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Labile anticausatives in Jordanian Arabic

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This study examines the morpho-syntax of labile anticausative structures in Jordanian Arabic (JA). Although the transitive counterpart of anticausatives is marked via morphological affixes that reflect structural and lexical components in Classical Arabic and Modern Standard Arabic, a number of verbs involving causative alternation exhibit identical forms in JA (e.g., *ġala* [+T] 'to CAUSE boil something' vs *ġala* [–T] 'to BECOME boil'). Such variation poses challenges for mapping between verb morphology and its lexical semantics. To handle such variation, which is also observed cross-linguistically, we argue in favour of Schäfer (2008; 2012), Schäfer & Vivanco (2015), and Ramchand's (2008) "causer-less" analysis over Koontz-Garboden's (2009) "reflexive" analysis. This work further assumes the existence of a Voice phrase lacking a specifier (external argument) and assumes that Voice projection is headed by an implied Voice head (^{v}CAUSER) that syntactically assigns the accusative case to its new subject and semantically encodes the internal argument and describes the resultant subevent of the verb. The work also provides an alternative solution for voice projection that lacks an explicit specifier bearing [+agent] or [+causer] feature specification. The work assumes the presence of an inchoative Voice head [^{v}INCH] introducing the Spec Voice Phrase, which encodes an inchoative resultant state of an event achieved over its THEME. Contrary to Al-Qadi (2015), the present model assumes that such verbs constitute a middle position between transitive and intransitive verbs in JA but do not constitute a separate class of their own. Evidently, the correct characterization of the anticausative subclass distribution is that it surfaces wherever v is transitive as well as in intransitive volitional contexts (a non-natural class). More intriguingly, the presented material suggests that there is an ongoing process of diachronic change in spoken Arabic varieties (including JA) that amounts to the development and expansion of an inchoative class where no external or internal inchoative detransitivizing morphemes are involved. This topic, which incorporates an intriguing diachronic dimension in addition to the syntactic details, is missing from the generative literature on Arabic morpho-syntax and is potentially of sufficient interest to merit investigation.

Keywords: Anticausativization, (un)accusative, causative, inchoative, Jordanian Arabic

1. Introduction

Jordanian Arabic (JA), a canonical accusative Semitic language[1], includes verbs that allow the binary selection of either two-place (default) or one-place predicates. This aspect of alternation can be referred to as "anticausativization", a morphological process whereby inchoative verbs are derived from their causative counterparts e.g., JA *kasar* 'break (trans)' versus *n-kasar* 'break (intrans)' (cf. Koontz-Garboden 2009: 77). The original use of the term is restricted to cases where the non-causative is formally derived from the causative. Different formal ways were established in the literature to morphologically encode the causative-anticausative alternations among languages. Possible alternative patterns include: (i) deriving causative and anticausative variants separately, as in Warlpiri (data in 1a), (ii), *causativization*, causative being morphologically derived from anticausatives, as in O'odham (data in 1b), and (iii) *anticausativization*, anticausatives being morphologically derived from causative, as in Cuzco Quechua (data in 1c)[2]:

(1) a. Warlpiri (Hale & Keyser 1998: 93 cited in Koontz-Garboden 2009: 78)
i- wiri-jarri-
'become large'
ii- wiri-ma-
'cause to become large'
iii- wiri
'large'
b. O'odham (Hale & Keyser 1998: 92 cited in Koontz-Garboden 2009: 78)
i- weg-i-(ji)d
'cause to become red'
ii- weg-i
'become red'
c. Cuzco Quechua (Cusihuaman 1976: 166 cited in Koontz-Garboden 2009: 79)
i- wisq'ay
'cause become closed'
ii- wisq'a-ku-y
'become closed'

Intriguingly, many verbs undergoing this alternation are morphologically LABILE in JA; that is, the stem of the transitive/causative use of the verb is morphologically identical to the stem of the intransitive/anticausative use (e.g., Haspelmath 1993; 2016; Nau & Pakerys 2016)[3]. This latter one is henceforth referred to as labile anticausativization,

[1] The classification of JA under accusative languages is based on the typical distribution of languages according to case marking systems as will be explained below.

[2] As shown here, multiple analyses cross-linguistically have been proposed for causative-anticausative alternation. However, the quantitative relation between the formal types of encoding has received much less systematic attention. This target would ideally be based on a systematic empirical study, which seems to be missing, or at least the empirical basis is not explicitly stated. This objective requires further detailed investigation of lexical semantics that determines which verbs fall into which formal category.

[3] Haspelmath (2016: 34) identifies the five semantic types of verb meanings of the "spontaneity scale": *transitive* (e.g., cut) > *unergative* (e.g., talk) > *automatic* (e.g., freeze intr.) > *costly* (break intr.) > *agentful* (e.g., be cut), with transitive be more causative and agentful be more anticausative.

the main concern of this work. The present study aims to provide a structural representation of "labile anticausativization", though not frequent in the literature on Arabic, in an attempt to understand the formal ways of causative-anticausative alternation cross-linguistically and among Arabic varieties. The lack of research on labile anticausativization in the literature on Arabic makes it a potentially useful topic of investigation. The main strength of this manuscript is its consideration of labile alternation in a Semitic language, where data have so far been lacking. However, there is a reason for this gap: the causative verb counterpart in Modern Standard Arabic (MSA) tends to have an inchoative 'change of state/degree' verb form where the anticausative form is marked via a detransitivizing morpheme. This is true even for the mostly likely class, namely, the 'break' class, e.g., *n-kasar* 'intransitive break' vs *kasar* 'transitive break', *n-fataḥ* 'intransitive open' vs *fataḥ* 'transitive open', *n-qalab* 'intransitive turn' vs *qalab* 'transitive turn', and *n-fajar* 'intransitive explode' vs *fajar* 'transitive explode'. The anticausative detransitivizing morpheme may alternatively be internal (non-concatenative), as in Form VIII verbs such as *ḥ-t-araq* 'intransitive burn' vs *ḥarag* 'transitive burn' and *n-t-ɑfar* 'intransitive spread' vs *nɑfar* 'transitive spread'. Causative alternation may also involve degemination, as in *ʃarib* 'intransitive drink' vs *ʃarrab* 'transitive help/cause somebody drink'. For more details on basic Arabic verb forms, refer to Holes (2004), Ryding (2005), Mashaqba (2015), and Zibin (2019), among others[4].

The importance of investigating (labile) anticausativization can best be introduced through some seemingly intriguing questions:

A: Why can transitive sentences such as (2a) be rephrased as intransitive sentences, as in (2b), whereas transitive sentences such as (3a) cannot be rephrased as (3b)?

(2) a. ʕAli ġala l-ḥaliib
[Ali boil.PT.M.3S DEF-milk]
'Ali boiled milk' (transitive)
b. il-ḥaliib ġala
DEF-milk boil.PT.3S
'Milk boiled'

(3) a. ʕAli ðabaḥ il-ḥajja
Ali kill.PT.M.3S DEF-snake
'Ali killed the snake'
b. *il-ḥajja ðabḥ-at
DEF-snake kill.PT.3S
'The snake killed'?

Cross-linguistically, any transitive verb can be passivized; however, a certain set of transitive verbs (the so-called change-of-state/change-of-degree) form anticausatives; however, not all change-of-state verbs have an anticausative variant (Alexiadou et al. 2015:

[4] As a typical nonconcatenative language, Arabic system involves morphological material which poses several critical challenges for theoretical approaches to morphology (Mashaqba et al. 2020). For a comprehensive account on nonconcatenative morphology, refer to Kastner & Tucker (2019).

52-54). For details on the existing knowledge about which verbs can form anticausatives and which verbs alternate, refer to Alexiadou et al. (2015) and § 3 for tests qualifying anticausatives.

B: Why is it that anticausative verbs can morphologically occur in true passive constructions, which implies the presence of an external causative agent, though there is no explicit mention of the agent, as in (4a) versus (4b) below? Recall that no tenable evidence, to the best of our knowledge, that (4b) is derived from (4a); instead, there is a strong possibility that (4b) is derived from its transitive counterpart:

(4) a. il-maḥall fataḥ
DEF-shop open-PT-3SG
'The shop opened'
b. il-maḥall **n-**fataḥ
DEF-shop PASS-open
'The shop was opened'

The morphologically marked alternation between transitivity (accusativity) and intransitivity which structures *causation* in Arabic has been examined (cf. Al-Qadi 2015 for Standard Arabic, Zibin 2019 for JA). However, the newly developed distinction between the two structures which is not overtly marked has not been investigated yet. Many verbs undergo this morphologically labile alternation in JA. For example, verbs such as *galab* 'to turn over', *ġala* 'to boil', *daḥal* 'to roll down', *fataḥ* 'to open', *sakkar* 'to close', *ʃaḥan* 'to charge' and many other verbs can be used both in transitive structures (the so-called *causatives*), as in (5a) below, and in so-called *anticausative* structures, as in (5b).

(5) a. ʕAli **ġala** *l-ḥaliib* fi-l-briiʔ (lexical) causatives
Ali-NOM boil-CAUSE.PT.M.3SG DEF-milk-ACC in-DEF-pot
'Ali boiled milk in the pot'.
b. *il-ḥaliib* **ġala** fil-briiʔ labile anticausative
DEF-milk-NOM boil.PT.3SG in-DEF-pot
'Milk boiled in the pot'.

The boldface predicate in data (5a) is identical to its counterpart in (5b). However, the sentences in (a) and (b) clearly exhibit different syntactic structures. More precisely, the expression presented in italics (the so-called THEME) forms the object of the transitive verbs in (5a), but it occupies the subject position of intransitive (labile anticausative) verbs in (5b). Despite having different constituent structure status, the italicized NP object in (5a) plays the same thematic role as the corresponding italicized NP subject in (5b). As such, *il-ḥaliib* has the θ-role THEME in both (5a) and (5b). To provide evidence, the transitive object and anticausative subject for a given lexical word are subject to the same Selection Restrictions test, as in (6):

(6) a. zeed **ġala** *l-ḥaliib/l-majj/l-gahwa/*l-ktaab* fi-l-briig
Zeid-NOM boil.PT.M.3SG DEF-milk/water/coffee/book-ACC in-DEF-pot
'Zaid boiled milk/water/coffee/the book in the pot'.

b. *il-ḥaliib/ majj/ gahwa/*ktaab/* **ġala**(t) fi-l-briig
DEF-milk /the-water/the-coffee/ the-book- NOM boil.PT.3SG in-DEF-pot
'Milk/water/coffee/the book boiled in the pot'.

Many works encounter critical misconception of anticausatives in Arabic with unaccusatives (e.g., Radford 1997; 2006; Al-Kawalda 2011, among others)[5]. The confusion surrounding the typological issue of ergative-absolutive languages vs nominative-accusative languages intersects with the separate issue of the poorly understood *unaccusativity*, which raises another challenge to generative grammar. It is true that unaccusative verbs were sometimes misleadingly labelled ergative in the generative literature, but this practice ceased a long time ago as it is just a terminological choice, not a problem[6]. However, the accusative-ergative distinction (stated in footnote 6) is still inconclusive since some recent (and not recent) works (e.g., Burzio 1986: 30; Belletti 1988; Ghali 2002; Farhat 2004; Ryding 2005; Radford 2009: 384; Al-Kawalda 2011: 169) have referred to some transitive verbs in accusative languages (for example, Arabic and English) that can be used intransitively as ergative predicates, though some of their data do not apply to the abovementioned typological mapping (cf. footnote 5)[7]. The behaviour of anticausative verbs (at least in JA) is different and more complex, with many such verbs not fully consistent with the (Un)accusative Hypothesis. This status creates an ambiguous understanding of the relationship between the meaning of intransitive verbs and their specification to be considered unaccusatives or ergatives. This critical challenge may arise because a certain set of intransitive verbs that serve as members of unaccusatives constitute a group that is heterogeneous both syntactically and semantically.

The rest of this paper proceeds as follows: we briefly overview the data related to labile anticausative verbs in JA and research methodology in § 2. Then, tests pertaining to anticausatives were reported using data from JA building necessary background to distinguish them from canonical unaccusatives, inchoatives and passives in § 3. The section mainly answers why anticausative verb class is among the JA verb classes that are not consistent with the Unaccusativity Hypothesis (Perlmutter 1978; Levin and Rappaport Hovav 1995). Then, we consider a structural representation of labile anticausatives

[5] Such structures have been referred to as "ergatives" in several previous works. Farahat (2014) refers to this structure as 'apparent ergatives' in Syrian Arabic, and Ghali (2002) calls it 'ergative unaccusative predicates' in Cairene Arabic. Al-Kawalda (2011) and Radford (1988; 1997; 2006; 2009) refer to them as ergative predicates.

[6] In short, traditionally, nominative-accusative patterns represent structures where NP subjects behave similar to NP agents but not to NP objects. Ergativity is widely used to describe a grammatical pattern in which the subject of an intransitive verb and the object of a transitive verb consistently receive the same morphological case marking, as in Basque (Levin 1983; Dixon 1994; Aldridge 2015; 2017). For details on the characteristics and typological distribution of accusative languages and ergative languages, see Dixon (1972; 1994), Levin (1983), Burzio (1986), Marantz (2000 [1991], Aldridge (2004; 2008), Massam (1998; 2006), Anand & Nevins (2006), Coon et al (2017), and Sheehan (2017).

[7] In English, the verb *break*, for instance, can appear in structures such as 'I broke the glass' and in structures such as 'the glass broke'. Here, 'the glass' in each of the two sentences seems to bear the same thematic role (Radford 2006: 287).

alternation in JA in § 4. The section discusses data from JA, where causative and anti-causative verbs may be morphologically unmarked. The empirical picture is situated with respect to various approaches. It provides further evidence in support of common-base approach over the traditional derivational approach. The last part of this section focuses on the notion that labile anticausative structure is part of the tendency of the diachronic change in the use of simple verb patterns in JA. We concluded the work with some potential remarks and recommendations for future investigations in § 5.

2. Material and methodology

Jordanian Arabic can be divided into three major varieties: urban dialect (mainly produced by town dwellers), Bedouin dialect (mainly produced by nomadic and semi-nomadic tribes), and rural dialect (mainly produced by villagers) (cf. Mashaqba 2015). Jordanian dialects resulted in the emergence of different local diversities, and the three groups developed their own social characteristic dialect. However, they share many linguistic features in common including labile anticausativity[8]. As far as we know, labile anticausative structure has not been reported for other regional dialects, including Syrian dialects, Kuwaiti dialects, Moroccan dialects and Egyptian dialects (e.g., Brustad 2000; Cowell 2005; Holes 2004; Aoun et al. 2009).

The data of this study come from 48 native speakers JA (representing the three major varieties: urban, Bedouin and rural). The age of these participants ranges between 35-60 years old (with the average age = 48.5). All participants are monolingual, and they have no speech or hearing impairments. The data corpus is built using the following methods. First, observation was the main strategy for collecting data where the authors registered 112 anticausative sentences over a period of three months. In each case, participants were asked about the meaning of the utterances involving anticausatives. Additionally, the participants were asked to decide whether or not other sentences containing labile anticausative verbs are acceptable in their everyday communication. Only acceptable forms were included in this work. Second, short videos (maximum 60 seconds) containing change-of-state activities were given to participants to orally describe these activities. Where necessary, the first author raised relevant questions that enrich the data: How do you describe this action in your own words? Which do you prefer/which is more acceptable for you: X pattern or Y pattern? Verbs involving morphological causative alternation are beyond the scope of this study and thus have been excluded. The data have further been double-checked for their grammaticality by two language consultants who are natives of JA. The selected sentences involve labile (anti)causative alternation and are deemed to be grammatical and meaningful based on the judgement of the authors and the language consultants.

[8] It is really important here to note that JA and Palestinian Arabic share a wide range of the linguistic profile (including verb patterns) due to several factors (historical, geographical, political, and socio-economic), as a result of the movement of Palestinian civil servants to Amman before 1948, the annexation of the West Bank into East Bank (Trans-Jordan) in 1949, and the large influx of Palestinian refugees after the wars of 1948 and 1967. For details on verb patterns in Palestinian Arabic, refer to Laks (2013) and Laks et al. (2019).

3. Tests qualifying canonical unaccusatives vs anticausatives

Three important terms must be identified: canonical unaccusatives, Arabic anticausatives, and inchoatives. We assume that canonical unaccusatives are a verb class that can occur intransitively with a subject but also with the equivalent of the English expletive *there* and the subject in complement position; this class includes verbs such as *appear*, *arrive*, *remain*, and *emerge*. Unaccusative verbs take only an internal argument such as a THEME. By contrast, Arabic anticausatives refer to the verb class that occurs in both transitive and intransitive structures, with the object of the transitive verb playing the same θ-role in the intransitive verb. In their intransitive constructions, they typically encode inchoatives: a change of state/degree occurring to the subject of the intransitive verb, such as *fataḥ* 'open', *sakkar* 'close', *daḥal* 'roll', *ḍaab* 'melt', and *ṭabax* 'cook'. In the modern literature on Arabic (both MSA and modern dialects), researchers seem unclear in their understanding and application of the canonical unaccusatives and anticausatives, as well as anticausatives with the separate issue of inchoatives (cf. § 1 above). The general opposition between anticausatives and unaccusatives that we try to establish here is to consider unaccusativity and anticausatives as two separate features which can combine in different ways. If unaccusativity refers to the structural properties of the subject (simply put: Is the surface subject a deep object?) and anticausatives are a construction which is characterized by several features such as (i) transitive-causative counterpart, (ii) causative object = anticausative subject, (iii) no implicit agent etc., then the question emerges whether a) (all) anticausatives are unaccusative and b) whether there are unaccusatives which are not anticausatives. Given this whole typological issue, classifying verbs as unaccusative merely on the basis of meaning is insufficient. It is necessary to apply relevant tests, many of which have been identified in the literature and implemented in studies of various languages including: passivization, causativization and anticausativization, verb restriction test, active participle test, passive participle test, and agentive adverb licensing test.

Passivization (or licensing of a by-phrase test in Schäfer [2008: 53]) is a valid test (diagnostic) that can be considered to qualify anticausatives in other languages, including JA. Although both passive and anticausative structures lack external arguments, a by-phrase is not licensed in labile anticausatives without modifying the consonantal pattern and/or vowel melody of the verb:

(7) a. il-ḥaʤar kasar il-gazaaz
DEF-stone break-PT DEF-glass
'The stone broke the glass'

b. *il-gazaaz kasar bi/min-l-ḥaʤar
DEF-glass break-PT by-DEF-stone
'The glass broke by stone.'

c. il-gazaaz in-kasar~maksuur bi-l-ḥaʤar
DEF-glass PASS-break-PT by-DEF-stone
'The glass was broken by the stone'

By contrast, the external argument in passive structures is licensed via a by-phrase. Semantically, the agent in passive structures is implicit and sanctions the 'by structure' to identify the logical subject. However, the proposition expressed by unaccusatives does not entail the existence of an agent, in which the external argument cannot be referred to via a by-phrase (for details, read Perlmutter 1978; Albackush & Grenat 2014; Lundquist et al. 2016). Subsequently, anticausatives can form a completely identified subclass on their own and can be tested by applying other tests, including *passive participle conversion* (for details on passive participle in JA, see Mashaqba [2015]). Only anticausatives are qualified for passive participle constructions: one can say *il-gazaaz kasar~in-kasar~-maksuur* 'The glass broke/was broken', but s/he cannot use a passive participle in the canonical unaccusative *il-walad wigiʕ* 'the boy fell down'/ **n-wagaʕ*/**mawguuʕ*.

To establish the relationship between labile anticausatives and inchoatives, we return to the structures of causativization and anticausativization: the former involves causatives derived from the inchoative BECOME as in (8a), whereas the latter involves inchoatives derived from the causative CAUSE as in (8b) (cf. Koontz-Garboden 2009; Al-Qadi 2015).

(8) a. il-gazaaz kasar (labile anticausative)
DEF-glass break-PT
'The glass BECOME broken'
b. ʕAli kasar il-gazaaz (causative)
Ali-NOM break-PT DEF-glass
'Ali CAUSE the glass to become broken'

Farhat (2014) impressionistically suggests that anticausative constructions are cases of *focus/topicalization* with a null expletive subject in Syrian Arabic, taking into account that topics can occur only in the clause-initial position (for details, read Farhat 2014: 150-152). However, this proposed account can be easily refuted: the syntactic subject's ability to follow the verb without any morphological encodings proves that what might be thought of as a topic is actually an object (e.g., *il-ḥaliib ġala ~ ġala l-ḥaliib* 'milk boiled'). In such a case, this reads that when the syntactic subject follows the verb, it is an object, and the semantic subject is implied. Here one should bear in mind that such a structure is different from the canonical VSO word order, where the semantic subject and object are explicit. For the detailed account of labile anticausatives, refer to data in (21) through (27).

Both structures (anticausatives and canonical unaccusatives) share one property, in that the subject of the sentence is the semantic object of the verb. However, anticausative verb class is among the JA verb classes that are not consistent with the Unaccusativity Hypothesis which divides intransitive verbs into unaccusatives and unergatives (Perlmutter 1978; Levin and Rappaport Hovav 1995). Evidence that anticausatives and canonical unaccusatives are not very similar can be found by performing a variety of reliable tests. For instance, unaccusativity is typically characterized by telicity (involving a natural endpoint in time), and can be validated by adverbials of duration test. While canonical unaccusatives cannot occur with adverbials of durations as in (9a), labile anticausatives in JA allow them as in (9b) and (9c). For details, refer to § 3 on tests qualifying labile anticausatives which distinguish them from unaccusatives.

(9) a. *ʕAli wiṣil la-saaʕa
Ali-NOM arrive-PT-UNACCU for an hour
'Ali arrived for an hour'
b. il-maḥall fataḥ la-saaʕa
DEF-shop-NOM open-PT-ANTICAUS for an hour
'The shop opened for an hour'
c. il-ḥaliib ġala la-dagiigteen
DEF-milk-NOM boil- PT-ANTICAUS for two minutes
'Milk boiled for two minutes'

Another important test of canonical unaccusative/anticausative constructions is that not every verb can undergo an anticausative–causative alternation using the identical verb pattern, as in (10a) and (10b) versus (10c) and (10d). Consider that unaccusative verbs typically take a deep-structure object and no subject, as in (10a) and (10b).

(10) a. waṣal/maat/ʕaad il-musaafr-iin
Arrive/die/comeback-PT DEF-passenger-PL.M.
'The passengers arrived/died/came back'
b. *waṣal/*maat/*ʕaad/ iṭ-ṭajjaar il-musaafr-iin
arrive/die/come back-PT DEF-pilot DEF-passenger-PL.M.
'The pilot arrived the passengers'
c. fataḥ il-baab
open-PT DEF-door
'The door BECOME opened'
d. il-walad fataḥ il-baab
DEF-boy-NOM open-PT DEF-door
'The boy CAUSE the door to be opened'

The verb set in data (10a) and (10b) takes the pattern of the canonical unaccusatives, whereas the second set in data (10c) and (10d) qualifies the labile anticausatives. This test is adequately correlated with another important test, namely, passivization. Labile anticausative verbs may undergo passivization using reflexive morphemes/prefixes[9], but the canonical unaccusatives do not undergo passivization (via the morphological change/ internal pattern change associated with passives, as in (11):

(11) a. n-ġala l-ḥaliib
PASS-boil-PT DEF-milk
'Milk was boiled'
b. *iʃ-ʃams *n-ġaab-at/* ġ-t-aab-at/*ġiib-at
DEF-sun PASS-set-SG.F.
'The sun was set'

One could say *n-ġala l-ḥaliib* 'milk was boiled' but not **iʃ-ʃams *n-ġaab-at/ *ġ-ta-ab-at/ *ġiib-at* 'the sun was set'. In other words, canonical unaccusatives occur only as

[9] So if the root has an anticausative verb, it will not have a passive until a later on stage of projecting the detransitivizing affix (-t- or n-) to produce passivization. For details, refer to discussions in data (18) and (19).

intransitives, whereas labile anticausatives may occur in both constructions. In turn, this suggests that the θ-role that such verbs assign to their complements is not compatible: no external agent is **implied** in the unaccusative structures (e.g., *iʃ-ʃams ġaab-at* 'the sun was set')[10].

Verb restriction is another major difference between anticausatives and canonical unaccusatives (cf. Schäfer 2008: 116). The former can appear in transitive structures, as in (12a). However, canonical unaccusatives in JA cannot appear transitively (as in 12b) unless triggering a morphological change (affixation) of the verb, as in (12c):

(12) a. ʕAli fataḥ il-maḥall
Ali open-PT DEF-Shop
'Ali opened the shop'
b. maat iṣ-ṣabi
die-PT DEF-boy
'The boy died'
c. *ma**ww**at* *is-samm* *iṣ-ṣabi*
CAUSE-die DEF-poison DEF-boy
'Poison killed the boy'

Another important test can be attributed to the semantic meaning of 'active participle' ($C_1VVC_2VC_3$ derived pattern). The active participles of anticausatives are understood as referring to a *present state*, as in (13a) where the pattern *faatiḥ* indicates that the shop is opening now. Meanwhile, active participles of other forms (such as canonical unaccusatives) are understood as indicating a *resultative* or *perfective state* of some sort; i.e., they have a past connotation, as in (13b) where the pattern *ġaajb-i* indicates that the sun went down a little while ago. In addition, the active participle of anticausative verbs used with the adverbial *lissa* may have either a 'just/already' or a 'still' reading, as in (13c), while the active participle of canonical unaccusatives may have only a 'just' reading, as in (13d) (see also Al-Kawada 2011 for tests on MSA).

(13) a. il-maḥall faatiḥ
DEF-shop open-AP
'The shop is NOW opening'
b. iʃ-ʃams ġaajb-i
DEF-sun go down-AP- F.SG.
'The sun went down'
c. il-maḥall lissa faatiḥ
DEF-shop still open-AP
'The shop is still opening'
d. iʃ-ʃams lissa ġaajbi
DEF-sun still set-AP
'The sun has just set'

[10] Up here (data in 11 and 12 above), stating that '[l]abile anticausative verbs may undergo passivization using reflexive morphemes/prefixes, but the canonical unaccusatives do not undergo passivization' and then stating that no external agent is implied in the unaccusative structures' should not mislead the reader since it is not the anticausative verb that is passivized, but there is a verb which can appear in various constructions: transitive-causative, anticausative, or passive.

To distinguish between canonical unaccusatives (which take an internal argument such as a THEME) and Arabic anticausatives (which occurs in both transitive and intransitive structures, with the object of the transitive verb playing the same θ-role in the intransitive verb). This can also be proved by performing the agentive adverb licensing test and allowing control into the purpose clause. Consider the data in (14)[11]:

(14) a. is-safiina ġirg-at b-surʕa
DEF-ship sink-PT-SG.F. quickly
'The ship sank quickly'
b. *is-safiina ġirg-at ʕamdan
DEF-ship sink-PT-SG.F. intentionally
'The ship sank intentionally'
c. il-majj in-ġala-t la-ni-ʕmal ʃaaj
DEF-water PASS-boil-PT-SG.F. to-1.P.PRT-prepare tea
'Water was boiled to prepare tea'
d. *il-majj ġala-t l-ni-ʕmal ʃaaj
DEF-water boil-PT-SG.F. to-1.P.PRT-prepare tea

In their intransitive constructions, anticausatives typically encode inchoatives: a change of state/degree occurring to the subject of the intransitive verb, such as *fataḥ* 'open', *sakkar* 'close', *daḥal* 'roll', *ðaab* 'melt', and *ṭabax* 'cook'. The agentive adverb *ʕamdan* 'intentionally' is not licensed in (14b) and does not allow control into the control clause in (14d).

Given these tests altogether, we can argue against Al-Qadi (2015: 59) who assumes that the inchoative/causative alternation (unergative, unaccusative dichotomy) does not exist in Standard Arabic, and thus "Arabic causatives are mainly derived from intransitives", and against Davis (2000: 27) who claims that Arabic is an anticausative language in which anticausatives are morphologically derived from causatives. In the view of the above discussion, the existence of labile anticausatives in JA questions the ability of the derivative approach to account for the causative alternation in JA. That is, one cannot claim that the anticausatives are derived from the causatives and vice versa. Thus, a common-base approach (e.g., Alexiadou et al. 2006; 2015; Schäfer 2009; Zibin 2019) can be argued for where both pendants (causative and anticausative) are derived from a common root/base, which works perfectly in JA. It explains why certain verbs even though they are derived from the same root could be morphologically marked or not marked. Additionally, adopting a common-base approach also accounts for the fact that some verbs do not causativise/anticausative, which actually poses another challenge for a derivative approach to the causative alternation (cf. discussions on deriving the verb patterns in (18) and (19). Consequently, we assume that anticausatives occupy a middle position between transitive and intransitive verbs in JA without constituting a separate class of their own.

[11] This test is also referred to as the 'modification and control test' (Schäfer 2008: 116).

4. Structural representation of labile anticausatives in JA

Two sharply different sets of proposals concerning the behaviour of anticausatives have been offered. One set views anticausatives as the reflexive version of the causative (e.g., Chierchia 1989/2004; Koontz-Garboden 2009; Beavers & Koontz-Garboden 2011 cited in Lundquist et al. 2016)[12]. The other set generally treats anticausatives as a *causer-less* version of the causative (de-causative account). The latter has three different but related versions: (i) anticausatives lack a semantic CAUSE event (e.g., Grimshaw 1982; Reinhart & Siloni 2005; Ramchand 2008); (ii) anticausatives have CAUSE components, but they encode an external argument (either existentially bound or replaced with an expletive argument, e.g., AGENT or INSTRUMENT) that brings about the CAUSE event (e.g., Levin & Rappaport Hovav 1995; Lidz 1999; Doron 2003; Alexiadou et al. 2006; Schäfer 2008)[13]; and (iii) anticausative structures (decausativization in their words) operate in the lexicon, in which "the external causer argument is eliminated from a transitive predicate to yield an intransitive predicate" (for details, cf. Lundquist et al. 2016: 1-2). The implications of these two differing views have certain consequences: the reflexive analysis requires that the causative component does not entail its anticausative counterpart, as the latter contains semantic information that is lost from the former (THEME is causally involved in/responsible for the undergoing change of state). By contrast, a causer-less proposal states that the causer component entails the anticausative counterpart (Lundquist et al. 2016)[14]. The rest of this section will introduce the different proposals that argue for the computation of anticausative structures and their lexical causative counterparts.

4.1. Verbal layers projections vs. little *v* flavours

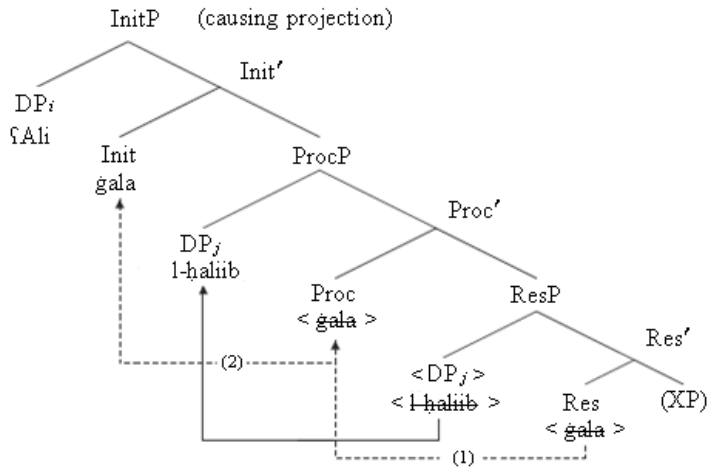
Ramchand (2008) adopted a contextual interpretation of the structure of change-of--state verbs, whereby specific inherent semantic features are syntactically encoded in different verbal layers. The verbal domain is projected into three verbal layers (core heads): the Initiation Phrase (InitP), which corresponds to the predicate CAUSE; the Process Phrase (ProcP), which corresponds to the predicate BECOME; and the Result Phrase (ResP), which corresponds to the predicate STATE (Ramchand 2008; Al-Qadi 2015: 79). The applications of this proposal to structures such as *ʕAli ġala l-ḥaliib* 'Ali boiled the milk' will be analysed as follows in (15) (adopted from Ramchand 2008: 46; Wood 2012: 9; Al-Qadi 2015: 80).

[12] In this approach, anticausativization is semantically and syntactically a reflexivization operation that assigns both arguments of the relation to be the same (Chierchia 2004). Additionally anticausative/inchoative contain the CAUSE operator which is retained in the lexical semantics of the causative counterpart (Koontz-Garboden 2009). The reflexive approach will no longer be pursued in this section as the reflexive morphemes (typically the prefix *n-*, and the infix *-t-*) were not used in JA data in this work.

[13] It is worth noting that Levin & Rappaport Hovav (1995) is the early proposal of the derivation of anticausatives in the lexicon.

[14] Results pertaining to this issue are still inconclusive and a matter of ongoing research; for details, refer to the debate between Beavers & Koontz-Garboden (2011) and Horvath & Siloni (2013).

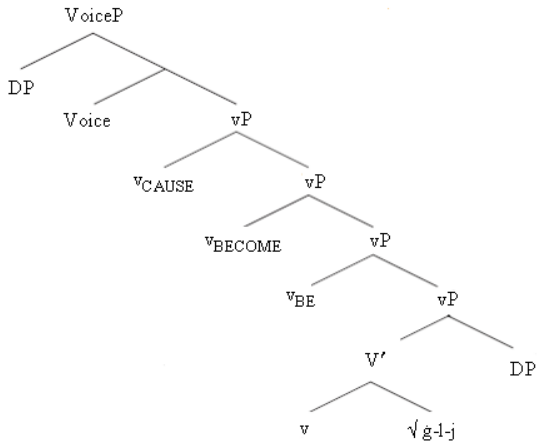
(15)



This derivation shows that the external argument *ʕAli* occupies the Spec, InitP as the agent/causer of the initiation state of the event. The internal argument (l-ḥaliib) originates in Spec, ResP as the subject of the result state and cyclically moves up the grid to occupy the Spec, ProcP as a subject of the process. The verb *ġala* 'boil' originates in Res (denoting the resulting subevent)[15], and then appears in Proc (denoting the change of state), followed by Init (denoting initiation/cause). The latter verbal layer (i.e., InitP) is what differentiates the lexical causative from its labile anticausative counterpart. Subsequently, the process can be rephrased as follows: the agent/causer (ʕAli) initiates a process on *l-ḥaliib* 'milk' that results in *l-ḥaliib* being boiled (cf. Wood 2012; Al-Qadi 2015). Considering the different lexical manifestations of the three verbal layers structured above, the complex structural representation can presumably be remapped in the grid in (16) (modified from Wood 2012: 12).

[15] The labile anticausative verb *ġala* 'boil-BECOME' starts out as a RES since it forms a resultative/change-of-state relationship attributed on its surface subject/THEME *il-ḥaliib* 'milk' (cf. Levin & Rappaport Hovav 1995 and data in 16).

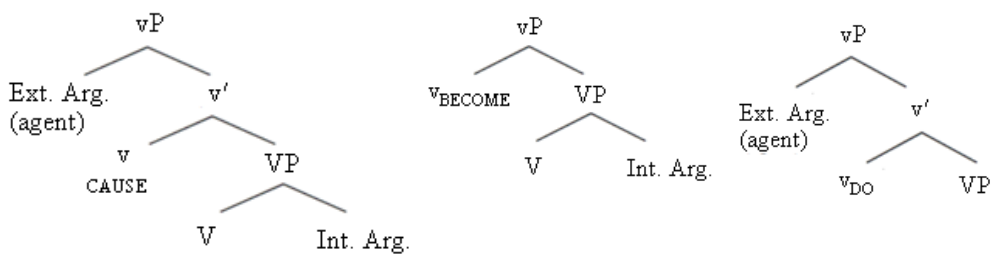
(16)



Following Wood (2012), layered grids such as (16) above would have overt reflexes of the semantic categories ^{v}CAUSE, ^{v}BECOME, ^{v}BE (and ^{v}DO), which may correspond to a complex morphological structure such as √ġ-l-j-BE-BECOME-CAUSE-VOICE. Considering the cross-linguistic variations and the proposal that some elements do not have active syntactic consequences/components, only elements that operate in syntax should appear. Thus, the above grid does not conform to all possible syntactic derivations.

The other major proposal involves the *little v flavours* approach; it is further assumed that the little head v hosts a specific semantic component and subsequently projects different subevents (e.g., stative, causative, anticausative, stative, resultative); hence, the little v contains a variety of flavours (CAUSE, BECOME, DO) that inherently affect the syntactic structure and thematic licensing of external arguments (cf. Harley 1995; Folli & Harley 2004; Blanco 2011; Al-Qadi 2015)[16]. The structures in (17a), (17b), and (17c) illustrate the different flavours of the little head v.

(17) a. ^{v}CAUSE 'Ali broke the vase' b. ^{v}BECOME 'the vase broke' c. ^{v}DO 'Ali ran'



[16] Marantz (1997) further assumes the 'verbalizer' property of the little head v, whereby the head v interdigitates a root into a verb template/pattern (transitive/intransitive) that promotes the little v flavour operation in order to allow/disallow the external argument. Although the researchers agree on the efficiency of the 'verbalizer v' in Arabic as motivated by the distributed morphology framework (Marantz 1997), this framework does not seem applicable in the case of the anticausativization process in JA. No morphological distribution in terms of a verbal pattern, vowel melody or affixation occurs in the derivation of anticausatives from their causative counterparts; therefore, we leave this issue for future investigations.

By contrast, Schäfer (2008, 2012), Marantz (2009), Fehri (2012), Wood (2012), Pitteroff (2014) and Alexiadou et al. (2014) decline the little v flavours approach as proposed in Harley (1995), Folli & Harley (2004), Blanco (2011), and Al-Qadi (2015), among others. Schäfer (2012: 131) further assumes that "the syntactic decomposition of causative verbs should not make use of semantically annotated verbal heads such as ^{v}CAUSE". Instead, the thematic causativity operates at "the Conceptual-Intentional Interface from the syntactically composed resultative event structure", and thus, causers are not introduced by Voice projection. Supporting this claim is the fact that passive constructions have an implicit argument, whereas anticausatives cannot combine with a by-phrase, a purpose clause (e.g., to collect insurance), or an agent-oriented adverb (e.g., deliberately). Accordingly, the external causation originates from the lexical semantics of the argument structure (cf. Manzini1983; Roeper 1987; Levin & Rappaport Hovav 1995), resulting in lexical reduction (Chierchia 1989/2004; Reinhart 1996 cited in Kallulli 2006).

4.2. Labile anticausative constructions in JA

Change-of-state events are causative since the causers (which derive their causative semantics from ^{v}CAUSE and select a resultant state of event) are inherently eventive; this entails that the causative semantics of causers originates within the VP (cf. Schäfer 2012). To this end, we assume that the verbal head ^{v}CAUSE (which selects a resultant state) dominates lexical causative and anticausative structures. We further assume that ^{v}CAUSE adjoins with the verbal root to form a complex head. The semantically annotated ^{v}CAUSE and the lexical verb jointly introduce the causative event indicated in the lexical verb.

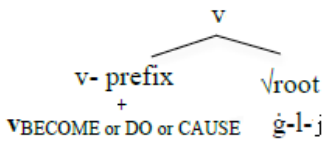
Following Embark (2010), building verbs involves categorizing a root (√) with a functional head v, as in (18):

(18) Roots cannot appear without being categorized; roots are categorized by combining with category-defining functional heads, e.g., v, n. Embick (2010).

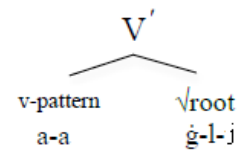
In line with distributed morphology (Marantz 1997; Arad 2005; Embick 2010; Al-Qadi 2015), the merger process basically applies to two different types of morphemes, namely, roots (consonantal root for Arabic) and functional morphemes. To gain its syntactic feature, a morphophonological process merges the consonantal root (which contains semantics)[17] with functional morphemes/vowel melody (v-pattern) to produce the *verbal pattern* (not a noun or an adjective). Intriguingly, the projection of the labile anticausative verb in JA is significantly different from that of Standard Arabic (cf. Al-Qadi 2015: 86-87); the consonantal root of the anticausative verb merges with a verbal/morphological *affix* to assign lexical and syntactic features in Standard Arabic. However, the JA root suffices to merge with v-pattern. The structures in (19a) and (19b) illustrate this operation for the verb *ġala* 'boil BECOME' in Standard Arabic, and *ġala* 'boil BECOME' in JA, respectively (root = {ġ-l-j}):

[17] Kastner (2019: 606) treats the consonantal root in Hebrew as a 'store of idiosyncratic phonological and semantic information'. The proposal combines the lexical root with functional heads to derive the non-concatenative effects of the language and make accurate predictions about interactions between allomorphic elements and the phonological word.

(19a)



(19b)

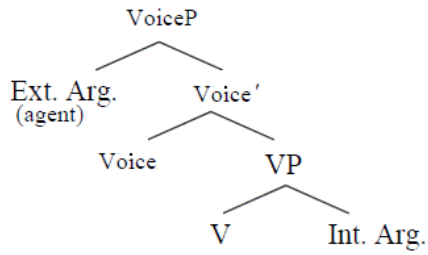


Based on the structures proposed in (19), we can demonstrate the difference between our proposal and Al-Qadi's (2015). In (19a), Al-Qadi (2015) adopts the little v flavours approach where the head "v" contains a prefix (verbal morphology) plus verbalizing features ^{v}BECOME/DO/CAUSE. In (19b), the function of the V projection is three-fold: (i) identifying the root as verbal, not nominal, (ii) identifying the phonology of the root and its templatic components, and (iii) promoting event implications (eventuality) (cf. Pitteroff 2014: 22). Therefore, we assume that causers are not introduced by Voice projection, and thus, the external causation originates from the lexical semantics of the argument structure, resulting in lexical reduction. Because the causers are inherently eventive, the causative semantics of causers originates within the VP. Assuming that the root semantics determines its behaviour in (anti)causative alternation (cf. Alexiadou 2006), the verbal layer is decomposed as follows: the lexical causative verb *ġala* 'boil', which involves a stative subevent in its event decomposition (Levin & Rappaport Hovav 1995), and the consonantal root √*ġ-l-j* merge with the morphological v-pattern, which together holds a residue of the semantic component [+cause]. The head V-bar then merges with its DP in order to assign the state of the object DP (for example, *il-ḥaliib* 'milk'). Stating that the root morpheme and verb pattern have an anticausative component in JA supports the common-base approach where both pendants (causative and anticausative) are derived from a common root/base (one could always assume derivation via null morpheme: anticausative *ġala* √*ġ-l-j* is derived from causative *ġala* √*ġ-l-j*, or vice versa). This would explain why certain verbs, even though they share the same root, could be morphologically marked or unmarked. Adopting this approach also accounts for many verbs that do not (anti)causativise, which actually poses another challenge for a derivative approach to the causative alternation.

Recalling that different types of voice exist, we follow Kratzer's (1996) Voice Hypothesis in assuming that the canonical external argument is introduced by the functional *Voice* head (e.g., ^{v}AGENT, ^{v}CAUSE), which projects it as an external argument and assigns it the θ-role, as in (20) (Schäfer 2008: 101; Schäfer 2012: 3)[18].

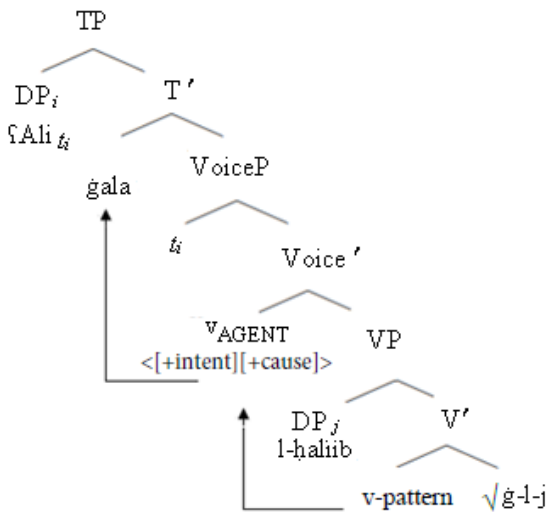
[18] For a comprehensive account of a formal account on the possible values of the head Voice where syntax interfaces with phonology, morphology and semantics, refer to Kastner (2020).

(20)



Following Schäfer (2012), a verbal head ^{v}CAUSE (which is semantically annotated) occurs in causative and anticausative verbs and expresses a change-of-state event[19]. Thus, *break*-class verbs project a [+cause] feature in Voice. Deriving anticausative constructions involves the use of Voice with a v projection that lacks an external argument (specifier) (cf. Alexiadou et al. 2006). Subsequently, the decomposition of the lexical causative in *ʕAli ġala l-ḥaliib* 'Ali boiled milk' should occur as in [ʕAli Voice [^{v}AGENT [^{v}CAUSE [l-ḥaliib V√ġ-l-j]]]]. Hence, the [+agent] and [+causer] roles played by the external argument *ʕAli* 'Ali' in the above structure can be referred to as 'agentive causer' in which such a structure manipulates the head function (cf. Schäfer 2008: 101; Kastner & Tucker 2019); consider the data in (21).

(21)

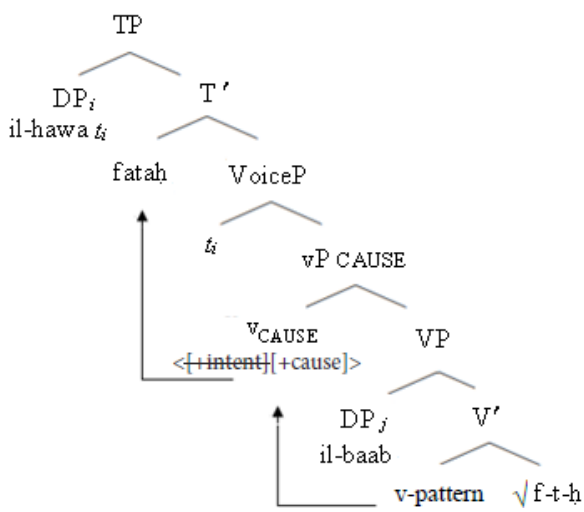


In other words, the computation of √ġ-l-j (which also contains causative semantics), the morphological v-pattern, and the *residue* of the cause feature together with the DP

[19] Recall that causative verbs and anticausative verbs 'are inherently causative even though they have no causer argument' (cf. Levin & Rappaport Hovav 1995; Schäfer 2012).

under the syntactic category VP correspond to the resultant stative subevent. The head v plus the residue of the semantic causative rises to Voice in an attempt to interdigitate the vowel melody {a-a} which specifies active voice, and then it raises to Spec, VoiceP to check grammatical tense and any other features that remain unchecked. The external argument (ʕAli) checks the [agent] feature occupied by the Voice head ^{v}AGENT. After being assigned its θ-role AGENT, the external argument moves upward in Spec, TP to check the nominative case feature occupied by T. In principle, this assumption can be expanded to similar structures where the causer is an inanimate entity or a natural force. Consider the decomposition of structures such as *il-hawa fataḥ il-baab* 'the wind opened the door'. An *unintentional* causer argument such as *il-hawa* 'the wind' is not an intermediate argument of the cause predicate. Rather, it introduces the Voice projection above CAUSE, where they check the ^{v}CAUSE feature, and then rises upward to Spec, TP, as in (22).

(22)



The derivation shows that voice projection does not introduce any subevent, as its function is to relate the external argument to the subevent introduced by the cause projection. Hence, event identification is achieved, as the proposed structure combines the state of event denoted by the verb with the proper external argument (cf. Schäfer 2008). Although verbs such as *fataḥ* 'open' and *ġala* 'boil' belong to the subclass that can be selected by ^{v}AGENT or ^{v}CAUSE, internal arguments (or affected elements) cannot thematically be assigned AGENT or CAUSER roles in the anticausative variant. In this respect, two potential explanations emerge.

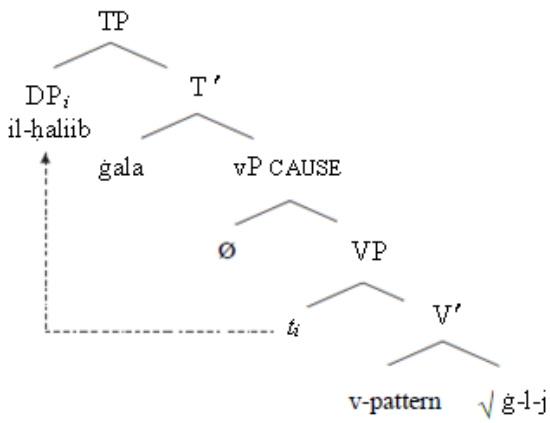
The first answer is to assume that labile anticausative constructions are derived in some way that is similar to the derivation for their causative counterparts. Evidence in support of this assumption can be found by testing for 'PP modification', in which labile anticausative structures licence unintentional causing elements and causers introduced by the preposition 'from' (cf. Schäfer 2008), as in (23):

(23) a. il-baab fataḥ mni-l-hawa
DEF-door open-PT from-DEF-wind
'The door opened from/because of the wind'
b. ? il-baab fataḥ mni-l-walad
DEF-door open-PT from-DEF-boy
? 'The door opened from/because of the boy'
c. il-baab in-fataḥ mni-l-walad
DEF-door PASS-open-PT from-DEF-boy
'The door was opened from/because of the boy'

Although intentional causers and agents cannot be introduced in 'from modification' when used in labile anticausative structures (as in 23b), the license of the same modifier in (23a), in the same way in (23c), reflects the presence of an implied (unintentional) cause component in the lexical semantic representation of the verb (for similar results in other languages, see Levin & Rappaport Hovav 1995; Alexiadou et al. 2006; Kallulli 2006; Schäfer 2008).

Recall that, following Schäfer (2008; 2012), we assumed that labile anticausatives inherently have an implicit causer argument and that there exists a voice head ^{v}CAUSE to select a resultant state, as in (24) in comparison with data in (21) and (22). (Also, read Al-Qadi (2015: 88, data 10) to compare our data in (24) with change-of-state structures in Standard Arabic):

(24)



Labile anticausative verbs such as *ġala* 'boil' only subcategorize for an internal argument in which *ġala* cannot assign either the accusative case or the external θ-role AGENT/CAUSER. In deriving structures such as *il-ḥaliib ġala* 'milk boiled', the affected element (*il-ḥaliib* 'milk') is first merged to the lower Spec, V projection, where it is assigned its THEME role. The suppression of the implicit nominative feature [cause] on the head Voice projection has resulted in neither an AGENT nor a CAUSER and is licensed in Spec, VoiceP. Since no external arguments are recognized, no external θ-role is assigned. Adopting Kratzer's Voice Hypothesis, this analysis indicates that the causative alternation presented

in (22) and (24) involves voice alternation (i.e., causatives have voice projection, and labile anticausatives do not). Additionally, the derivation in (24) indicates that labile anticausatives inherently capture a subevent decomposition [+cause] similar to that of the derivation in (22) but without a voice head, since the causative predicate does not assign an external argument. Where a merger process is not allowed, the absence of an AGENT or CAUSER gives the internal argument/affected component *il-ḥaliib* 'milk' the opportunity to raise to Spec ,TP attracted by the strong nominative case feature that remains unchecked. In line with Burzio's generalization (government binding theory in Chomsky 1981; 1986; Burzio 1986; Haegeman 1994; Levin & Rappaport Hovav 1995), a verb that does not assign a θ-role to its subject cannot legitimately case-mark its object. In terms of the Extended Projection Principle (EPP), since the unaccusative predicate *ġala* does not assign the accusative case to *il-ḥaliib*, the object (*il-ḥaliib*) is forced to move up to the subject position, where it is assigned case, to satisfy the EPP. The derivation in (24) above has correctly specified the same word order in the sentence *il-ḥaliib ġala*. This claim is best supported by the notion that labile anticausatives and lexical causatives involve only one event combined with the same result state introduced in both variants[20].

The second answer builds on the variation in shades of meanings and the assumption of the existence of multiple voice heads, which together entail a variety of selectional restrictions. This assumption addresses labile anticausative structures separately from their causative counterparts. Evidence in support of this notion is two-fold: (i) the lack of external argument is evident from the inability to license the 'by + agent' structure as discussed in (7) earlier, and (ii) labile anticausative structures license the 'by itself/without cause' phrase when no intentional or unintentional external argument is involved. Structures such as *il-ḥaliib ġala* do not involve explicit CAUSER or AGENT arguments. This test provides possible/grammatical results for labile anticausatives (but not passives), as in (25):

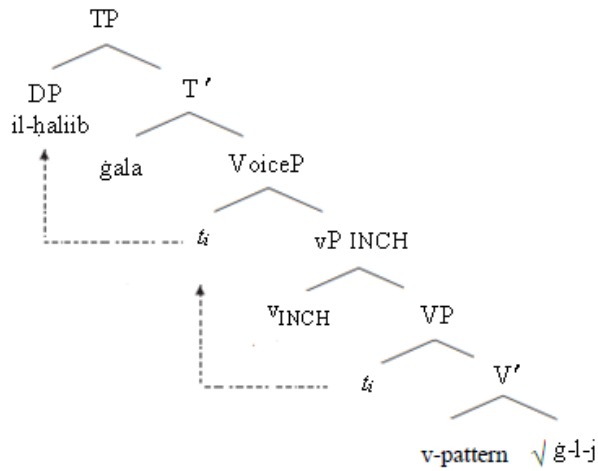
(25) a. il-baab fataḥ la-ḥaalu
DEF-door open-PT by itself
'The door opened by itself'
b. *il-baab in-fataḥ la-ḥaalu
DEF-door PASS-open-PT. by itself
'The door was opened by itself'

Contrary to the passive construction in (25b), licensing the 'by itself' phrase in (25a) indicates that labile anticausative constructions may not involve an implicit external force/causer. Assuming that we are correct in the semantic annotation of labile anticausatives (shifting away from examples such as *ʕAli ġala l-ḥaliib*), the voice predicate does not entail agency or causativity. In the absence of an implicit AGENT or CAUSER role, a straightforward label that captures the relationship between the subject (*il-ḥaliib*) and its predicate is as follows: the voice projection introduces the Voice head (ᵛINCH), which encodes an inchoative resultant state of event achieved over its THEME, which is definitely different from having a verbal template that is bearing a BECOME semantic meaning. Recall

[20] (cf. Kastner & Tucker 2019 who argued that using different patterns produces different derivations).

that the role of verbal template is vital in clarifying causative alternation in Standard Arabic (cf. Al-Qadi 2015). However, verbal template loses such a morphological role in JA. Consider the following structure in (26):

(26)



The internal argument decomposes under the lower VP, and ^{v}INCH, found in the Voice head, forces the fronting of the internal argument to Spec, VoiceP to check the inchoative feature and to confirm that the voice is not passive and that the argument is neither a causer nor an agent (similar to middle voice^{0}); then, it raises up to Spec, TP for other nominative case checking; the decomposition of the labile anticausative in *il-ḥaliib ġala* would be represented as in (il-ḥaliib Voice [^{v}INCH V√ġ-l-j]). This assumption supports the claim that each verb interdigitates with other syntactic components (specifically arguments and voice) that together identify certain semantic features carried by the verb that lead to different syntactic derivations. To this end, the structure in (26) suggests that labile anticausatives are pure inchoative structures in which the absence of the cause head does not block the implied (unintentional) causer reading.

At this point, regardless of whether we prefer one solution over the other, one might argue that such verbs are best be characterized as 'morphosemantic' elements in nature, rather than morphosyntactic. In line with Kastner (2016; 2018) and Kastner & Tucker (2019), finding more than one meaning of the same base ($C_1VC_2VC_3$) without building new complex structures dictates the language ability to access more idiosyncratic meanings of the same root in other contexts. In other words, reporting labile exceptions to the morphologically marked causative alternation (of certain class of roots) gives some support as of how the roots' idiosyncratic meaning controls syntactic structure.

Further, one might ask about the number of voice heads that may be expanded in the syntax of labile anticausatives, where such computations allow for extra expansions, and ask whether they are purely syntax-bound or whether semantical annotations are still expected to contribute to each specification. Such important questions will be addressed

in future research. In sum, evidence suggests that simple transitive structures (causatives) such as (2a) involve a phonetically empty υ analogous to the overtly realized light verb in labile anticausative structures (cf. Chomsky 1995 building on Hale & Keyser 1993; Hornstein et al. 2005).

4.3. Jordanian Arabic vs other Arabic variants

One important notion should be stipulated before moving forward to the next section: the emergence of labile anticausative structures lends supporting evidence to the ongoing process of diachronic change in JA. Data in (27) compares structures mentioned in this work with structures reported in MSA Arabic, other JA dialects, and some regional Arabic dialects:

(27) a. al-baab-u futiḥ-a MSA
DEF-door-NOM open-PASS
'The door was opened'
b. al-baab-u n-fataḥ-a MSA
DEF-door-NOM ANTICAUS-Open
'The door BECOME-opened'
c. al-baab n-fataḥ Modern Arabic dialects
DEF-door ANTICAUS-Open
'The door BECOME opened'
d. ʕAlij-un q-t-anaʕa MSA
Ali-ACC convinced-ANTICAUS
'Ali became convinced'
e. ʕAli n-ginaʕ (Iraqi Arabic & Libyan Arabic)
Ali Conviced-ANTICAUS (Zibin 2019: 61)
'Ali became convinced'
f. ʕAli ginaʕ JA
Ali BECOME-convinced-PT
'Ali became convinced'

Comparing labile anticausative structure in (27f) with the other examples (27a-e) would be an indicator of the ongoing process of diachronic change in spoken JA that results with a strong tendency to the use of simple verbal morphology in comparison with MSA and many other Arabic dialects. The reduction of morphosyntactic structures includes the use of basic Form I verb faʕal/$C_1VC_2VC_3$ (e.g., *fataḥ* and *ganaʕ*) instead of the morphologically derived verb forms and passive patterns (e.g., *n-fataḥ*, *n-ganaʕ*, and *g-t-anaʕ*). Hence, voice does not involve internal vowel change but is incorporated into the triconsonantal verb forms I (*futiḥa* > *fataḥ*). Such simplification/reduction in a number of morphological patterns and grammatical structures produces duplicated/redundant morphological functions. This process also results in the development and expansion of the inchoative/change-of-state class where no external or internal inchoative detransitivizing morphemes (e.g., n-patterns, t-pattern, or internal vowel change for passive) are involved (cf. Laks et al. 2019 for the used patterns in Palestinian Arabic).

5. Conclusion

The present study provides a natural and rational analysis that addresses the relationship between transitive objects and labile anticausative subjects in JA. As an accusative language, JA shows structural development of anticausativity attested by certain labile anticausative verb constructions. JA appears to implement syntactic but not morphological anticausativity, since morphological affixation is not used within the investigated anticausative structures.

The present work also examines the adequacy and flexibility of the linguistic theory for deriving non-trivial predictions that account for certain structures. This analysis has additionally explored the importance of incorporating thematic functions into syntactic models. This process allows us to capture the similarity between different (but related) uses of one lexical item, where the semantic properties of certain lexical items significantly influence the syntactic behaviour of such items. This study shows that in order to explain the variable behaviour of labile anticausative verbs in JA, it is essential to consider the lexical features of those verbs and the dynamic interaction between the features and meanings of the constructions in which certain verbs may appear.

Labile anticausative verbs in JA participate in alternations such as that exemplified in (5). The intransitive variant in the (5b) example above confirms the proposition that the subject has escaped elimination. The transitive variant in the (5a) counterparts comprises a causative construction that includes an AGENT (causer) responsible for saving the THEME. The analysis of labile anticausative verb structures provides interesting evidence that VPs comprise a complex structure with a Voice head that introduces the top VP and that the Voice head is mainly responsible for the presence/absence of an external argument (Kratzer 1996). The strong relationship between the voice type, Voice head, and external argument also suggests a plausible answer to causative and anticausative constructions. In our data, two proposals have been suggested: one assumes the presence of a Voice head ^{v}INCH (similar to middles) that forces internal argument fronting, and the other assumes that deriving labile anticausative constructions involves the use of Voice with an implicit ^{v}CAUSE projection that lacks an external argument (specifier). That is, labile anticausative verbs in JA contain a cause subevent but lack an external argument that forces this change of state.

More interestingly, the results of this work are in line with the general trend of the Arabic dialect towards a diachronic nominalizing v and antipassive constructions where the semantic object of a transitive verb prefers internal argument movement and appears as an external (non-core) argument. In congruence with this phenomenon, JA forces an antipassive account of transitive structures via the involvement of one structural case applied to intransitive subjects and transitive objects without any morphological devices. Contrary to the previous works on modern Arabic dialects that consider break-class verbs as ergatives, the present model assumes that such verbs constitute a middle position between transitive and intransitive verbs in JA but do not constitute a separate class of their own. Evidently, the correct characterization of the labile anticausative subclass distribution is that it surfaces wherever v is transitive as well as in intransitive volitional

contexts (a non-natural class). Finally, future studies are recommended in order to examine the implications of modern syntactic theories of the case system in JA compared to that in other languages. In line with Béjar (2003), researchers should further attempt to verify whether shared properties may occupy variant heads in different languages.

Although the transitive counterpart of anticausatives are usually marked via morphological affixes that reflect structural and lexical components in Classical Arabic and MSA, a number of verbs in JA involving causative alternation exhibit identical forms in JA (e.g., *ġala* (+T) 'to CAUSE boil something' vs *ġala* (-T) 'to BECOME boil'). The intriguing question here is whether 'break-class verbs' truly exhibit occasional anticausative patterns in JA. Based on representative JA corpora, further comprehensive investigation is recommended to identify whether or not the marked anticausativization loses this feature in the course of its modern history.

Abbreviations

JA = Jordanian Arabic; VP = verb phrase; DEF = definite article; 3 = third person; M = masculine; F = feminine; SG = singular; PL = plural; PT = past tense; AP = active participle; PASS = Passive; PRT = present.

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