum deħku   ʕalē-ha
      form-3SGF as.if-3PL   laugh.PV.3PL on-3SGF

      She seems as if they've fooled her.

(57) ʃakl el-welād   kaʔenn-aha darabet-hom
      form DEF-boys as.if-3SGF   beat.PV.3SGF-3PL

      The boys seem as if she's beaten them.

(58) ʃakl-ak   kaʔinn-ak mabsūt
      form-2SGM as.if-2SGM happy.PSP.SGM

      You seem as if you're happy.

There is an important and clear difference between these examples, involving a CP with the complementising particle *kaʔin*, and the previous examples with *ʃakl*, which do not involve a complementiser: (56)-(58) and other examples with this pattern receive an interpretation in which some aspect of the individual denoted by the dependent NP in the CSC is the source of the perceptual report. That is, these examples involve an *individual* PSOURCE.

The contrast between the following examples supports the observation that it is essentially the presence of the complementising particle *kaʔin* which introduces the

individual PSOURCE requirement. (59) requires direct observation of the patient, while in (60) it can be any aspect of the eventuality: for example, the reaction of her mother, or the lack of medicine in her room.

(59) kān   ʃakl-aha   kaʔenn-aha ʔetħassinit
     be.PV.3SGM form-3SGF as.if-3SGF got.better.PV.3SGF
     She seemed as if she got better.   SE-SHL

(60) ʃakl-aha   ʔetħassinit
     form-3SGF got.better.PV.3SGF
     It seems she's got better.

An association between *kaʔin* and some form of direct perception is found in other examples in which a NP occurs with a *kaʔin*-CP. Thus consider (61), with a CSC as subject and (62), with a simple NP subject. Each of these is interpreted as reporting a direct observation of the office (as indicated by the English free translation), and in fact substitution of the 'standard' complementising particle *ʔin* is impossible. [12]

(61) maktab-ak   kaʔinn-u   lessa mitratteb
     office-2SGM as.if-3SGM just tidy.PSP.SGM
     Your office looks as if its just been tidied up.

(62) el-maktab kaʔinn-u   lessa mitratteb
     DEF-office as.if-3SGM just tidy.PSP.SGM
     The office looks as if its just been tidied up.

(63) *el-maktab ʔinn-u   lessa mitratteb
     DEF-office that-3SGM just tidy.PSP.SGM
     The office that its just been tidied up.

Although we do not provide any details of an analysis here, we can view the relation between the CSC and the following *kaʔin* CP as mediated by an (unexpressed) copula predicate. It is no surprise then that we get a temporal auxiliary if the perception reported is temporally located in the past, as illustrated in (64). As with the other examples in this subsection, in (64) some aspect of the directly perceived corpse is the source of the perceptual report.

(64) kān   ʃakl-o   kaʔenn-o   mayyet men fatra tawīla
     be.PV.3SGM form-3SGM as.if-3SGM dead   from time long
     He seemed as if he's been dead for a long time.

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[12]There is, of course, a crucial additional factor distinguishing (61), for example, from examples such as (58) and (57): in the latter examples there is an inalienable relation between the 'part' (head N) and the 'whole' (dependent NP). (61) would be totally infelicitous uttered when 'you' but not 'the office' was visible.

Agreement on the auxiliary is optional, where it can be controlled either by *ʃakl* or the annexed (dependent) nominal, with no apparent difference in meaning.

(65) kān   ʃakl-aha   kaʔenn-aha ʔetħassinit
     be.PV.3SGM form-3SGF as.if-3SGF got.better.PV.3SGF

     She seemed as if she got better.   SE-SHL

(66) ʃakl el-welād kān   kaʔenn-ohom etdarabo
     form DEF-boys be.PV.3SGM as.if-3PL   beat.PV.PASS.3PL

     The boys seemed as if they were beaten.

(67) ʃakl el-welād kānu   kaʔenn-ohom etdarabo
     form DEF-boys be.PV.3PL as.if-3PL   beat.PV.PASS.3PL

     The boys seemed as if they were beaten.

3.3 Summary and Discussion

We have shown in this section that a natural and frequent means to express perceptual reports in ECA involves the use of a CSC headed by the N *ʃakl* 'form' and either a predicative phrase, finite IP or sentential complement introduced by the complementising particle *kaʔin*. The construct headed by *ʃakl* has unusual agreement properties, where the complement sometimes agrees with the dependent N (rather than the head N). However the pattern of agreement which we see does not correlate with the distinction between *individual* and *eventuality* types of PSOURCE: agreement patterns are basically independent of whether the dependent (annexed) nominal serves as PSOURCE. We have seen two further clear patterns in the data. First, a bare finite complement may occur only when the subject is co-referential with the dependent N within the CSC. Second, an individual PSOURCE requirement emerges only when *ʃakl* CS combines with a COMP, which must be introduced by *kaʔin*. The central role of this complementising particle in the construction is consistent with, and similar to, the role which Camilleri et al. (2014) argue is played by the cognate particle in MSA copy raising with the verb *yabdū* 'seem'.

4 Summary

This paper has presented a preliminary investigation of the expression of perceptual reports in ECA, based on a substantial corpus of data collected using the webcrawling corpus collection tools available in SketchEngine. We have discussed two constructions which are used to express perceptual reports in ECA. The first, less frequent, uses the AP *bāyen*. We have suggested that *bāyen* occurs principally in two constructions. The first is an expletive construction, and here there is no requirement that the PSOURCE be a (visible) individual. In the second construction, the PSOURCE is expressed in a PP, which we take to be in the matrix clause. This is reminiscent of the expression of an individual PSOURCE in a PP in Swedish,

discussed by Asudeh and Toivonen (2012). This construction has some interesting agreement properties, which we are tempted to view as cases of parasitic agreement. That is, predicate agreement is not always a reliable subject diagnostic. The second, more frequent way of expressing perceptual reports involved the use of the noun *ʃakl*, heading a (nominal) construct state construction and co-occurring with a predicative phrase, IP or a CP. The choice of complementising particle for CP in this construction is limited to *kaʔin*, and we argue that an individual P-SOURCE interpretation arises obligatorily, as in English CR, in such cases. Where the *ʃakl* CSC occurs with an IP/finite verbal complement, then the dependent nominal within the CSC and the subject of the finite verb are co-referential. With the *ʃakl* constructions we have also seen some interesting agreement facts, notably cases in which the dependent nominal within the NP CSC may control predicate agreement at clausal level.

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