A cross dialectal view of the Arabic dative alternation

Maris Camilleri
University of Essex
mcamil@essex.ac.uk

Shaimaa ElSadek
University of Essex
sesels@essex.ac.uk

Louisa Sadler
University of Essex
louisa@essex.ac.uk

Abstract: This paper is concerned with the syntax of ditransitive verbs in Arabic. We concentrate on the vernaculars, focussing in particular on three geographically spread dialects: Egyptian Cairene Arabic, the dominant vernacular in Egypt, Hijazi Arabic, spoken in Western Saudi Arabia and Maltese, a mixed language with a Magrebi/Siculo-Arabic stratum. We show that all three exhibit an alternation (the dative alternation) between a ditransitive ('double object') construction and a corresponding prepositional dative construction, and outline a number of differences between these constructions in the different varieties of Arabic. We consider the distribution of verbs exhibiting the dative alternation in the light of Ryding's (2011) observations concerning Modern Standard Arabic.

Keywords: ditransitive predicates; dative alternation; Lexical Functional Grammar; Lexical Mapping Theory; Arabic vernaculars

1. Introduction

This paper is concerned with the syntax of ditransitive verbs in Arabic. We concentrate on the vernaculars, focussing in particular on three dialects which are relatively distant from each other: Egyptian Cairene Arabic (ECA), the dominant vernacular in Egypt (widely understood in the Arab world through its prevalance in the film and television media), Hijazi Arabic (HA), spoken in Western Saudi Arabia, and Maltese (MT), a mixed language with a Maghrebi/Siculo-Arabic stratum, a Romance (Sicilian, Italian) superstratum and an English adstratum. Our primary aim here is to offer a contribution to the description of syntactic variation in modern vernacular Arabic although we also briefly consider the theoretical

implications of the data we present in relation to the lexical semantic factors which are taken to underpin the syntactic behaviour of ditransitive verbs, and the syntactic analysis of this class of verbs within the framework of Lexical Functional Grammar (LFG).

The following pair of examples from Egyptian Cairene Arabic illustrates the alternation between what we will call the prepositional dative construction (PDC), in which the recipient/goal argument is the object of a preposition *li-*, and the ditransitive construction (DTC) in which both the recipient/goal argument and the theme appear as bare NPs (with the recipient/goal in canonical object position, preceding the theme).[1] Note that we have followed what seems to be standard practice in Arabic linguistics and glossed the prepositional element as a morph. This practice reflects Arabic orthography (which attaches single character prepositions to the following word) and should not be taken to necessarily imply a theoretical position in favour of analysing the preposition preceding a non-pronominal NP as morphologically part of the noun.

(1) ʔahmad ʔedda   el-kitāb   li-mona
     Ahmad gave.PV.3SGM DEF-book to-Mona
     'Ahmed gave the book to Mona.'   ECA

(2) ʔahmad ʔedda   mona el-kitāb
     Ahmad gave.PV.3SGM Mona DEF-book
     'Ahmed gave Mona the book.'   ECA

In broad terms, we show that while three relatively diverse dialects share with Modern Standard Arabic the property of allowing an alternation between the **prepositional dative construction** (PDC) and the **ditransitive construction** (DTC), there are also some interesting differences in terms of the morphosyntactic and morphosemantic conditions that govern the constructions in the different varieties of Arabic. We will see some clear differences in the use and status of the different variants across the dialects and a clear effect of grammaticalisation in Maltese.

Throughout (and following Ouhalla 1994) we will use the term **dative alternation** to refer to the alternation between the two constructions. Our terminology throughout the presentation of the empirical, descriptive material in this paper should not itself be interpreted as implying any particu-

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[1] We use the following abbreviations in the interlinear glossing: ACC 'accusative'; DAT 'dative'; DEF 'definite'; F 'feminine'; IMP 'imperative'; IMPV 'imperfective'; INDEF 'indefinite'; M 'masculine'; NOM 'nominative'; PST 'past'; PV 'perfective'; PL 'plural'; SG 'singular'.

lar analytic view – for this reason we eschew use of the term 'double object construction' in favour of *ditransitive construction* precisely to avoid the implication that both arguments should be viewed as (primary) objects. Further, the term *prepositional dative construction* used in the description of the construction should not be taken to necessarily implicate the presence of a P in the syntactic representation in all three dialects, or indeed to suggest that the status of the *li*-marked argument is necessarily the same across the three dialects.

There is an enormous literature on the dative alternation, that is, on the syntactic realization of those classes of three argument verbs typically involving, in some broad sense, causation of potential possession, and hence a recipient argument, which allow alternative codings of the theme and recipient arguments in the syntax. Although it would fall well beyond the scope of the present contribution to address this literature thoroughly, we will briefly review a number of aspects to which our study is potentially of relevance.

Much of this literature addresses the question of the extent to which there is a clear lexical semantic basis underpinning the classes of alternating and non-alternating three-place predicates. Here a number of different views can be distinguished. Some work assumes that both alternative realizations share the same meaning (for example, Baker 1988; Larson 1988; Bresnan & Moshi 1990; Wechsler 1995), but the predominant **uniform multiple meaning approach** (Rappaport Hovav & Levin 2008) associates the availability of two distinct but related lexical semantic structures with alternating predicates. The idea is broadly that a CAUSED POSSESSION frame underlies the DTC and a CAUSED DIRECTED MOTION frame underlies the PDC (see Pinker 1989; Jackendoff 1990; Krifka 1999, and many others, including work which embraces a syntactic approach to these distinctions in predicate argument frames such as Hale & Keyser 2002). In more recent work, Rappaport Hovav and Levin (2008) argue against the uniform multiple meaning approach (in which a verb such as *give* is associated two different lexical semantic structures) and lay out the case for a more fine-grained "verb sensitive" approach which recognises distinctions among (subclasses of) verbs. They take *give*-type predicates to always involve a CAUSED POSSESSION semantic frame, while *throw*-type predicates are associated with both CAUSED MOTION and CAUSED POSSESSION in the English PDC.

Our discussion of the classes of predicates which we find permit the dative alternation in the three vernaculars contributes new data to this ongoing debate concerning the semantic basis underpinning the dative

alternation, and in particular to the question of whether CAUSED POS-SESSION is the key characteristic.

A very significant proportion of the work on the dative alternation is concerned with English, where verbs exhibiting the DTC include those that signify acts of giving, sending, instantaneous causation of ballistic motion, continuation causation of accompanied motion in a deictically specified direction and verbs of future having. On the basis of a small language sample, Croft et al. (2001) propose a hierarchy such that if the DTC is constrained, it is most likely at the higher end of the hierarchy ordering verbs of giving above verbs of sending, above verbs of caused ballistic motion. As we will see, this is consistent with data we present from the three Arabic vernaculars.

While in a language like English the recipient argument (of the relevant three argument verbs) is encoded either as a prepositional oblique (with *to*) or as an NP "first object", other languages may use a dative case, as in the following German and Russian examples.
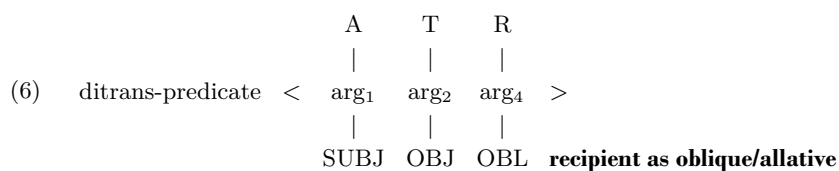
(3) Ich   schickte ihm   ein Buch.
     I.NOM sent   him.DAT a   book
     'I sent him a book.'   (Beavers 2006, 185)

(4) Ja   dal   Ivanu   knigu.
     I.NOM give.PST Ivan.DAT book.ACC
     'I gave Ivan a book.'   (Levin 2006)

This raises the question as to whether the dative recipient in such examples has the same status in the syntax (or indeed in terms of the semantic entailments holding over the participant) as the recipient in the ditransitive construction, or that in the prepositional oblique construction. Levin (2006) argues that a dative NP recipient has more in common with the recipient object in a DTC than it does with the recipient coded by means of the prepositional construction, which often involves an allative preposition also used to mark goals (such as English *to*). A similar position is taken in Beavers's (2006) work on alternations and lexical meaning. Levin (2006) suggests that while three constructions are found crosslinguistically, as shown in (5), the first two of these are morphosyntactic strategies in complementary distribution, in the sense that a given language will only exhibit one of these two. As we will see below, the Arabic data is immediately relevant to this question, and we believe that a single language may in fact exhibit both of these strategies in parallel.
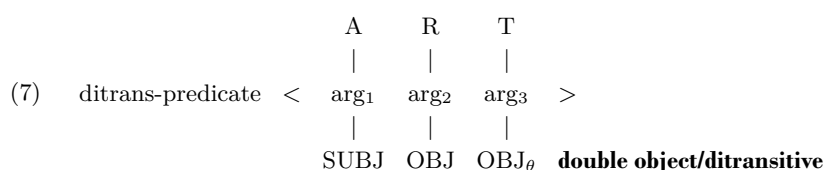
(5)　double object construction: recipient as possessor (recipient as first object)
　　　dative construction: recipient as possessor (theme as object)
　　　allative construction: recipient as goal NP/PP (theme as object)

Although we will not develop a complete analysis here, it is useful to make more explicit the set of assumptions concerning the syntax–lexical semantics interface which underpins our work. We assume a monostratal, surface-oriented constraint-based model of syntax, that of Lexical Functional Grammar. Different aspects of the surface syntax are represented in parallel structures which are placed in correspondence: c-structure (which represents the phrase structure of a sentence) and f-structure, which represents the abstract relational structure of sentences, organised around grammatical functions such as subject, object, predicate, adjunct and so on. The interface between syntax and lexical semantics involves a theory of linking which is concerned with capturing principles and generalizations with respect to the alignment between grammatical functions and semantic arguments. A version of this Lexical Mapping Theory (LMT) which offers a promising approach to ditransitives because it accommodates the three-way distinction between the double object, dative and allative construction types is proposed by Kibort (2008) (see also Kibort 2007). Kibort's approach involves an intermediate level of ordered argument positions between participant roles (characterised in terms of sets of entailments in the spirit of the approach of Dowty 1991) and surface grammatical functions.[2] The array of potential morphosyntactic realizations available can be visualised by means of the following diagrams, where A, T and R may be thought as standing for bundles of entailments which characterise these participants. To aid the reader in keeping track of the participants, A, T and R are mnemonic for agent, theme and recipient respectively: they should not be interpreted as implying a commitment to theta-roles. (6) represents the prepositional oblique (or allative) mapping, in which the theme argument is mapped to direct object and the recipient surfaces as an oblique.

$$
\begin{array}{cccc}
 & A & T & R \\
 & | & | & | \\
(6)\quad \text{ditrans-predicate} \quad < & \text{arg}_1 & \text{arg}_2 & \text{arg}_4 \quad > \\
 & | & | & | \\
 & \text{SUBJ} & \text{OBJ} & \text{OBL} \quad \textbf{recipient as oblique/allative}
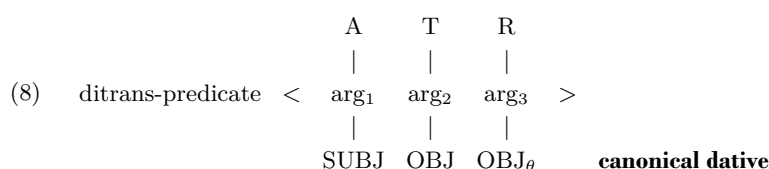\end{array}
$$

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[2] For further details on LFG's Lexical Mapping Theory in general see Falk (2001) and Dalrymple (2001).

Notice that in the ditransitive construction, shown in (7), the R participant is associated with more prominence in terms of the semantic entailments which hold over it (see also Beavers 2006 for extensive discussion of entailments and the ditransitive alternation). This prominence determines a mapping (mediated by the intervening level of argument structure) in which the recipient is mapped to direct object, and the theme argument to thematically restricted (or secondary) OBJ_θ.

$$
\begin{array}{cccccc}
 & & & A & R & T \\
 & & & | & | & | \\
(7) & \text{ditrans-predicate} & < & \text{arg}_1 & \text{arg}_2 & \text{arg}_3 & > \\
 & & & | & | & | \\
 & & & \text{SUBJ} & \text{OBJ} & \text{OBJ}_\theta & \textbf{double object/ditransitive}
\end{array}
$$

The grammatical function OBJ_θ is associated with the second, thematically restricted object in languages which allow a second object (as in the English DTC). Crosslinguistically, the range of semantic roles (or sets of entailments) which may be associated with the OBJ_θ varies: in English it is associated only with the theme, but other languages associate roles such as recipient, goal or beneficiary with the OBJ_θ. The dative construction, shown in (8), maps the recipient argument to the second, thematicallyrestricted OBJ_θ.

$$
\begin{array}{cccccc}
 & & & A & T & R \\
 & & & | & | & | \\
(8) & \text{ditrans-predicate} & < & \text{arg}_1 & \text{arg}_2 & \text{arg}_3 & > \\
 & & & | & | & | \\
 & & & \text{SUBJ} & \text{OBJ} & \text{OBJ}_\theta & \textbf{canonical dative}
\end{array}
$$

An issue which is relevant to our eventual analysis of the Arabic data is therefore that of determining what the nature of the prepositional construction is, that is, whether it corresponds to an allative or oblique construction (as in English) or to a dative construction (involving an OBJ_θ in LFG terms). With this background in place, we now turn to a discussion of ditransitive predicates in the three Arabic vernaculars.

2. Prepositional dative construction

Ditransitive verbs, that is, verbs with three arguments (typically an agent, theme and recipient/possessor or goal), may occur in what we refer to as a **prepositional dative construction** (PDC) in which the theme argument

is the object. In the Arabic vernaculars the recipient is coded by means of a prepositional element *li-* and its variants.

Although the canonical order of postverbal elements has the theme NP object preceding the prepositional argument, as in (1) and in the parallel examples for the three dialects given in (9), (10) and (11) (for HA, ECA and MT respectively), the reverse order of arguments is also possible in both ECA and HA, as shown in (12)–(13). By contrast, this order is not possible in MT, except in cases in which the theme is in a pausally offset discourse position, as the contrast between (14)–(15) illustrates. This difference reflects a wider distinction between MT and the other vernaculars in terms of word order constraints.

(9) ʔahmad labbas   al-malābis li-ḫālid
     Ahmad dress.PV.3SGM DEF-clothes to-Khalid
     'Ahmed dressed Khalid in the clothes.'   HA

(10) labbes-t   el-hudūm   l-el-walad
     dress.PV-1SG DEF-clothes to-DEF-boy
     'I dressed the boy in the clothes.'   ECA

(11) libbis-t   il-ħwejjeġ   lit-tfal
     dress.PV-1SG DEF-clothes DAT.DEF-children
     'I dressed the children in the clothes.'   MT

(12) labbas-t   li-ʕali al-malābis
     dress.PV-1SG to-Ali DEF-clothes
     'I dressed Ali in the clothes.'   HA

(13) labbes-t   l-el-walad   el-hudūm
     dress.PV-1SG to-DEF-boy DEF-clothes
     'I dressed the boy in the clothes.'   ECA

(14) *libbis-t   lit-tfal   il-ħwejjeġ
     dress.PV-1SG DAT.DEF-children DEF-clothes
     'I dressed the children in the clothes.'   MT

(15) libbis-t   lit-tfal,   il-ħwejjeġ
     dress.PV-1SG DAT.DEF-children DEF-clothes
     'The clothes, I dressed the children in them.'   MT

Note that throughout, we will gloss *l-* in the Maltese examples as 'DAT', reflecting our view that this element has grammaticalised into a case marker in that language (see Camilleri & Sadler 2012; Sadler & Camilleri 2013).

For HA we gloss this form as 'to'. For ECA we adopt a mixed practice, glossing as 'DAT' when the *l*-forms are attached to the verb, and otherwise as 'to'. A fascinating discussion of the status of *l*-forms attached to the verb is Retso (1987), who also suggests the form's reanalysis as a dative marker in some dialects.

If the theme argument is pronominal it is (normally) expressed by means of what is traditionally described as a suffixal pronominal form (*ḍamāʕir muttaṣila*), as is normal for pronominal direct objects.[3]

(16) labbes-t-ha   l-el-walad
      dress.PV-1SG-3SGF.ACC to-DEF-boy
      'I dressed the boy in them (it).'   ECA

(17) ʔahmad labbas-ha   li-ḫālid
      Ahmad dress.PV.3SGM-3SGF.ACC to-Khalid
      'Ahmed dressed Khalid in them (it).'   HA

(18) Libbis-t-hom   lit-tfal
      dress.PV-1SG-3PL.ACC DAT.DEF-children
      'I dressed the children in them.'   MT

When the object of a preposition in Arabic is pronominal, a weak or suffixed form of the pronoun attaches to the preposition in the vernaculars, just as in Modern Standard Arabic (MSA). The traditional description of these elements is very consistent with the view that they are inflectional elements (although they are often assumed to be post-lexical clitics in generative approaches). Some illustrative paradigms for ECA are given in Table 1.

(19) and (20) are examples of prepositional dative constructions with pronominal recipients in ECA and HA respectively: as expected, the recipient/goal argument is realized as an inflected form of *li-*.

(19) labbes-t   el-hudūm   lu-hum
      dress.PV-1SG DEF-clothes to-3PL.ACC
      'I dressed them in the clothes.'   ECA

(20) biʕ-t   al-bayt   l-ū
      sell.PV-1SG DEF-house to-3SGM.ACC
      'I sold the house to him.'   HA

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[3] Note that non-human plurals may govern SGF agreement forms in the Arabic vernaculars, but not in Maltese, so the 3SGF.ACC affix on the verb in (16) may refer to a plural object.

Table 1: Some ECA Inflecting Prepositions (Abdel-Massih 1979/2011, 215)

	bi 'with, by'	fi 'in'	ʕala 'on'
1S	biyya	fiyya	ʕalayya
2MS	biik	fiik	ʕaleek
2FS	biiki	fiiki	ʕaleeki
3MS	biih	fiih	ʕaleeh
3FS	biiha	fiiha	ʕaleeha
1P	biina	fiina	ʕaleena
2P	biikum	fiikum	ʕaleekum
3P	biihum	fiihum	ʕaleehum

Interestingly, just as a non-pronominal *li*-marked NP may appear between the verb and the theme argument, so too can a pronominal recipient, resulting in an example such as (21) for HA and (22) for ECA. Note that the *l*-marked pronominal recipient is transcribed as part of the verbal word in the ECA examples, a matter to which we return shortly. Examples (23)–(24) also illustrate the case where both theme and recipient are pronominal.

(21) labbas-t   l-ū   al-malābis
     dress.PV.1SG to-3SGM.ACC DEF-clothes
     'I dressed him in the clothes.'   HA

(22) labbes-t-l-u   el-hudūm
     dress.PV-1SG-DAT-3SGM DEF-clothes
     'I dressed him in the clothes.'   ECA

(23) ʔahmad labbas-ha   l-ū
     Ahmad dress.PV.3SGM-3SGF.ACC to-3SGM.ACC
     'Ahmed dressed him in them/it.'   HA

(24) labbes-t-ha   l-ū
     dress.PV-1SG-3SGF.ACC to-3SGM.ACC
     'I dressed him in them/it.'   ECA

Turning now to Maltese, a second difference is evident between the prepositional dative construction in Maltese and that in its sister dialects. Maltese has inflecting prepositions just like the other dialects. Table 2 illustrates the prepositions *ma'* 'with' and *fuq* 'on', alongside *lil* 'to'. Note however that we believe there is persuasive evidence that the latter form has more

the status of a grammatical marker than a semantic preposition coding an OBLique argument (Sadler & Camilleri 2013).

Table 2: Prepositional inflection in Maltese

Def NP	Indef NP	Prn.3sGM	Prn.2sG
ma' John	ma' tifel	miegħ-u	miegħ-ek
'with John'	'with a boy'	'with him'	'with you(sg)'
fuq John	fuq tifel	fuq-u	fuq-ek
'on John'	'on a boy'	'on him'	'on you(sg)'
lil Marija	lil-tifel	lil-u	lil-ek
'to Mary'	'to a boy'	'to him'	'to you(sg)'

When the recipient argument is pronominal we do not find an inflected preposition corresponding to the forms (19) and (20) above: (25) is un-grammatical. Rather the pronominal recipient/goal argument is expressed by affixation to the verb, as shown in (26). When both theme and recipient/goal arguments are pronominal, they are both affixal in MT and occur in the order theme-recipient, as shown in (27).

(25) *Libbis-t   il-ħwejjeġ   l-hom
      dress.PV-1SG DEF-clothes DAT-3PL
      'I dressed them in the clothes.'   MT

(26) Libbis-t-i-l-hom   il-ħwejjeġ
      dress.PV-1SG-EPENT.VWL-DAT-3PL DEF-clothes
      'I dressed them in the clothes.'   MT

(27) Libbis-t-hom-l-hom
      dress.PV-1SG-3PL.ACC-DAT-3PL
      'I dressed them in them.'   MT

The significant difference between MT and the other vernaculars is thus the requirement that a pronominal *l*-marked recipient be expressed as a verbal inflection, from which it follows that (25) is ungrammatical. The only exception to this is when certain information structure constraints intervene. In (28), for example, the recipient is contrastively focussed and hence we see a strong (syntactic) pronominal form.

(28) Libbis-t   il-ħwejjeġ   LILHOM u   mhux lilkom
      dress.PV-1SG DEF-clothes DAT.3PL CONJ NEG DAT.2PL
      'I dressed THEM in the clothes and not you.'   MT

One striking aspect of the ECA data is the behaviour of the prepositional argument when verb adjacent. The clear pattern presented by the Maltese data may be suggestive of an analysis for the ECA examples such as (22): the question which arises is whether the pronominal recipient is in fact a verbal inflection in these cases, as it is in MT. This in turn would have consequences for its syntactic analysis, to which we return in section 7. Since incorporation of an oblique argument is rather less expected than incorporation of a term argument, evidence for the affixal status of the pronominal recipient would in turn support an analysis as a second, indirect or thematically restricted object. Note that a distinction of the appropriate sort, between obliques and dative arguments or goal/recipients, is common to a number of frameworks. Relational Grammar systematically distinguishes recipient arguments in prepositional dative constructions, which are taken to be indirect objects or initial and final 3 **terms**, from obliques. Along similar lines, working within the framework of Lexical Functional Grammar (LFG), Sadler and Camilleri (2013) argue that the *li*-marked recipient in Maltese ditransitive structures is not an oblique but a thematically restricted object, or OBJ$_\theta$.

While suggestive of word-internal (morphological) status, the fact that an element is represented orthographically as part of the following (or preceding) word does not necessarily distinguish affixes from proclitics (and enclitics); that is, the orthographic word may not necessarily correspond to the morphological word, a point made in Haspelmath (2011) among many other sources. Standard Arabic orthography represents a number of prepositions and conjunctive, discourse and aspectual particles as part of the following word, yet, as Watson (2002) observes in connection with the stress pattern of ECA, a number of these elements may be proclitics, rather than part of the morphological word, since they attach without having any effect on the word stress, properties which are typical of canonical simple clitics (Spencer & Luis 2012). On the other hand, elements such as the imperfect prefix, the subject and object pronominal suffixes and the negative suffix effect the assignment of lexical stress (and syllabification). Indeed she argues specifically that in ECA "prepositional phrases which complement a verb are invariably incorporated into the phonological word of the verb when they take a pronominal suffix. This is seen most clearly when the verb is negated by the discontinuous morpheme $ma + š$ (Abdel-Massih 1979/2011)" (Watson 2002, 62). Sentential negation in ECA is expressed by means of a (usually) discontinuous element, the second part of which attaches to the end of the verbal word, as shown in table 3 from

Abdel-Massih (1979/2011, 151–152) and the following examples (29)–(30) (Abdel-Massih 1979/2011, 136).[4]

Table 3: ECA negation (after Abdel-Massih 1979/2011)

/ma+katab+lak+š/	ma katablakš	'he did not write to you (SGM)'
/ma+katab+lina+š/	ma katablināš	'he did not write to us'
/ma+katab+ha+lina+š/	ma katabhalnāš	'he did not write it (SGF) to us'

(29) ma-baʕat-tu-hum-lu-hum-š
      NEG-send.PV-1SG-3PL.ACC-DAT-3PL-NEG
      'I did not send them to them.'   ECA

(30) ma-katab-ha-l-ak-š
      NEG-write.PV.3SGM-3SGF.ACC-DAT-2SGM-NEG
      'He did not write it(f) for you.'   ECA

A crucial point from our perspective is that the negative marker may attach **after** the *l*-marked pronominal: if the negative marker is itself a morphological affix then this provides evidence that the *l*-pronominal is also affixal. Evidence that the negative element *š* is part of the phonological word is provided by its interaction with the word-internal process of pre-suffix vowel lengthening in ECA. This process takes place within the morphological word and is triggered by the constraint that a morpheme may not be suffixed to a form ending in a short vowel (Watson 2002, 182). It points to the conclusion that both the second negative marker and the (attached) *l*-marked pronominal forms are indeed suffixes. Watson's examples are as follows in table (4), where *š* is the negative marker, *-ni*, *-u* and *-ha* the 1SG, 3SGM and 3SGF object suffixes and *-lak* the 2SGM dative/recipient suffix.

Note that although Watson speaks of "prepositional phrases", to our knowledge, the **only** "prepositional" elements which permit this are the *l*-pronominals: pronominally inflected forms of e.g. *fi-* 'in' and *min-* 'from' do

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[4] We refer to *ma* + *š* as a discontinuous element without prejudice to the precise details of the morphological analysis. Several pieces of evidence tend to support a double exponence view over a circumfixal account, however. One of these is that the distribution of the *š* element is sensitive to the presence of (certain) NPIs in both MT and ECA. We are grateful to an anonymous reviewer for reminding us of the relevance of this fact. See Haspelmath & Caruana (1996) for the MT facts and Soltan (2012) for ECA.

Table 4: ECA verbal suffixes (after Watson 2002)

/ma darastu+š/	ma darastūš	'you (PL) didn't learn'
/ma šuft+u+š/	ma šuftūš	'I didn't see it (SGM)'
/ʕallimu+ni/	ʕallimūni	'they taught me'
/šufna+ha/	šufnāha	'we saw her'
/ʔult+u+lak/	ʔultūlak	'I told you (SGM) it (SGM)'

not permit 'neg-wrap' but must occur after the second part of the negative marker as a separate syntactic word.

On the basis of these observations, then, the evidence strongly suggests that a historical process of grammaticalisation is in progress, such that the pronominal *l-* forms in ECA have now acquired affixal status alongside their status as independent (syntactic) words. Note that it is not unknown for elements to have such a dual status as affixes and syntactically independent elements: see Luis & Otoguro (2011) for a recent instance of the argument that Portuguese weak proclitic and enclitic object pronouns are in fact syntactic words when proclitic, but word-level suffixes when enclitic. An interesting further twist to the ECA data, however, is that even when verb-adjacent, it appears that the pronominally-inflected *l-* forms have a dual status. Firstly, authentic recent ECA sources (messages on Egyptian Twitter feeds) indicate both orthographic practises (attached and non-attached)[5]. Secondly, given that the second negative element *-š* is a word-final affix, the fact that both the forms in (31) are found is indicative of this dual status synchronically.

(31) a.   ma-baʕate-lū-š
      NEG-send.PV.1SG-DAT.3SGM-NEG
      'I didn't send (it) to him.'

    b.   ma-baʕate-š   l-ū
      NEG-send.PV.1SG-NEG to-3SGM
      'I didn't send (it) to him.'

If these observations are along the right track, a picture emerges in which the dialects may be placed upon a grammaticalisation cline with respect to the expression of the pronominal *li-* marked argument. The highest degree of grammaticalisation of the pronominal *li-*marked argument is seen

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[5] *moš hasmaḥ lu-hum* 'I won't allow (for)-them' as against *baʔul-l-ū* 'I'm telling to-him' and *baʕate-l-ū* 'I sent (to)-him'.

in Maltese, where the argument is expressed as a verbal inflection, while ECA is at an intermediate stage, in which potentially both morphological and syntactic structures co-exist in the grammar (as illustrated by (31) above), on the assumption that the -š negation marks the end of the morphological word. A question then arises as to the status of the verb adjacent pronominal recipient argument in HA such as (21), the issue being whether this element is always an independent syntactic word, which would be consistent with the view that HA is less far along the grammaticalisation cline in this respect. We leave this issue for future work, but tend to the view that the *li*-marked pronominal in HA corresponds to a separate syntactic word (note that this does not preclude the possibility that it is cliticised post-syntactically as a weak form).

It is useful to summarize the main data points in this section at this point. We have seen that the prepositional dative construction allows a greater degree of word order freedom in HA and ECA than it does in Maltese: in the latter language the theme NP must precede the recipient/goal argument. On the other hand, pronominal recipients are obligatorily incorporated into the verbal morphology in Maltese and optionally so in ECA and not at all in HA. This looks like a clear grammaticalisation path, with Maltese further along the grammaticalisation cline.

In the case of prototypical ditransitive verbs such as *ʔedda* (ECA) 'give' or *bāʕ* 'sell' (HA), the semantic role of the *li*-marked argument is that of recipient or goal, and in discussing predicates exhibiting the dative alternation we have generally used the term 'recipient' to refer to this participant. It should be noted, however, that arguments with a range of thematic or semantic roles may be realized by the *li*- prepositional marker in all three vernaculars, most particularly in a range of constructions involving non-selected arguments, such as external possessors, benefactives and affected experiencers, as in the following.

(32) zawwad-t   al-flūs   lu-hum
      make.increase.PV-1SG DEF-money to-3PL.ACC
      'I increased the money for him.'   HA

(33) saxxan-t-u-lu-hum
      make.heat.PV-1SG-3SGM.ACC-DAT-3PL
      'I heated it for them.'   ECA

3. The ditransitive construction

A subset of verbs which may appear with three arguments (that is, with a recipient/goal/beneficiary argument) also permit the recipient to occur as a bare NP, or in a pronominal form lacking the *l-* marker. We will return later to the conditions under which this construction is permitted in the various dialects. Recall that we refer to this construction as the **ditransitive construction** (DTC) in order to avoid the analytic implications potentially carried by the more familiar term *double object construction*. The order of arguments in the DTC is that the recipient/goal argument precedes the theme. The most straightforward examples are shown in (34)–(37), from which it can be observed that the DTC construction, when both arguments are full lexical NPs, is possible in ECA and in HA but not in MT.

(34) labbes-t   el-walad el-hudūm
      dress.PV-1SG DEF-boy DEF-clothes
      'I dressed the boy in the clothes.'   ECA

(35) farīd fahhim   ʕali d-dars
      farid explain.PV.3SGM Ali DEF-lesson
      'Farid explained the lesson to Ali.'   ECA (Abdel-Massih 1979/2011, 191)

(36) ʔahmad labbas   ḫālid   al-malābis
      Ahmad dress.PV.3SGM Khalid DEF-clothes
      'Ahmed dressed Khalid in the clothes.'   HA

(37) *Libbis-t   it-tfal   il-ħwejjeġ
      dress.PV-1SG DEF-children DEF-clothes
      'I dressed the children in the clothes.'   MT

On the other hand, if the **recipient** is a pronoun (and hence expressed affixally), the structure is fully grammatical in all three dialects. Note that in this construction the pronominal recipient is expressed by means of the standard "object" morphology, consistent with the view that it is "promoted" to the status of primary object (we will show further evidence in a subsequent section that this is the case). MT therefore shows a restriction on the DTC construction that limits it to cases in which the recipient argument is a pronominal. Such restrictions on the ditransitive construction (i.e., structures with two lexical NPs are lacking) are also found in many dialects of North Africa and the Maghreb (Tucker 2013).

(38) labbes-t-u   el-hudūm
      dress.PV-1SG-3SGM.ACC DEF-clothes
      'I dressed him in the clothes.'   ECA

(39) ʔahmad labbas-ū   al-malābis
      Ahmad dress.PV.3SGM-3SGM.ACC DEF-clothes
      'Ahmed dressed him in the clothes.'   HA

(40) Libbis-t-u   l-ħwejjeġ
      dress.PV-1SG-3SGM.ACC DEF-clothes
      'I dressed him in the clothes.'   MT

Given that in the contemporary vernaculars there is only one 'slot' in
the verbal morphology for an object pronominal, it is interesting to see
what structure arises when both theme and recipient/goal arguments
are pronominal.[6] We expect this to depend at least in part on what
free pronominal forms the language has available. That is, what (if any)
pronominal paradigm is available for expressing a pronominal theme 'ob-
ject' or 'secondary object' when the recipient argument (whether pronom-
inal or a lexical NP) is not a *li*-marked form?

The big picture is that both MT and HA permit both arguments to
be pronominal in the DTC, although they differ in detail, while ECA does
not. Broadly speaking, MT distinguishes two full sets of free pronouns, one
used mainly for subjects (and vocatives) and one used in several other en-
vironments, notably for direct and second objects (Camilleri 2011).[7] ECA
and HA have a single free pronoun paradigm set, but HA appears to per-
mit the use of these pronouns for the theme argument in the ditransitive
construction, while ECA reserves its use essentially to the subject function.
Table 5 provides the free pronoun paradigms for the dialects under dis-
cussion. Again, we refer the reader to Retso (1987) for some fascinating
discussion of differences in the pronominal systems across dialects.

The contrast between (41) and (42) follows from the observation
above, namely that HA permits the use of the free pronoun in a wider set
of circumstances than ECA. (43) illustrates the use of the non-nominative
free pronoun in MT.

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[6] This is in contrast to earlier forms of Arabic. As is well known, combinations of
two accusative pronominal affixes/clitics were attested in Classical Arabic. For a
recent discussion of such data see Walkow (to appear). We thank an anonymous
reviewer for pointing out to us the discussion in Gensler (1998).

[7] The distribution of these two sets of pronouns is slightly more complicated once
one considers pronominal topics: see Sadler & Camilleri (2013) for some discussion.

Table 5: Free pronoun forms

	HA free pronoun	ECA free pronoun	MT NOM. pronoun	MT NON-NOM. pronoun
1SG	ʔana	ʔana	jien	lili
2SGM	ʔinta	ʔinta	int	lilek
2SGF	ʔinti	ʔinti	int	lilek
3SGM	huwa	huwa	hu/huwa	lilu
3SGF	hi/hiya	hiya	hi/hija	lilha
1PL	iḥna	ʔiḥna	aħna	lilna
2PL	ʔantum	ʔintu	intom/intkom	lilkom
3PL	humma	humma	huma	lilhom

(41) *ʔedde-nā-kum   huwa
     give.PV-1PL-2PL.ACC he
     'We gave you it.'   ECA

(42) ʔaddain-na-kum   huwa
     give.PV-1PL-2PL.ACC he
     'We gave you it.'   HA

(43) Taj-nie-kom   lilhom
     give.PV-1PL-2PL.ACC them
     'We gave you them.'   MT

Before continuing our discussion of the DTC, we illustrate the availability of the free pronoun for the theme in the prepositional dative construction in HA. Our informants provide the following example as fully grammatical, without this argument being pausally offset or associated with a special information structure status. It remains to be determined under what conditions this use of a free pronoun is an acceptable alternative to the affixal pronominal in the prepositional dative construction (see Retso 1987 for some further discussion).

(44) ğāb   l-i   humma
     bring.PV.3SGM to-1SG them
     'He brought them to me.'   HA

Returning now to the DTC, the use of the free pronoun *huwa* for the theme argument in (42) is interesting. In MSA the free pronouns which are cognate with the sets shown in the HA, ECA and MT NOM columns

above are used only in subject function. In other circumstances a suffixal pronoun is used, suffixed to a verbal or prepositional stem (as object of that head) or to a nominal (as the dependent argument in a construct state construction). When an appropriate head is not available for some reason, a particle ʕiyyā is used to which a suffixal pronoun is attached. One such circumstance occurs when the recipient is expressed by means of the suffixed pronoun on the verbal stem, as in (45) (Abu-Chacra 2007, 94).

(45) bāʕa-nī   ʕiyyā-hu
      sell.PV.3SGM-1SG.ACC PTL-3SGM.ACC
      'He sold it to me.'   MSA

While this form is found in Syrian Arabic (for example, see (46) from Cowell (1964, 439)) and other Levantine varieties (see (47) from Wilmsen (2012, 216)) we do not find it in our data. For some interesting discussion of the distribution of ʕiyyā see Wilmsen (2012).

(46) a. fahhəm-ni   d-dars
          explain.IMP-1SG.ACC DEF-lesson
          'Explain the lesson to me.'   Syrian Arabic

      b. fahhəm-ni   yā
          explain.IMP-1SG.ACC PTL.3SGM.ACC
          'Explain it to me.'   Syrian Arabic

(47) aʕṭay-t-u   yā-hā
      give.PV-1SG-3SGM.ACC PTL-3SGF.ACC
      'I gave him it.'   Levantine

A further point is that the use of a free pronoun for the theme in the ditransitive construction in HA, illustrated in (42), appears to be limited to cases where the recipient is itself an attached pronoun – that is, it does not seem to be possible for the free pronoun to follow an NP recipient separating it from the verb.[8]

Finally, we note what is at first sight a surprising additional possibility, apparently available in HA but not grammatical in ECA or in MT, and which we refer to as the **bare recipient construction**. From one perspective this is a variant of the DTC (with two NPs) in which the order of arguments is linearly reversed such that the theme precedes the recipient, and both

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[8] The question does not of course arise at all for Maltese, since the ditransitive construction is itself limited to examples in which the recipient is pronominal. Neither does it arise in ECA since the free pronouns can only be used for subjects.

are clearly clause-internal rather than being placed in a pausally offset discourse position. From another perspective, this might be viewed as a variant of the prepositional dative construction, but in which the *l*-marking is absent. Note that the order theme - recipient is also possible when the theme is an attached pronominal, as shown in (49).

(48) mona labbas-at   al-malābis ḫālid
     Mona dress.PV-3SGF DEF-clothes Khalid
     'Mona dressed Khalid in the clothes.'   HA

(49) mona labbas-at-ha   ḫālid
     Mona dress.PV-3SGF-3SGF.ACC Khalid
     'Mona dressed Khalid in them.'   HA

This is an intriguing observation, and we have not come across any discussion in the literature of such a pattern in any contemporary dialect. It is potentially relevant to observe that the Gulf dialects are in general more conservative than those found in the Levant and to the west, and it is claimed in the literature that Classical Arabic did not have the usage of the *li-* construction found in MSA and the contemporary vernaculars, but used a construction in which each nominal was accusative case-marked, and in which the NPs could occur in either order.[9] On the other hand, many questions remain open concerning the extent to which the alternative shown in (48)–(49) is available to HA speakers, since parallel examples such as (50)–(51) and (52)–(53) are not accepted.

(50) al-raǧul sallaf   Muhammad al-flūs
     DEF-man lend.PV.3SGM Muhammad DEF-money
     'The man lent Muhammad the money.'   HA

(51)*al-raǧul sallaf   al-flūs   Muhammad
     the-man lend.PV.3SGM the-money Muhammad
     'The man lent Muhammad the money.'   HA

(52) mona saʔal-at   al-walad suʔāl
     Mona ask.PV-3SGF DEF-boy question
     'Mona asked the boy a question.'   HA

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[9] A reviewer wonders whether the possibility of expressing the recipient in this way might be related to the possibility in HA of expressing the theme as a stand-alone NOM pronominal. Note however that (42) is only grammatical with a pronominal recipient attached to the verb. We are not in a position to pursue this suggestion here.

(53) *mona saʔal-at   suʔāl   al-walad
     Mona ask.PV-3SGF question DEF-boy
     'Mona asked the boy a question.'   HA

To summarise our observations concerning the ditransitive construction
(DTC), we have shown that it occurs in all three dialects, but is heavily
restricted in Maltese where it is confined to pronominal recipients (which
are necessarily expressed by pronominal affixes on the verb). Both MT and
HA allow a free pronoun to be used for the theme argument, at least in the
case where the recipient is a pronominal affix, while this does not appear
to be possible in ECA.

   In the following section we turn to the question of determining which
verbs undergo the dative alternation, that is, permit both of these struc-
tures. We start by reviewing a recent discussion of this question for MSA.

4. The ditransitive alternation in Modern Standard Arabic

The ditransitive alternation in MSA may be illustrated with the verb *aʕṭā*
'give', a verb which is inherently a three-place predicate. As in the vernacu-
lars, the prepositional dative construction in MSA involves the preposition
li- 'to' which marks the recipient/goal argument.

(54) aʕṭay-tu   l-miftāḥ   li-l-bint-i
      give.PV-1SG DEF-key-ACC to-DEF-girl-GEN
      'I gave the key to the girl.'   MSA (Ryding 2011, 291)

(55) aʕṭay-tu   l-bint-a   l-miftāḥ-a
      give.PV-1SG DEF-girl-ACC DEF-key-ACC
      'I gave the girl the key.'   MSA (*idem.*)

(56) sa-yu-ʕṭii-haa   l-taðkarat-a
      FUT-3SGM-give.IMPV-3SGF.ACC DEF-ticket-ACC
      'He will give her the ticket.'   MSA (Ryding 2005, 515)

An interesting recent contribution concerned with the ditransitve structure
and its prepositional dative counterpart in Modern Standard Arabic is
Ryding (2011) (other relevant work includes Salih 1985; Ouhalla 1994;
Wilmsen 2010; 2011). Ryding is concerned essentially with the question of
the role played by the semantic properties of verbs in determining whether
or not a given form exhibits the ditransitive alternation. She observes that
ditransitive structures in English result from both the dative alternation

in which an underlying recipient (or spatial goal) argument of the verb alternates between realization as a prepositional oblique and as an object, as in (57), and the benefactive alternation, in which an **optional** or added participant alternates between realization as a prepositional oblique and as an object, illustrated in (58).

(57) John sent a book to Mary.
      John sent Mary a book.

(58) John baked a cake for Mary.
      John baked Mary a cake.

She argues that the Arabic preposition *li-* corresponds both to English 'to' in its use marking the recipient/goal argument of three-place verbs, and to English 'for' in its use marking the added beneficiary as in (58). The essential point of her paper is to consider what determines the range of the dative alternation in MSA.

Consider first a verb which is not underlyingly a three-place predicate, such as *ishtarā* 'buy'. Clearly a buying event can take place without an intended recipient or beneficiary. It is possible to add such a recipient/beneficiary by means of a PP headed by the preposition *li-*. Ryding suggests that with such a verb the preposition *li-* essentially introduces an additional FOR THE BENEFIT OF predication into the lexical semantic structure. Ryding's proposal is informally specified, but very much in the spirit of the sort of lexical conceptual decompositions used in Rappaport Hovav & Levin (1998) and subsequent work. This corresponds to the 'for-datives', but unlike English, these verbs do not permit the ditransitive structure in Arabic, occurring only in the prepositional dative construction.[10]

(59) ishtaray-tu zahrat-an   li-l-bint-i
      buy.PV-1SG flower-ACC.INDEF for-DEF-girl-GEN
      'I bought a flower for the girl.'   MSA

(60) *ishtaray-tu l-bint-a   zahrat-an
      buy.PV-1SG DEF-girl-ACC flower-ACC.INDEF
      'I bought a flower for the girl.'   MSA

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[10] Note however, that the position of the postverbal arguments is not totally inflexible. While this is not possible as a basic ordering in English, the prepositional argument may precede the direct object.

The class of non-alternating two-place predicates such as *ishtarā* contrast with recipient-taking verbs which correspond to the 'to-datives' of English, and *do* permit the dative alternation. Ryding argues that the crucial point about members of this latter class of verbs is that they all involve a CAUSE predication in the lexical semantic structure, either because they are inherently causative lexical verbs (such as *manaḥa* 'grant' (underived, or Ist form)), or because they are derived forms, for example, in the IVth form (measure, or *wizan*).[11] Arabic verbal morphology is characterised by a system of measures or *ʔawzān* involving derivational morphological processes by which new verbal lexemes are derived. In the Western tradition, these forms (or measures) are referred to by means of roman numerals, with the Ist form being the underived lexeme, while in the Arabic tradition they are often referred to by giving the relevant form of the lexeme 'do/make'; for example, the IVth form may be referred to as the *ʔafʕal* form. Each derived form (or measure) has one or more semantic core meanings, and when both the under-derived (Ist) form and the derived form exist, the meaning of the latter is often (at least partly) predictable. In other cases the meaning of the 'derived' lexeme may be less predictable. No root combines with all the measures. Ryding's study is essentially concerned with the IVth measure applying productively and synchronically to derive causative forms of verbs, as well as with underived "lexical" three-place predicates exhibiting the dative alternation, such as the verb *aʕṭā* 'give', illustrated in (54)–(55) above.

A three-place predicate such as 'give' crucially involves a CAUSE-TO-HAVE type predication (where the recipient possesses the Object theme because the Agent has caused a transfer of possession), which Ryding represents as follows (for comparison, we give a representation for caused possession from Levin 2011 in (62)).

(61) CAUSE<Agent, predication[EVENT<Recipient, Object>]>

(62) [[x ACT] CAUSE [BECOME [y HAVE < POSS-TYPE > z]]]

However the class of predicates which involve a CAUSE predication and undergo the dative alternation is wider than the class of verbs which are **inherently** associated with CAUSE-TO-HAVE predications. An example from the 'causative' (*ʔafʕal* or IVth) measure is *ʔatʕama* 'feed' the causative

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[11] The Arabic term *wizan* pl: *ʔawzān* corresponds to the Hebrew term *binyan* pl: *benyanim*.

form of Ist measure *taʕima* 'taste' and which alternates as shown in (63)–
(64).[12]

(63) ʔa-tʕam-tu   l-ʕinab-a   li-l-bint-i
     CAUSE-feed.PV-1SG DEF-grapes-ACC to-DEF-girl-GEN
     'I fed the grapes to the girl.'   MSA

(64) ʔa-tʕam-tu   l-bint-a   l-ʕinab-a
     CAUSE-feed.PV-1SG DEF-girl-ACC DEF-grapes-ACC
     'I fed the girl the grapes.'   MSA

Although the notion of causation relevant to the dative alternation in MSA
is wider than the caused-possession class which is associated with the alter-
nation in many different languages, (as (64) and similar examples show),
there is a clear class of causative predicates (in the IVth form) which do not
alternate, although they permit the prepositional dative structure. These
are predicates lexicalizing a causative-intransitive structure, involving the
causative (*ʔafʕal*) of an intransitive verb (such as *ʔaḥḍara* 'bring' from
ḥaḍara 'come').

(65) ʔa-ḥḍar-tu   l-zuhūr-a
     CAUSE-bring.PV-1SG DEF-flowers-ACC
     'I brought the flowers.'   MSA

The lexical argument structure of the derived verb is along the lines shown
in (66): the Agent causes the event to happen (the Object to come): note
that the recipient is not involved in the argument structure of the verb
itself, and hence, as shown in (65), the (two-place) predicate is perfectly
grammatical without the recipient.

(66) CAUSE<Agent, predication[come<Object>]>

These verbs may permit an (intended) recipient to be expressed as an
additional argument. In such cases, an additional FOR-THE-BENEFIT-OF
predication is introduced by the semantics of the preposition itself. Hence
the preposition itself cannot be dropped if the (optional) recipient is ex-
pressed, and as a consequence verbs in this class do not permit the DTC,

[12] The observation that verbs which allow two accusative arguments in Arabic are
often in the 'causative' *ʔawzān* is of course well established in the literature on
Classical Arabic (CA) (see for example Wright 1874), and taken up in recent
Minimalist work on clitics and agreement markers in CA in Walkow (to appear),
independent of Ryding's (2011) work on MSA.

that is, they are non-alternating predicates. (67) shows the combined lexical semantic structure Ryding associates with an example such as (68).

(67) FOR THE BENEFIT OF < Recipient [CAUSE<Agent, predication[come<Object>]>]>

(68) ʔa-ḥdar-tu   l-zuhūr-a   li-l-bint-i
     CAUSE-bring.PV-1SG DEF-flowers-ACC to-DEF-girl-GEN
     'I brought the flowers to the girl.'   MSA

(69) *ʔa-ḥdar-tu   l-bint-a   l-zuhūr-a
     CAUSE-bring.PV-1SG DEF-girl-ACC DEF-flowers-ACC
     'I brought the girl the flowers.'   MSA

In the next section we consider the extent to which these generalizations concerning the availability of the DTC for causative-transitive structures hold for the dialects we are considering. There are essentially two questions: firstly, is it right that the *li-* arguments with intransitive base causatives do not undergo the DTC and secondly, it is the case that causative-transitives in general do so.

5. The role of the cause predicate

The system of measures or forms is clearly evident in the dialects which we consider, although this is an area of grammar where the gap between the classical system, still extant in MSA, and the contemporary vernaculars is quite considerable. Overall the system of forms has undergone some simplification, and in particular, the IVth form which is the essential focus of Ryding's study of verbs involving a CAUSE predicate, has largely disappeared from the three dialects we are concerned with here, with a transfer of functions to the IInd form.[13] The second measure is characterised by gemination of the second consonant of the root (*faʕʕal* form). As Fassi-Fehri (1993) observes, the transitivizing property of the IInd measure is beyond question. It expresses a range of meanings, amongst the most common being causative and intensive meanings (examples from ECA include *xawwif* 'frighten' from *xaaf* 'be afraid'; *daffaʕ* 'make s.o. pay' from *dafaʕ* 'pay'; *kassaṛ* 'smash' from *kasaṛ* 'break' (Abdel-Massih 1979/2011, 280)).

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[13] For ECA, Abdel-Massih lists some measure IV transitive verbs expressing causation, such as *ẓahaṛ* 'appear'/*aẓhaṛ* 'show', but observes that the "use of Measure IV to express causation is indicative of education and acquaintance with Standard Arabic" (Abdel-Massih 1979/2011, 281).

In the light of this, it is an interesting question as to whether the generalization that Ryding makes about the class of alternating verbs in MSA holds true of the dialects, given this displacement of morphological functions. In order to answer this question we have begun a systematic investigation of verbs in the IInd measure and other verbs falling into semantic classes which are crosslinguistically most likely to alternate. In broad outline, a reasonably comprehensive survey of IInd form verbs which we have carried out for the three dialects appears to show that such verbs display the same distributional properties Ryding illustrates for IVth form verbs in MSA: that is, causatives from intransitive predicates do not alternate while causatives from transitive predicates tend to do so. This in turn suggests that the generalization concerning the CAUSE predication is also relevant to the contemporary vernaculars, independent of the 'shift' in the form used for causative derivation. We will return further to the discussion of the distributional generalization below.

Table 6 provides a small representative sample of alternating verbs across the dialects and illustrates the striking cross-dialectal similarity. The final column distinguishes between those verbs which have form I non-causative counterparts synchronically (Derived), from those which do not (Lexical). A number of the verbs classified here as Lexical are in the IInd measure (with a doubled second consonant) but are (at least synchronically) non-derived in the sense that they do not have a Ist measure counterpart, because the system of meaures is less regularly productive in the contemporary vernaculars. Consequently, from a purely synchronic point of view, their behaviour in either allowing or not allowing the alternation appears to be a matter of lexical idiosyncrasy. Equally, there are a number of alternating verbs such as MT *wera* 'show', *ta* 'give' and *tema'* 'feed' which show inflectional characteristics of their diachronic membership in the IVth measure, although they are now assimilated to other inflectional paradigms. These verbs undergo the dative alternation, consistent with the causative semantics associated with the IVth measure, even though this verbal template is no longer synchronically productive in any way in that vernacular. Diachronic evidence for membership in the IVth measure is not simply manifest through the causative predication available, but also from other morphological remnants, including the word-form's V1 lengthening in the imperfect sub-paradigm and the final *i* stem-vowel in the SG cells in the imperfect sub-paradigm, which has long been associated with causative morphology (Sutcliffe 1936, 110).

Examples (70)–(71) show an alternating IInd measure causative from a transitive base (in ECA), and (72)–(73) an alternative causative from a

Table 6: Alternating causatives

Transitive Base	ECA	MT	HA	Structure
dress	labbes	libbes	labbis	Derived
make taste	dawwaʔ	dewwaq	dawwiʔ	Derived
make earn	kassib	qalla'	kassab	Derived
make hear	sammaʕ	semma'	sammaʕ	Derived
make drink	šarrab	(1)	šarrab	Derived
feed (2)	ʔakkil	—	ʔakkil	Derived
make understand	fahhim	fiehem (3)	fahhim	Derived
increase	zawwid (4)	—	zawwid	Derived
lend	sallef	sellef (5)	sallef	Lexical
ask	saʔal (6)	saqsa/staqsa (6)	saʔal (6)	Lexical
give	ʔedda	ta/għadda	ʔadda	Lexical
teach	ʕallim	għallem	ʕallam	Lexical
show	warra	wera	warra	Lexical

(1): The corresponding MT verb *xarrab* means 'wetten'.
(2): MT *tema'* 'feed' is diachronically a IVth measure verb which has
       been synchronically reanalyzed as a I measure form.
(3): MT *fiehem* 'make understand' is a IIIrd form verb.
(4): This verb has an Intransitive base.
(5): This verb is derived in MT.
(6): These verbs are all Ist measure forms.

transitive base in HA. In (74)–(75) we illustrate an alternating verb in MT
which is cognate with the form IInd verb in ECA and HA, as shown in
Table 6, and which is diachronically associated with the (no longer active)
IVth measure, as discussed above.

(70)   fahhem-t   el-dars   l-el-walad
      make.understand.PV-1SG DEF-lesson to-DEF-boy
      'I made the boy understand the lesson.'   ECA

(71)   fahhem-t   el-walad el-dars
      make-understand.PV-1SG DEF-boy DEF-lesson
      'I made the boy understand the lesson.'   ECA

(72)   al-rağul   sallaf   al-flūs   li-Muhammad
      DEF-man lend.PV.3SGM DEF-money to-Muhammad
      'The man lent Muhammad the money.'   HA

(73) al-raǧul sallaf   Muhammad al-flūs
     DEF-man lend.PV.3SGM Muhammad DEF-money
     'The man lent Muhammad the money.'   HA

(74) Wrej-t   il-ktieb   lit-tifla
     show.PV-1SG DEF-book DAT.DEF-girl
     'I showed the book to the girl.'   MT

(75) Wrej-t-ha   l-ktieb
     show.PV-1SG-3SGF.ACC DEF-book
     'I showed her the book.'   MT

Our survey does not pretend to yet give a comprehensive overview of the availability of the dative alternation in the contemporary Arabic vernaculars. However it is already clear that the range of the alternation is wider than is sometimes claimed in the literature. For example, in recent work on Maltese, Tucker (2013, 192) states that there are (only) five verbs that display such alternation, namely: *seraq* 'steal', *ta* 'give', *wera* 'show', and the two IInd from verbs *għallem* 'teach' and *sellef* 'lend' (see also the much earlier discussion in Borg & Comrie 1984). Sadler and Camilleri (2013) provide in an appendix a list of alternating ditransitive verbs, and show that no less than 31 verbs participate in this alternation. To this list we can add two verbs form the IIIrd measure: *wiegħed* 'promise' and *fiehem* 'make understand' (the latter related to the ECA/HA *fahhim*) listed in Table 6. While *fiehem* is derived from the transitive Ist form verb *fehem* 'understand', *wiegħed* is 'lexical' in our terminology, in that it is not associated synchronically with another form.

Ryding (2011) does not discuss more than a couple of verbs in any detail (namely, the alternating *aṭʕama* 'feed' and the non-alternating *aḥḍara* 'bring', but states that verbs lexicalizing a causative-transitive semantic structure alternate. There is in fact some unclarity as to whether she assumes that *all* such three-place verbs involve a recipient or potential possessor role, but as (76) shows, she does assume a recipient role for the causee in 'feed'.

(76) CAUSE<Agent, predication[taste <Recipient, Object>]>

In fact it seems to us that the range of semantic roles (or sets of entailments) holding over the non-theme argument (and corresponding to the causee or agent of the caused predication) may well be wider than those associated with verbs of CAUSED POSSESSION in particular, unless this notion is interpreted in a very extended sense. That is, while many of the

most typical alternating predicates in Arabic may be conceptualised in
terms of possession/recipients, this is not necessarily the case for all such
predicates. For example, the verb *sammaʕ* (ECA/ha)/*semma'* (MT) 'make
hear' alternates (in line with its causative-transitive frame) but any notion
of potential possession is at least very abstract.

(77) sammaʕ-t   el-laħn   l-el-motreb
      make.hear.PV-1SG DEF-melody to-DEF-singer
      'I made the singer hear the melody.'   ECA

(78) sammaʕ-t   el-motreb el-laħn
      make.hear.PV-1SG DEF-singer DEF-melody
      'I made the singer hear the melody.'   ECA

(79) Semmaj-t-hom   naqra mużika   tajb-a
      made.hear.PV-1SG-3PL.ACC a.little music.SGF good-SGF
      'I made them hear some good music.'   MT

(80) Semmaj-t   il-mużika lin-nies
      made.hear.PV-1SG DEF-music DAT.DEF-people
      'I made the people hear the music.'   MT

Before turning to non-alternating verbs, the verb *zawwid* (ECA/HA) 'in-
crease' presents an interesting puzzle. As noted above, the Ist measure
verb is intransitive, but the verb *zawwid* occurs completely naturally in
DTC such as the following.

(81) zawwad-t   al-šay   sukar
      increase.PV-1SG DEF-tea sugar
      'I increased the sugar in the tea.'   HA

(82) zawwid   el-šay   sokkar
      increase.PV-3SGM DEF-tea sugar
      'He added sugar to the tea.'   ECA

In other cases, the additional argument is *li-* marked and has the flavour
of a beneficiary, as in (32) (repeated here as (83)) and (84).[14]

(83) zawwad-t   al-flūs   lu-hum
      increase.PV-1SG DEF-money to-3PL.ACC
      'I increased the money for him.'   HA

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[14] We suspect that examples such as (81) and (82) may involve some sort of part-
   whole relation, and leave this for future work.

(84) zawwid-t   el-flūs   l-Muhammad
     increase.PV-1SG DEF-money to-Muhammad
     'I increased the money for Muhammad.'   ECA

Consistent with Ryding's generalization for MSA, according to which *li*-marked arguments to causative-intransitives should not exhibit the DTC, we find that many IInd measure verbs from intransitive bases do indeed fail to permit the ditransitive structure, though they may take a prepositional argument marked with *li*-. A representative list of such non-alternating predicates are given in Table 7. As before, we mark as Lexical those verbs which are causative forms in the IInd measure but lack a non-causative Ist measure counterpart synchronically.[15]

Table 7: Non-alternating causative predicates

Intransitive Base	ECA	MT	HA	Structure
return	raggaʕ	radd	raǧǧaʕ	Derived
deliver	waṣṣal	wassal	waṣṣal	Derived
make lower/descend	nazzil	niżżel	nazzal	Derived
make higher/ascend	ṭallaʕ	tella'	ṭallaʕ	Derived
make cold	saʔʔaʕ	kessaħ/berred	barrad	Derived
make hot	saxxan	saħħan	saxxan	Derived
make enter	daxxal	—	daxxal	Derived
distribute	wazzaʕ	qassam	wazzaʕ	Lexical (derived in MT)
sew	xayyat	—	xayyat	Lexical
exchange	baddel	biddel	baddal	Lexical (derived in MT)

Ryding associates two meanings with *li*-, observing: "One can thus posit that there are two *li*s: one which acts as a surface marker of a predicate-nuclear Recipient, and one which is an independent predicate whose meaning is: FOR THE BENEFIT OF. The latter links the Recipient with a verb-phrase predication on a separate level, outside the nuclear predicate-argument structure of the main clause" Ryding (2011, 295).

The non-nuclear (additional) argument with a beneficiary reading (corresponding to Ryding's FOR THE BENEFIT OF predication) is found in vernacular examples such as (85) and (86).

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[15] In fact MT *biddel* 'exchange' is related to *bidel* 'change' and *qassam* 'pass, cause to divide' to *qasam* 'cut, divide'. Although both Ist measure verbs are transitive, the IInd measure counterparts do not alternate.

(85) saxxan-t   el-ʔakl   lu-hum
      make.heat.PV-1SG DEF-food DAT-3PL
      'I heated the food for them.'   ECA

(86) saxxan-t-l-hum   el-ʔakl
      make.heat.PV-1SG-DAT-3PL DEF-food
      'I heated the food for them.'   ECA

But we also find that the *li*-marked argument of a causative-intransitive
may correspond to a range of different meanings. These include the exam-
ples in (87) and (89) which would appear to correspond more closely to an
(optional) goal or spatial location argument. The ungrammatical examples
(88) and (90) show that the DTC is not available with these verbs.

(87) daxxal-t   el-welād   l-el-doktōr
      make.enter.PV-1SG DEF-boys to-DEF-doctor
      'I made the boys enter the doctor's.'   ECA

(88) *daxxal-t   el-doktōr   el-welād
      make.enter.PV-1SG DEF-doctor DEF-boys
      'I made the boys enter the doctor's.'   ECA

(89) Wassal-t   l-aħbar   lil Mario
      make.arrive.PV-1SG DEF-news.SGF DAT Mario
      'I delivered the news to Mario.'   MT

(90) *Wassal-t-u   l-aħbar
      make.arrive.PV-1SG-3SGM.ACC DEF-news.SGF
      'I delivered him the news.'   MT

To conclude, in this section we have shown that the generalizations sug-
gested for MSA in Ryding (2011) also hold for the distribution of the dative
alternation in the vernaculars. Causative IInd form verbs in the dialects
that are derived from transitive verbs do tend to allow both DTC and PDC,
while those which are derived from intransitive verbs must mark any added
recipient, goal or benefactive with a *li-*. This lends some plausibility to the
notion that at least one of the factors conditioning the distribution of the
DTC in the Arabic vernaculars is the status of the 'recipient' argument
as a participant in the event denoted by the underlying (or caused) event.
While in many cases, possession or potential possession is an associated
entailment, the set of alternating verbs is not co-extensive with verbs which
may involve potential possession. A particular case in point (and indeed
a place where the vernaculars differ from each other) is presented by the

dialect cognates of MSA *bāʕa* 'sell', a verb which alternates in MSA (see (94)) and indeed is explicitly mentioned by Ryding to be a verb which lexicalizes a CAUSE-TO-HAVE structure. The corresponding dialectal verbs *bāʕ* (ECA) and *biegħ* (MT) fail to alternate, but HA *bāʕ* alternates, just like the MSA counterpart.

(91) biʕ-t   al-bayt   li-Muhammad
      sell.PV-1SG DEF-house to-Muhammad
      'I sold the house to Muhammad.'   HA

(92) biʕ-t   al-bayt   lu-h
      sell.PV-1SG DEF-house to-3SGM.ACC
      'I sold the house to him.'   HA

(93) biʕ-t-uh   al-bayt
      sell.PV-1SG-SGM.ACC DEF-house
      'I sold him the house.'   HA

(94) biʕtu-ka   ʔiyyā-hā
      sell.PV-1SG-2SGM.ACC PTL-3SGF.ACC
      Lit: 'I've sold it to you.'   MSA (Bahloul 2008, 56)

In the following section we turn to an aspect of the analysis of these constructions, focussing mainly on the grammatical function of the recipient ('dative') argument in these two constructions.

6. Grammatical functions in the ditransitive structure

We have seen that for a given class of three-place predicates, two structures are available. In the ditransitive structure, the recipient occupies the canonical position for NP objects, or is expressed as an (object) pronominal inflection on the verb. In the prepositional dative structure, it occurs as the complement of the 'dative' preposition (*li-*) (and incorporated into that form if pronominal). A natural expectation, then, is that these different realizations of a recipient/goal argument are associated with different grammatical functions and that the two constructions correspond to two different surface valency structures. In this section we will provide some evidence that it is the recipient/goal which is the primary object in the ditransitive construction. Of course the very fact that the recipient is coded as an (incorporated) object pronoun is already highly suggestive of this conclusion. Indeed, literature which argues that MSA has a double object

construction or DTC (Salih 1985; Ouhalla 1994) uses as evidence for this
claim observations such as the acessibility of the recipient/goal to subject
position under passivisation, the ACC case marking of the recipient, and
the fact that it appears as an inflection (or enclitic) to the verb when
pronominal. Since the distribution of ACC case is far wider in MSA than
just marking the direct object (it also occurs, for example, on the theme
or second NP in the ditransitive construction), and given that the mod-
ern vernaculars do not mark case on (non-pronominal) NPs, we shall have
nothing to say about the case diagnostic.[16] A key syntactic test is there-
fore passivisation: a primary object is expected to be able to promote to
subject under passivisation. If the goal/recipient argument in the active
DTC is the primary object, then we expect to find corresponding passive
sentences with the goal/recipient argument as subject. The examples be-
low show that this is indeed what we find: a verb which permits the DTC
(and only those verbs), also permit the recipient argument to promote
to subject under passivisation. By contrast, in a DTC construction (that
is, when the recipient is not *li-* marked), the theme is not accessible to
promotion, though of course it is from a prepositional dative construction.

(95) labbes-t-u   el-hudūm
      dress.PV-1SG-3SGM.ACC DEF-clothes
      'I dressed him in the clothes.'   ECA

(96) el-walad ʔit-labbis   el-hudūm
      DEF-boy PASS-dress.PV.3SGM DEF-clothes
      'The boy was dressed in the clothes.'   ECA

(97) *el-hudūm   ʔit-labbis-it   el-walad
      DEF-clothes PASS-dress.PV.3SGF DEF-boy
      'The clothes were dressed (to) the boy.'   ECA

(98) ʔahmad labbas   ḫālid   al-malābis
      Ahmad dress.PV.3SGM Khalid DEF-clothes
      'Ahmed dressed Khalid in the clothes.'   HA

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[16] Diagnostics which rely on anaphoric and variable binding should also shed some
light on this matter, but require us first to understand the role played by both
superiority (e.g. c-command, or f-command in LFG) and linear precedence in rela-
tion to binding. For some discussion of relevant examples and evidence for Maltese
see Borg & Comrie (1984); Sadler & Camilleri (2013) and Tucker (2013). We leave
this matter for future work.

(99) ḫālid   lubbis   al-malābis
  Khalid dressed.PV.PASS.3SGM DEF-clothes
  'Khalid was dressed in the clothes.'   HA

The ECA example in (96) shows the use of a prefix *ʔit-* to give a corresponding passive form. This contrasts with MSA, where the (principal) exponent of passive voice is a particular set of stem vowel patterns. The use of the system of measures (that is, the use of affixal morphology) to encode a voice alternation has largely replaced the internal (vocalic melody) passive in the contemporary vernaculars. The ECA *ʔit-* is clearly (diachronically) related to the *t-* stem augment of measures V and VI of the MSA system, which generally adds a mediopassive or reflexive character to the verb meaning, but which has specialized into a passive form in the dialect.[17] Some Eastern dialects use the *n-* diachronically related to the *ʔin-* of measure VII used in MSA passive formation (see Holes 2004, 135–138 for further details of prefixal passivisation in the vernaculars). He also notes that the vocalic passive of Classical Arabic and MSA is "more or less functional" in some Arabian (that is, peninsula) dialects (Holes 2004, 135). Intriguingly our Hijazi speaking informant produced a vocalic passive form of the verb for the DTC (see (99)), but did not do so for the passive of the corresponding PDC. Given that Gulf dialects are broadly considered to be more conservative than Levantine and more westerly dialects, it is interesting that our informant produced this classical passive form in the context of the ditransitive construction. The ditransitive (DTC) corresponds to the older pattern for the expression of three argument CAUSE-TO-HAVE predications (including causatives of transitive predicates). Indeed in Classical Arabic verbs such as *ʕaṭā* 'give', *manaḥa* 'grant' and *wahaba* 'give, donate' took two accusative NP arguments (theme and recipient) and did not permit the use of *li-* to encode the recipient. (Classical Arabic also permitted the arguments to order freely up to ambiguity, with the recipient before theme order being required if ambiguity would otherwise ensue.)[18] It is quite natural that the more conservative passive form was produced with

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[17] Abdel-Massih (1979/2011, 195) notes the existence of some specific verbs in ECA which lack the expected vernacular pattern and the MSA internal (vocalic) passive is used instead.

[18] Ouhalla (1994, 58–59) also notes (on the basis of Moutaouail 1988) that in Classical Arabic, with verbs taking the double accusative construction, it was possible to raise the Theme to passive subject (with the recipient coded as an accusative NP) and to have a theme clitic as object on the verb. These structures are not possible in MSA.

the older construction rather than with the more innovative prepositional
dative construction.

Similar facts concerning passivisation and the ditransitive alterna-
tion hold in Maltese. The key generalisation is that it is **only** those verbs
which permit the DTC which allow the recipient to be the subject of a
corresponding passive. Verbs which permit the PDC (in which the recip-
ient/goal is *l*-marked) only exhibit theme subject passives. See Borg &
Comrie (1984) and Sadler & Camilleri (2013) for further discussion of this
point.

(100) Taj-t-ha   il-flus.
       give.PV-1SG-3SGF.ACC DEF-money
       'I gave her the money.'   MT

(101) Marija n-għata-t   xi   flus.
       Mary   PASS-give.PV-3SGF some money
       'Mary was given some money.'   MT

(102) Marija d-dewwq-et   il-helu.
       Mary   PASS-make.taste.PV-3SGF DEF-sweets.SGM
       'Mary was made to taste the sweets.'   MT

(103) S-semmgħ-u   naqra mużika   tajb-a,   n-nies
       PASS-make.hear.PV-3-PL a.little music.SGF good-SGF DEF-people
       'The people were made to listen to some good music.'   MT

The passivisation data in the three vernaculars strongly suggest that the
recipient is promoted to primary object in the active ditransitive con-
struction, while the impossibility of promoting the theme to subject from
this construction, in which the recipient is not *li*-marked, supports the
view that the theme is not the primary object. In terms of the syntax
and mapping from argument structure, the analysis proposed in Sadler &
Camilleri (2013) for the Maltese ditransitive construction extends straight-
forwardly to the other dialects. This analysis is based on the approach to
syntactic argument realization using the version of Lexical Mapping The-
ory proposed by Kibort (2007; 2008), in which the mapping from semantic
roles (or rather sets of entailments over participants) to surface grammat-
ical functions is mediated by an ordered argument structure. Predicates
which are realized syntactically in the DTC are associated with the argu-
ment structure to syntactic function mapping shown in (105). With this
class of predicates the R argument may be associated with entailments
(such as 'affectedness' or 'causee' or 'potential possessor' (for this last, see

Beavers 2006, 197)), and as a consequence a mapping to argument structure is available such that the R argument outranks the T argument in the ordered argument structure. This is turn determines the mapping to surface grammatical functions, for argument positions are associated with features which constrain the choice of surface grammatical functions associated with those arguments. The standard LFG feature decomposition of (nominal) grammatical functions $+/-$ r (indicating whether or not the grammatical function is restricted to particular semantic roles) and $+/-$ o (indicating whether or not the grammatical function is an object) defines the four grammatical functions for (nominal) participants as shown in (104). The association of features with arguments which Kibort proposes, and the resultant grammatical function assignment, with the theme argument as thematically restricted OBJ_θ, is shown in (105).

(104)

	$-r$	$+r$
$-o$	SUBJ	OBL_θ
$+o$	OBJ	OBJ_θ

(105)   ditrans-predicate $<$

$$
\begin{array}{ccc}
A & R & T \\
| & | & | \\
arg_1 & arg_2 & arg_3 \\
-o & -r & +o \\
| & | & | \\
SUBJ & OBJ & OBJ_\theta
\end{array}
$$

$>$ **double object/ditransitive**

A number of questions of course remain open as to how the precise class of predicates which permit the DTC must be specified, and it would fall well beyond the scope of the current paper to attempt to develop a full lexical semantic analysis to capture the range of entailments associated with 'R' arguments which map to arg_2. The range of predicates allowing the DTC is both surprisingly wide, encompassing predicates such as *sammaʕ* (ECA/HA)/*semma'* (MT) 'hear', and at the same time restricted, excluding 'send' and 'throw'. Further, the range of the DTC is restricted in MT, but not in ECA and HA, to pronominal R arguments, so that the distribution of the DTC is subject to an additional morphosyntactic restriction.

7. Grammatical functions in the prepositional dative construction

In the prepositional dative construction, the passivisation diagnostic confirms that it is the theme argument which is the direct object. Verbs which

take the prepositional dative construction exhibit passives in which the
theme is mapped to the subject function, and unless the verb also permits
the DTC, the recipient argument cannot surface as subject of a correspond-
ing passive. Examples (106)–(107) use a IInd form non-alternating derived
(causative) verb, which occur only in the prepositional dative structure,
and show that the theme may promote to passive subject.

(106) saxxan-t-lu-hum   el-ʔakl
       heat.PV-1SG-DAT-3PL DEF-food
       'I heated the food for them.'   ECA

(107) el-ʔakl   ʔit-saxxan-lu-hum
       DEF-food PASS-heat.PV.3SGM-DAT-3PL
       'The food was heated for them.'   ECA

Similarly, (108) is the only passive possible for *bāʕ* 'sell' which is a non-
alternating (prepositional dative) verb in MT and ECA (recall that it
permits the ditransitive construction in MSA and HA).

(108) el-beyt   ʔit-bāʕ-lu-hum
       DEF-house.SGM PASS-sell.PV.3SGM-DAT-3PL
       'The house was sold to them.'   ECA

Examples (110) and (111) show theme subject passives corresponding to
PDCs in HA (these are alternating verbs, which also permit a recipient
subject passive). Notice that these HA passive examples also show the use
of the prefixal passive, shifting the IInd form *labbas* to Vth form *tilabbas* in
(110) and the IVth form *ʕaṭaa* to VIIth form *ʔinʕaṭa* in (111). The subject
appears sentence-finally in (110) but it could equally well appear in the
postverbal position preceding the *li*-marked recipient.

(109) ʔahmad labbas   al-malābis   li-ḫālid
       Ahmad dress.PV.3SGM DEF-clothes to Khalid
       'Ahmed dressed Khalid in the clothes.'   HA

(110) ti-labbas-at   li-ḫālid   l-malābis
       PASS-dress-PV-3SGF to-Khalid DEF-clothes
       'The clothes were put on Khalid.'   HA

(111) humma ʔin-ʕaṭa-w   l-i
       them   PASS-give.PV.3-PL to-1SG.ACC
       'They were given to me.'   HA

The Maltese verb *bagħat* 'send' in (112)–(114) is one which does not permit the ditransitive construction and so expresses a recipient by means of the prepositional dative construction. Note that in (113) the dative marking on the recipient is optional because it is in a right-extraposed topic position (doubling the affixal pronoun attached to the verb).

(112) Bgħat-t   il-ktieb   lil Marija
       send.PV-1SG DEF-book.SGM DAT Mary
       'I sent the book to Mary.'   MT

(113) Nt-bagħt-i-l-ha   il-ktieb,   (lil) Marija
       PASS-send.PV.3SGM-EPENT.VWL-DAT-3SGF DEF-book.SGM DAT Mary
       'The book was sent to Mary.'   MT

(114) *Marija nt-bagħt-et   il-ktieb
       Mary PASS-send.PV-3SGF DEF-book.SGM
       'Mary was sent the book.'   MT

We observe then that in all three dialects the recipient/goal argument, which is coded by means of the *li-* preposition (or dative marker), is not accessible to promotion to SUBJ by passivisation in this construction, while the accessibility of the theme argument suggests that it is a primary object.

A further interesting question concerns the status (in terms of grammatical function) of the *li-* marked recipient itself, in particular, whether it is an OBLIQUE (allative), like other prepositional phrases, or whether it corresponds to a more central grammatical function, such as the final stratum 3 term of Relational Grammar. Work in a range of different frameworks points to the special status of 'dative' arguments (see *inter alia* Primus 1998; Levin 2006; Pylkkänen 2008) and as discussed in section 1, Kibort (2008) proposes an approach to mapping using LMT which admits a three-way distinction between recipient arguments in terms of their mapping to surface grammatical function. Prepositionally marked recipient arguments, may correspond to obliques or to 'structural datives', the latter having a special (morphosyntactic) status, lying between a core argument and an oblique: languages differ in terms of whether they admit canonical datives of this sort.[19] In addition to the DTC mapping, illustrated in (105) above, recipients may correspond to arg_3, mapping to a restricted OBJ function,

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[19] Clearly this is a possible locus of historical change, and indeed following Allen (2001) whose work traces the loss of the dative in English, Kibort (2008) suggests that constructions such as: *You can give it me back* and *A good policeman will sit you down and tell it you his way* in British English are vestiges of an earlier

or to arg4, when they surface as an OBLIQUE function (again we use A T and R to denote the three participants in the event).

(115)

		A	T	R	
		|	|	|	
ditrans-predicate	<	arg_1	arg_2	arg_4	>
		$-o$	$-r$	$-o$	
		|	|	|	
		SUBJ	OBJ	OBL	**recipient as oblique**

(116)

		A	T	R	
		|	|	|	
ditrans-predicate	<	arg_1	arg_2	arg_3	>
		$-o$	$-r$	$+o$	
		|	|	|	
		SUBJ	OBJ	OBJ_θ	**recipient as dative**

The interesting question, then, is whether the PDC in the three vernaculars corresponds to an OBLIQUES or to a more central grammatical function. In a recent paper, Sadler and Camilleri (2013) argue at length that in Maltese the *li*-marked recipient of three-place predicates is an instance of what Kibort (2008) calls a canonical dative, represented in terms of LFG's array of surface grammatical functions as an OBJ_{recip} (that is a grammatical function restricted to a small set of arguments over which recipient-type entailments hold), and hence are more accessible to some grammatical processes than obliques. Crucial facts are (*inter alia*) that (i) a pronominal recipient argument is obligatorily affixed to the verb, unlike an inflected prepositional object; (ii) a *li*-marked NP cannot be coordinated with a PP; (iii) unlike an OBL, relativisation on a dative argument does not require an obligatory resumptive; and (iv) a *li*-marked recipient, but not an oblique can float a quantifier.

Though it is not the purpose of this paper to produce a detailed analysis of the prepositional dative construction in any of the dialects under discussion, some of the facts which we pointed out above in relation to the PDC in ECA strongly suggest that at least in that dialect, the *li*-marked recipient may be plausibly analysed as a canonical dative (or restricted object, in LFG terms). Establishing the correct analysis (restricted object or oblique) of the *li*-marked recipient in ECA and HA will be the focus

construction in which the recipient was coded as a canonical dative (hence OBJ_{recip} in LFG terms).

of future work, but we think that it is likely that a process of historical change implicating dative objects is underway in Arabic.

8. Conclusion

This paper has focussed on ditransitive constructions in Arabic, with a view to making a contribution to the description and analysis of the contemporary Arabic vernaculars. We have shown that three relatively distant dialects, Maltese, Egyptian Cairene Arabic and Hijazi Arabic share with each other, and with Modern Standard Arabic, the property of having an alternation between what we have called the ditransitive construction and the prepositional dative construction. However, we have also highlighted a number of syntactic differences between the dialects. The ditransitive construction (in which the recipient/goal is the primary object) is more restricted in Maltese in the important sense that it is limited to **pronominal** recipients, a restriction which is also found in Maghrebi dialects. This restriction is not found in ECA or HA. Further differences between the dialects follow from their differing pronominal systems. Both MT and HA, in different ways, make available a free pronoun for the theme argument ("second" object in this construction), but ECA does not. In terms of the prepositional dative construction, a major point of interest concerns the means of expression of a pronominal recipient in this construction. In Maltese such arguments appear as affixes on the verb; in ECA they appear to optionally incorporate into the morphological word, while in HA the pronominal recipient is expressed as an inflected form of the prepositional head. There is significant evidence from Maltese that the *li*-NP is essentially a "canonical dative" that is, an argument which corresponds to a second (thematically restricted) OBJ rather than to an OBL. Further research is required to establish whether this may be true in other Arabic dialects, but we think it is a strong possibility at least for ECA. In recent work Ryding (2011) has suggested that alternating verbs in MSA are those which are causative-transitives, and those lexicalising a CAUSE-TO-HAVE predicate. Her observations focus largely (but not exclusively) on forms (from transitive bases) in the IVth measure in MSA, such as *ʔatʕama* 'feed' (from *taʕima* 'taste'), which exhibit the alternation. Our investigation of the three vernaculars appears to largely bear out Ryding's observations, but transposed to the IInd measure, which is used as the productive causative derivation in these varieties of Arabic.

Acknowledgements

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