
RESEARCH ARTICLE

The Syntax of Unaccusative Verbs in Moroccan Arabic: A Minimalist Approach

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ABSTRACT

The present paper explores the syntax of unaccusative verbs in Moroccan Arabic (MA) within the theoretical framework of the Minimalist Program (MP). The study aims to delimit the gap in the literature concerning the analysis of unaccusative verbs in the context of MA. The primary objective of this research is to apply the VP split hypothesis to account for unaccusative verb constructions. The findings reveal that unaccusative verbs can appear in locative inversion constructions and expletive-insertion structures but cannot undergo passivization. Furthermore, the Split-VP hypothesis provides an appropriate account for these constructions and the alternating SVO orders of MA. Semantically, unaccusative verbs take one internal theme argument in their thematic grid. This internal argument originates within VP, where it receives nominative case, and remains in VSO order. To derive the SVO order, the theme argument moves to spec-TP to satisfy the EPP feature of T. Therefore, the study provides insights into the syntactic structure of unaccusative verbs in MA, which can supply information for comparative syntax in future research.

KEYWORDS

Unaccusative, unaccusativity hypothesis, the Minimalist Program, VP-split hypothesis, nominative case, Moroccan Arabic

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1. Introduction

Verbs are central components of linguistic structures, serving as the core around which sentences are built. Consequently, the study of verbs and their classification has received considerable attention in the linguistic literature. Generally, verbs are classified according to the number of arguments they take; they are categorised into transitive, intransitive, and ditransitive. Intransitive verbs do not require a complement; they are mono-argument verbs (Adger, 2003; Chomsky, 2015; Radford, 2004). These verbs can be further subdivided according to the thematic roles of their subjects. Indeed, the Unaccusative Hypothesis introduced by Perlmutter (1978), classified intransitive verbs into unaccusatives and unergatives, each associated with a different syntactic behaviour. Unaccusative verbs such as 'arrive', 'sneeze', and 'fall' have an internal argument but not an external one. This argument is theta-marked as [Theme] but occurs in the subject position. In contrast, unergative verbs such as 'smile', 'walk', and 'speak' require a single external argument that bears an [Agent] theta role. Following the Uniformity of Theta Assignment (UTAH), the [Theme] argument originates as a complement of VP (Adger, 2003). However, Burzio (1986) concluded that unaccusative verbs cannot assign accusative case to their complements since these verbs lack an [agent] argument. Hence, the internal argument moves to spec-TP where it receives the nominative case.

The remainder of this paper is organised as follows: The first section provides an overview of the argument structure and unaccusative hypothesis and presents the Split VP hypothesis and phase theory. The second section presents an in-depth analysis of the unaccusative sentence structures. Finally, a conclusion to the paper is presented.

2. Literature Review

The GB theory introduced the notion of argument structure in the 1980s, which acknowledged that lexical items can take different arguments according to their meaning (Al-Qadi, 2015). Accordingly, Trask (1993) portrays an argument as “a noun phrase bearing a specific grammatical or semantic relation to a verb and whose overt or implied presence is required for well-formedness in structures containing that verb” (p. 20). Hence, the argument can be described based on its syntactic and semantic roles. While the syntactic roles of an argument concern its position within the sentence structure, the semantic roles refer to the semantic relation between a verb and its argument(s).

Marantz (1984) stated that internal arguments are syntactically and semantically linked to the complement position of the verb within the VP. On the other hand, external arguments refer to the subject's position and semantic role. These hypotheses strive to reach a uniform mapping between semantic structure and syntactic structure. Consequently, to adequately account for the argument structure of a predicate, one must describe the thematic role (θ -role) that each argument fulfils concerning the predicate (Radford, 2004).

Accordingly, predicates directly θ -mark (assign a θ -role) their complements (internal argument) but indirectly θ -mark their subjects. Chomsky (1981) proposed that these thematic properties of arguments abide by a UG principle referred to as the theta criterion:

- 1) **Theta-criterion/ θ -criterion:** Each argument bears one and only one θ -role, and each θ -role is assigned to one and only one argument (Chomsky 1981, p. 36).

Moreover, according to Radford (2009, p. 251), thematic relations (like agent and theme) have been argued to play a prominent role in the description of various linguistic phenomena, such as the argument structure of verbs. For example, transitive verbs require both subject and object arguments. Consequently, their subject displays agent-like properties (Taha & Mohammed Sultan, 2022).

- 2)
 - a) James [Agent] made the cake [Theme].
 - b) The boy [Experiencer] enjoyed the match [Theme].
 - c) The girl [Goal] received a warning [Theme].

In contrast, intransitive verbs only require one argument, without the need for a direct object.

- 3)
 - a) The plate [Theme] broke.
 - b) He [Agent] laughed.

As a result, unaccusative (intransitive) verbs require one single argument that bears a theme theta role; however, it occurs in the subject position and behaves syntactically like the object of transitive verbs. Unaccusativity has generally been taken as a key focus in the syntax/semantics interface discussion. Subsequently, the Unaccusative Hypothesis has paved the way for researchers to explore the relationship between argument roles and syntactic positions. It demonstrates the underlying argument structures of both intransitive verbs: unaccusative and unergative.

2.1 The Unaccusative Hypothesis

In 1978, Perlmutter introduced the notion of unaccusativity. He proposed the Unaccusative Hypothesis (UH), which distinguished between two types of intransitive verbs: unergative and unaccusative, each associated with a different underlying syntactic configuration (Radford, 2009).

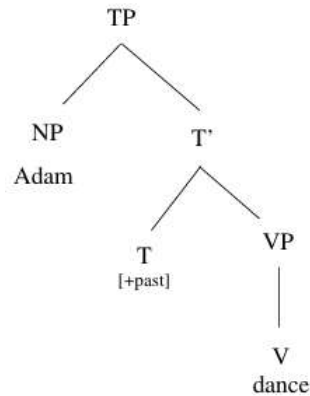
- 4)
 - a. Unergatives: the subject Np (Adam) carries the thematic role of AGENT.
NP [VP V] Adam danced.
 - b. Unaccusatives: the subject Np (Eve) carries the thematic role of THEME.
[VP V NP] Eva arrived.

According to Levin and Hovav (1995, p. 3), unergative verbs differ from unaccusative verbs in their argument structure. Unergative verbs are characterised by having an external argument NP (Adam) but no internal argument. In contrast, the single argument (Eva) of an unaccusative verb stems from its internal complement position and functions as the object. Levin and Hovav (1995) also differentiated between intransitive verbs based on how they display different syntactic configurations in the deep structure representations. Unergative verbs take a D-structure subject and no object, while unaccusative verbs take surface subjects that correspond to a D-structure object. This hypothesis showcases the role of semantics in determining syntactic behaviour. It highlights the importance of considering both the syntactic structure and the semantic meaning of verbs to assess their classification as unaccusative or unergative. For instance, Perlmutter considered the semantic features (agentivity) of the subject to classify intransitive verbs. Accordingly, understanding the thematic roles of a verb enables us to anticipate the

syntactic structure of the predicate. Unergative verbs encode actions where the subject is the agent performing the act, like “sing” or “dance”. Unaccusative verbs entail the subject undergoing the action, typically involving a change of state or location, as in “break” or “sleep” (Van Gelderen, 2013; Levin & Hovav, 1995). Furthermore, in light of the unaccusative hypothesis, Levin and Hovav (1995) outlined several diagnostic tests that can be used to distinguish between unaccusative and unergative verbs, including passivisation, resultative constructions, causative alternation, and ‘there’ insertion. These diagnostics, which vary across languages, are based on syntactic and semantic criteria and have been widely used in linguistic research. In this study, some of these tests are applied in order to distinguish unaccusative verbs in MA.

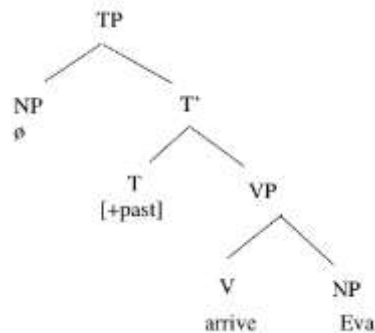
2.1.2 Unergative Verbs

The sole argument of unergative verbs is generated in the subject position and stays in situ, where it is assigned the Nom case. Therefore, no movement is needed since the [EPP] feature is already satisfied by the subject.



2.1.3 Unaccusative verbs

According to Burzio’s generalisation (1986, p. 178), when a verb lacks an external argument, it loses its ability to assign a theta-role (Agent) to its subject NP; hence, it cannot assign a structural (accusative) case. Therefore, the single argument of any type of intransitive verb is assigned a nominative case (only in an accusative languages). As these verbs do not assign the accusative case to their complement, they are termed unaccusative. Thus, the postverbal argument remains in situ in the VP-complement position.



Perlmutter’s (1978) analysis shows that themes of unaccusative verbs occur in object positions, but since these verbs cannot assign a case to their complement, the argument, therefore, has to move to the external argument (subject position) to be assigned a case. Thus, the NP (Eva) moves to an external position of VP to gain the Nom case. This operation is in accordance with the Attract Closest Principle, which moves the closest (and only) nominal c-commanded by [T ø]. Radford (2004) argued that this movement is traditionally known as A-movement, as it involves movement of a subject into the specifier position (spec-TP) within TP, which can only be occupied by an argument. This movement is triggered by the [EPP] feature carried by T.

All in all, Perlmutter’s (1978) and Burzio’s (1986) Unaccusative Hypothesis distinguished between the two classes of intransitive verbs. Unergative verbs have a single argument that carries an agent θ -role and remains in situ. On the other hand, unaccusative verbs’ sole argument carries a theme θ -role and undergoes movement to Spec-TP to satisfy the EPP feature and case assignment. Therefore, the single argument carries a theme θ -role for unaccusative verbs and an agent theta role for unergative verbs (Adger, 2003). However, this violates economic considerations of MP, such as the Uniform Theta Assignment Hypothesis (UTAH, henceforth).

- 5) **Uniform Theta Assignment Hypothesis/UTAH:** A hypothesis proposed by Baker in 1988 which posits that “each theta-role assigned by a particular predicate is canonically associated with a specific syntactic position” (Radford, 2004, p. 482).

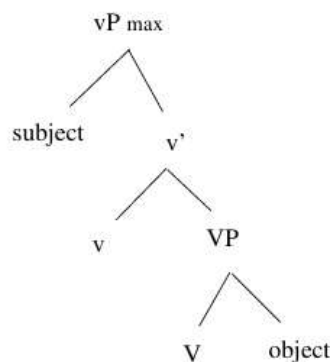
Hence, the syntactic structure of unaccusative verbs is refined with the introduction of the Split-VP hypothesis. This paper analyses unaccusative verbs in MA under a minimalist approach using the split-VP hypothesis.

2.2 The Split VP Hypothesis

Larson (1988) first introduced the VP-shell hypothesis to account for the case assignment of double objects. Later on, this proposal was extended to account for the analysis of verb phrases. This hypothesis posits that VP is split into two distinct projections, or shells: an inner shell and an outer one (Abdel Wahed, 2021). Since this research is concerned with unaccusative verbs, the split VP construction is limited to the construction of unaccusative verbs. Larson (1988) suggested that VPs can split into two shells, in which one embeds the other:

- vP (little v): the functional projection where the external argument (subject) is introduced. According to Radford (2004), it is headed by a strong affixal light verb (with a causative sense), to which a verb is raised.
- VP (big VP): The inner VP shell, where the lexical verb and its internal arguments are generated. It is the complement of the vP structure.

This VP shell hypothesis showcases the hierarchical asymmetry between internal and external arguments and conforms to economic considerations. Moreover, a uniform mapping between the syntactic structure and the semantic structure of arguments is maintained.



VP Shell Structure according to Chomsky (1995, p.351).

Radford (2004) illustrated that the unaccusative constructions are represented at the underlying syntactic level with a two-layered VP shell structure: An inner VP shell is headed by a lexical verb which serves as the complement of an outer VP shell headed by a strong affixal light verb (Smadi et al., 2022). Hence, the sole argument of the unaccusative verb originates internally as the complement of the lexical verb (V). The unaccusative verb (V) raises and is merged with the light verb (v) because of its strong 'v' feature. The internal argument is assigned the nominative case through the agreement with the T. Then it is moved to spec-T to satisfy the EPP feature of T. The vP shell does not block the movement of the Theme argument to the spec-TP.

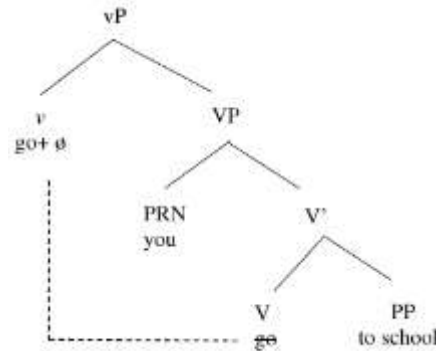
2.3 Phase theory

The MP framework introduced the concept of phases, where a given clause proceeds through two successive phases: an inner v*P phase and an outer CP one. The clausal complex CP phase represents a complete syntactic projection, including the force specification. While the (transitive) v*P represents a complete argument (thematic) structure. As mentioned earlier, the economy principle plays a key role in MP. As a result, in order to minimise the search for a probe to find its goal, the operation agrees is agreed to be local and applied in phases. Evidently, Radford (2009) explained that neither intransitive clauses, which include a vP with no (thematic) external argument, nor defective clauses lacking a CP projection are phases. Thus, the phrase (local domain of the phase) is not sent to the LF and PF yet via a transfer operation. Accordingly, the relevant TP and vP are accessible in the syntax and do not violate the following MP condition:

- 6) **Phase Impenetrability Condition/PIC:** the c-command (local) domain of a phase head is impenetrable to a probe outside the phase (Chomsky, 2001, p. 5).

According to Radford (2009), this analysis permits us to account for the postverbal position of unaccusative subjects. In this case, the subject remains in situ, where it receives its nominative case. Radford illustrated the VP shell analysis by considering Belfast's English unaccusative imperative structures:

- 7) Go you to school! (Radford, 2009, p. 360)



Similar to the split-VP hypothesis, Rizzi proposed breaking down the CP into a number of separate functional projections or layers. He suggests that complementisers, which specify the force of the phrase, should be viewed as force markers that head a Force phrase. Additionally, topicalised and focused constituents are projected into their own separate projections. Topicalised constituents occupy the specifier position of a Topic phrase, while focused constituents are contained within the spec of a Focus phrase (Radford, 2004, pp. 328-329). This subsection introduced Rizzi's (1997) split-CP analysis as it is used in the analysis of the present study, mainly the TopP and FocP projections. The introduction of VP-shells (Larson 1988) changed how we distinguish between unaccusative and unergative verbs. It has brought a change to the A-movement assumed by Perlmutter (1978) and Burzio (1986), which violates the UTAH principle. Instead, intransitive verb constructions are accounted for through a split-VP analysis. Accordingly, an unaccusative verb is a verb that only takes an internal argument. The present study adopts this definition of unaccusative verbs.)

3. Data Analysis

3.1 The Argument Structure of Unaccusative Verbs in MA

Like all other predicates in MA, the derivation of MA unaccusative verbs is not morphologically distinct. Therefore, unaccusative verbs in MA are characterised by their syntactic and semantic behaviour. This is reflected in the thematic structure and syntactic position of their argument structure. In MA, unaccusative verbs take an intransitive form, which requires one internal nominal argument that is θ -marked as Theme. The examples below reveal the argument/thematic structure of unaccusative verbs in both VSO and VSO orders, respectively.

8)

- a) l-bnat wəʃl-u the-girls arrive -Past-3Pl-F.

The girls arrived.

- b) wəʃl-u l-bnat

Arrive-past-3Pl.the-girls

The girls arrived.

wəʃl-u: V [Theme]

9)

- a) l-kəlb mat

the-dog die-past-3SG

The dog died.

- b) mat l-kəlb

die-past.3SG the-dog

The dog died.

mat: V: <DP> [Theme]

10)

- a) š-šta ʔafə-t

Rain fall-past-3SG-F

It rained.

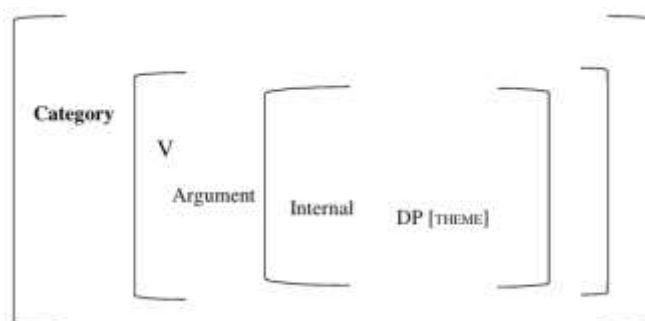
- b) ʔafə-t š-šta

fall-past-3SG-F Rain
It rained.
ṭafīʾ-t: V:

11) Unergative verb:

a) Ṣali šṭəḥ
Ali dance-past-3SG
Ali danced.
b) šṭəḥ Ṣali
dance-Past-3SG
Ali danced
šṭəḥ: V: [agent]

The examples demonstrate the thematic argument structure of unaccusative verbs in MA. This class of intransitive verbs requires only one argument. This argument is internal and occurs in the subject position but bears a Theme θ -role in SVO and VSO orders. This semantic consideration of the subject's agentivity demonstrates a diagnostic test to distinguish unaccusative and unergative verbs. For instance, in (9a; b) the unaccusative verb *mat* (died) has a single internal argument marked as a [Theme] *l-kalb* (the dog) because it does not control or perform the action; instead, it typically undergoes a state change. In contrast, in the sentence (11), the verb *šṭəḥ* (danced) is an unergative verb whose subject is an external argument, *Ṣali* (Ali), that performs the action; thus, it carries an Agent theta-role. Under the VP-internal hypothesis and UH, we can conclude that the sole argument of unaccusative verbs originates within VP and carries a Theme θ -role. This allows us to reach a uniform mapping between syntactic and semantic structure. Accordingly, the feature specification of unaccusative verbs in MA is suggested in the following schema:



This feature specification concludes that unaccusative verbs are predicates that take a single argument, which is merged internally with the verb and assigned a theme θ -role. This follows Burzio (1986) generalisation, where MA verbs which lack an external argument carrying an [Agent] θ -role fail to assign accusative case and are classified as unaccusative. This is in line with Perlmutter's hypothesis (1978) of English unaccusative classification as well as other Arabic dialects. MA unaccusative verbs share their feature specification with Classical Arabic (Abdel Wahed, 2021), Modern Standard Arabic (Alonini, 2022; Al Qadi, 2015), Jordanian Arabic (Smadi et al., 2022) and Sudanese Arabic (Taha and Sultan, 2022).

3.2 The Insertion of Additional Arguments

Subsequently, the insertion of an external argument, such as an agent, renders the sentence ungrammatical, as shown in the following examples:

- 12)
- a) dab t-təḷʒ
melt-past-3sg the-ice
The ice melted.
 - b) t-təḷʒ dab
the-ice melt-past.3SG
The ice melted.
 - c) *l-weld dab t-təḷʒ
the-boy melt. past.3SG the-ice
The boy the ice melted.

As shown in the example (12c), the insertion of an external argument *l-weld* (the boy) causes the sentence to become ungrammatical. This is because the DP *l-weld* is not assigned an Agent theta role or a case by the unaccusative verb (which requires only a theme argument). This violates the theta criterion and case filter. This also supports the argument that the internal argument of unaccusative verbs in MA originates in the complement of VP and is assigned a theme theta role. Therefore, in the SVO and VSO orders, the unaccusative verbs require only one argument that bears a theme role. However, these verbs may take an optional argument of location or path. This argument takes the form of a PP complement, illustrated in parentheses.

13)

(c) *š-šta ʔaħə-t (f-qniṭra)*

Rain fall-Past-3SG-F in-Kenitra

d) *ʔaħə-t š-šta (f-qniṭra)*

fall-Past-3SG-F rain in-Kenitra

It rained in Kenitra.

ʔaħə-t: V: < [theme], (Locative) >

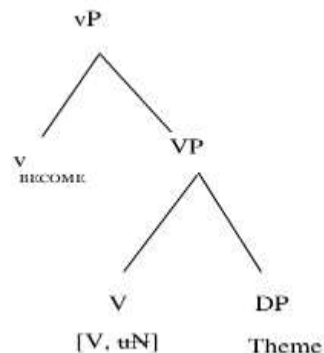
The examples show that unaccusative verbs in MA are typically verbs of change of state or location. For instance, the unaccusative verb *ʔaħə-t* (fell), in the example (27), has two internal complements: the objects *š-šta* (rain) and the PP *f-qniṭra* (in Kenitra), respectively. A syntactic tree representation of this sentence, where the DP and PP are complements of the verbs, would assume a ternary branching. However, this structure is problematic within the MP framework, which assumes that the merger operation that forms phrases is inherently binary. In this study, a Split-VP analysis (Larson, 1988) is adopted to account for the structure of unaccusative verbs with a PP complement in both SVO and VSO structures.

4. VP Shell Hypothesis and Unaccusative Verbs in MA

The schematic representation shows that the unaccusative category of verbs assigns one argument that receives a [theme] θ -role and is merged internally with the verb. Therefore, this theme argument is positioned as a complement of the verb. This is based on the UTAH principle, which imposes that specific theta roles hold unique syntactic positions in all structures. This principle is in line with Larson's (1988) Split-VP hypothesis, where the structure of the verb phrase is split into two projections: a high vP projection headed by a light verb and an embedded lower VP projection headed by a lexical verb. Accordingly, the configuration of thematic roles respects the UTAH principle in the form of a hierarchical projection (Adger, 2003).

- DP is the daughter of vP if it bears an [Agent] role.
- DP is the daughter of VP if it bears a [theme] role.

Thus, the sole argument of unaccusative verbs, which bears a theme of theta roles, originates as a complement of the VP within a vP shell, as illustrated in the following:

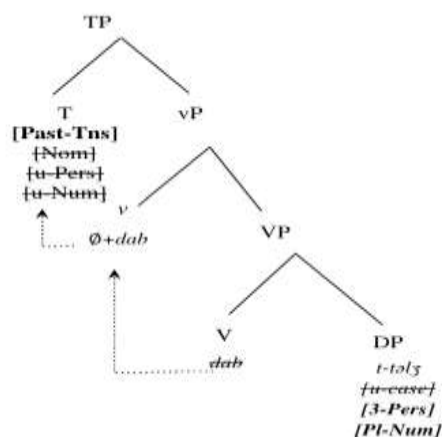


The subject of the unaccusative verb originates as the complement of the lexical verb, leaving the subject of the light verb null in [Spec, vP]. Additionally, the little *v* head corresponds to the semantic meaning of a change of state or location. For instance, in (25), the unaccusative nature of the verb *dab* (melt) is determined by the selectional property of *v BECOME*. This is in line with Al-Qadi (2015) findings in MSA and Achab (2012) characterization of change of state verbs in Tamazight. However, Al-Qadi (2015) and Abdel Wahed (2021) presumed that unaccusative verbs' argument in CA originates or moves to spec-vP.

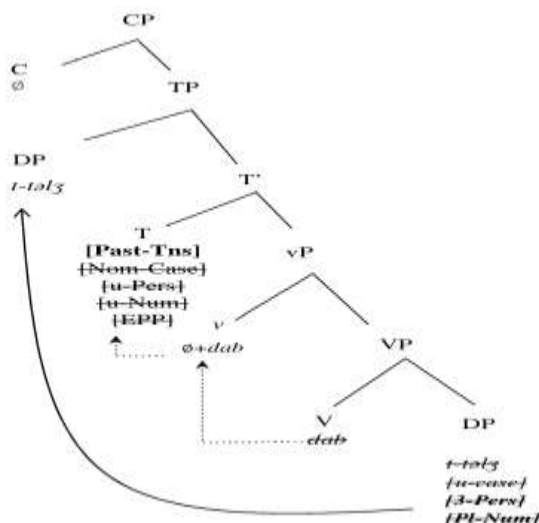
4.1 Unaccusative Verb Derivation in SVO and VSO

the derivation of the unaccusative verbs such as *dab* (melt) in the sentence (12a; b) in SVO and VSO is as follows: First, the verb *dab* (melt) is an unaccusative verb; it does not assign accusative case to its sole DP argument, *t-təʔ* (the ice), which bears a Theme θ -role. Based on the UTAH, this argument is merged internally within the VP in the complement position. Then, the verb is raised to merge with the null light verb *v*, which lacks a specifier and an accusative case feature. The vP projection is, in turn, merged with the functional head *T*, which carries the NOM case. Finite *T* acts as a probe by virtue of being the highest active

head and checks its unvalued Φ -features with the local goal $t\text{-}t\alpha\lambda\zeta$ uninterpretable person and number features. Next, T values the unvalued case feature of DP $t\text{-}t\alpha\lambda\zeta$ as nominative in situ (which is not overtly marked in MA). T also probes v and checks its [TNS] against the goal v. Throughout this research it is assumed that v moves to T in order to check the [TNS] and strong [V] features on v. v values its uninterpretable ϕ -features against T, which is ϕ -complete via agreement with DP. Thus, T values a V-feature against v (Announi, 2021). Besides, v to T movement is associated with rich morphology languages. For instance, in Spanish, a change in the stem vowel of a verb results in a uniform alteration of tense/agreement. Thus, the v feature of T is morphologically manifested in the form of a stem vowel. For example, to derive the past tense form of the verb 'canto' (I sing), the stem vowel changes from /a/ to /e/, 'canté' (I sang) which causes v to T movement (Concha, 2014). Subsequently, in the VSO order, the T does not have an [EPP] feature; hence, it does not trigger movement as shown below.



In the case of the SVO order, the derivation proceeds in the same way. However, the head T is characterized by a strong [EPP] feature, which triggers the movement of the theme DP $t\text{-}t\alpha\lambda\zeta$ to the specifier of the TP. The resulting TP is merged with the null declarative complementizer C to form CP.



In contrast to Alrashed (2012), Al-Qadi (2015) and Abel Wahed (2021) analyses of unaccusative verbs in CA and MSA, which concluded that the theme argument is assigned nominative case through movement from spec-vP to spec-TP. This minimalist analysis provides an economical solution to the nominative case assignment via agreement. The theme is assigned Nom case in situ in through agreement with the head T. This allows to reach a uniform account of Nom-case assignment of the Theme, where it is assigned and remains in situ in VSO but moves to spec-TP in SVO. This analysis also aligns with the UTAH principle, in which the theme argument originates as an object of VP.

5. The Syntactic Computation of Unaccusative Verbs in MA

Unaccusative verbs in MA are derived through different syntactic operations and processes. For instance, the derivation of the example (12a) is as follows: First, the numeration process selects the lexical items [*dab*, $t\text{-}t\alpha\lambda\zeta$] from the lexicon. Next, the operation Merge is applied in successive applications. The lexical items are merged to form the VP $dab\ t\text{-}t\alpha\lambda\zeta$, which in turn merges with the light verb v that lacks a specifier, forming the vP $\emptyset + dab\ t\text{-}t\alpha\lambda\zeta$. The lexical verb *dab* moves to attach to v through a combination of Copy and Merge operations. The vP thereby formed merges with the T constituent, forming the T'. The T serves as a probe because of its uninterpretable ϕ -features and searches for a nominal goal. Since the DP $t\text{-}t\alpha\lambda\zeta$ carries an

uninterpretable case feature and is within the local domain of T, it serves as a goal. Thus, the case feature of the theme *t-taʕz* is valued as nominative and deleted. Conversely, the goal *t-taʕz* values and deletes the uninterpretable person/number feature of T. In SVO order, the T carries an [Epp] feature, which is deleted by movement of the goal to spec-TP. The deleted uninterpretable φ -features of T and the case features of the goal are visible in the PF and syntax components, but not in the LF component. The undeleted [Past-Tns] feature of T will be visible in the PF and LF. Hence, the verb is spelt out in the third-person plural past tense form *dab* (melted). The resulting TP is subsequently merged with a null declarative complementizer. Since all unvalued features have been valued and all uninterpretable features have been deleted, the derivation is convergent.

5.1 Expletive-insertion in MA

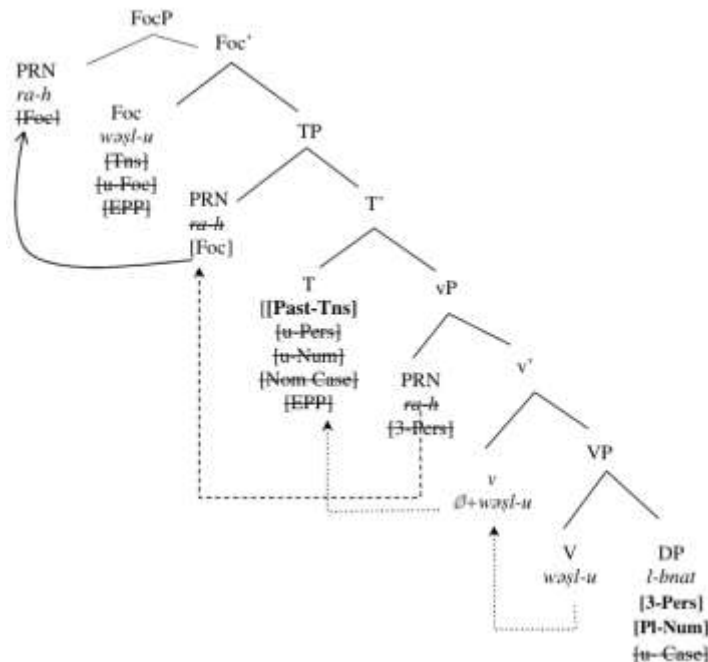
An alternative way to satisfy the EPP feature of the functional head T is by merging an expletive 'there'.

According to Fehri (1993), in MA, if the thematic subject is plural, an expletive may be either singular or plural, such as '*ra-h/ra-hum*' (it/there). Subsequently, unaccusative verbs can appear in expletive-constructions in MA. This serves as another diagnostic test that distinguishes unaccusative verbs and provides evidence for the VP split analysis account.

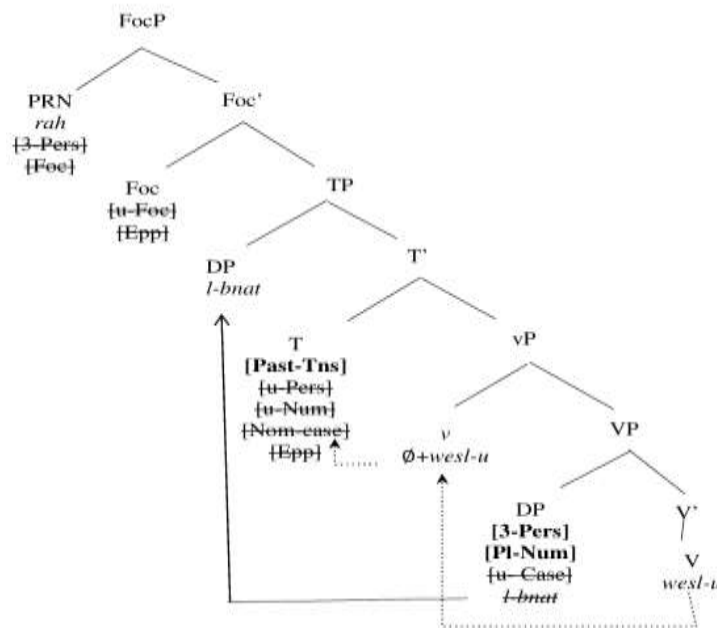
14)

- a) *ra-h/hum waʕl-u l-bnat*
see-them Arrive-past-3pl.the-girls
There arrived the girls.
- b) *ra-h/hum l-bnat waʕl-u*
see-them the-girls Arrive-past-3pl.
There arrived the girls

The derivation of example (14a) is formed as follows: The unaccusative verb *waʕl-u* (arrived) merges with its locative complement *l-bnat* (the girls) to form the VP *waʕl-u l-bnat*. This VP in turn is merged with a null light verb which, being affixal, triggers movement of the lexical verb *waʕl-u* from its position in V to adjoin to the light verb. The resulting v-bar is merged with the expletive *ra-h* (it) to form the vP shell *ra-h $\emptyset$ +waʕl-u l-bnat*. Since this vP shell is unaccusative (intransitive) by virtue of having no thematic external argument (no agent). The merging of the expletive pronoun *rah* satisfies the *Expletive Condition of External Argument*, which requires the expletive to merge as "the highest argument of a light verb with no external argument" (Radford, 2009, p. 363). Thus, the non-thematic expletive '*ra-h*' (there) is externally merged in the non-thematic specifier of v. The vP shell is then merged with T and the v raises to T to satisfy the tense feature, forming the T-bar *$\emptyset$ +waʕl-u ra-h l-bnat*. At this point, the T is the highest head in the structure, and so serves as a probe. It is active because of its uninterpretable person/number features; therefore, it looks for active nominal goals to agree with in its local domain. The expletive *ra-h* (active because of its uninterpretable 3-person feature) and the DP *l-bnat* (active because of its uninterpretable case feature) are two active goals accessible to the probe T. Both are accessible since neither is c commanded by a phase head (a complementizer or transitive verb) according to the Phase Impenetrability Condition/PIC (Radford, 2004). Hence, T simultaneously agrees with both *rah* and *l-bnat*. The unvalued person feature of T will be valued as third-person via agreement with the third-person goals *ra-h* and *l-bnat*. The unvalued number feature of T will be valued as plural via agreement with DP *l-bnat*. Then, the uninterpretable φ -features of T are deleted by the goal *l-bnat*. The unvalued case feature on the theme DP will be valued as nominative and deleted by the φ -complete probe T. Per the Attract Closest Principle, the EPP feature of T attracts the closest active goal, *ra-h* (there) to move from spec-vP to spec-TP. This movement is not blocked since it occurs within the local domain of the TP and the intransitive vP is not a phase. Since '*rah*' is used for emphasis purposes (for focus scope), this analysis adopts Rizzi's (1977) split-CP analysis and argues that '*rah*' is raised into the specifier position within the focus phrase to satisfy both the [EPP] feature and the uninterpretable focus feature of Foc head. Besides, the verb moves from T into the head Foc position of FocP because of its strong affixal [Tns] feature and to check the Focus feature. The derivation is represented by the following tree:

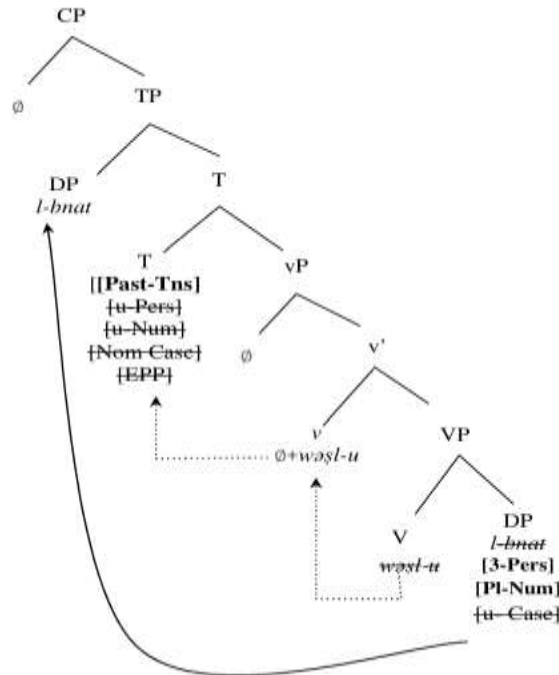


Additionally, to drive the SVO order as in example (14b) *ra-h l-bnat wayl-u* (There arrived the girls), the analysis supposes that the [EPP] feature of T is satisfied by moving the DP from Spec-VP to Spec-TP. This *rah-SV* order is considered less natural. In fact, it issued questions in its grammaticality judgements. However, it was deemed acceptable and that 'rah' is used for emphasis reasons in both orders. Accordingly, from a discourse perspective, the focused expletive 'rah' is assumed to present new information. Since Foc allows only one constituent as its specifier, 'rah' is externally merged in the spec-FocusP position. Thus, the derivation continues as follows: the TP is merged with a Focus projection, where the expletive 'rah' is merged externally in Spec-FocP. The Foc head is a weak head that does not carry a [Tns] feature to account for the fact that the verb *wayl-u* remains in the T position. The expletive serves as a probe because it is the highest head in the structure and carries an uninterpretable third-person ϕ -feature. It locates the goal Foc which is active because of its uninterpretable focus features and the goal DP *l-bnat* which is active because of its ϕ -features: these have been marked as invisible in the LF (via feature deletion), but remain visible in the syntax. Accordingly, the goals delete the matching uninterpretable third-person and focus feature carried by the expletive 'rah' (EL Haddari, 2025).



Otherwise, in the case of non-expletive construction, the EPP feature of T can be satisfied through the *Attract Closest Principle* by moving the only available nominal goal, *l-bnat*, to spec TP. The complement argument of the unaccusative verbs raises to become the subject of the underlying verbs as represented in the tree below. In this case, the expletive and the internal

argument DP are mutually exclusive or in complementary distribution. They both compete for the non-thematic specifier of TP. For instance, the sentence '*rah wašl-u*' (they arrived) is grammatical, where the expletive replaces the DP *l-bnat*.

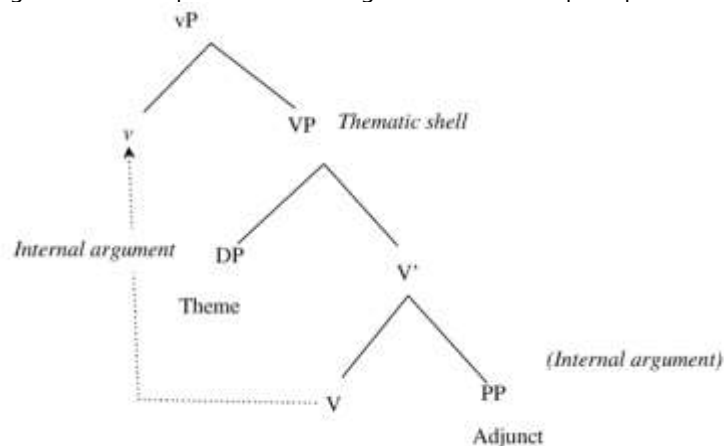


In sum, the insertion of the expletive there/it in MA results in grammaticality in unaccusative verb constructions. This illustrates another piece of evidence in support of the assumption that the argument of the unaccusative verb appears in an internal position within VP, i.e. theme. This is explained by the insertion of the non-thematic expletive '*rah*' (there) in the external argument position Spec-vP where it moves to Spec-TP to satisfy EPP of T. The expletive '*rah*' is used for focus scope in both SVO and VSO orders in MA. Thus, in VS it further moves from spec-TP to spec-FocusP. Whereas, in VS order it is externally merged in Spec-FocusP.

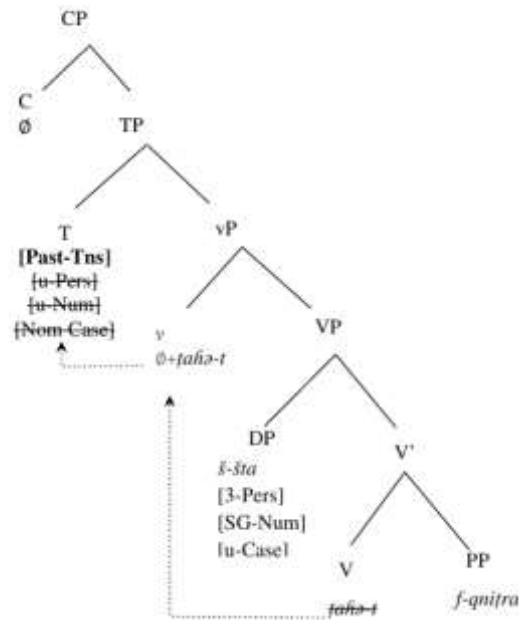
Furthermore, this analysis aligns with Smadi et al. (2022) study in JA, where the expletive '*fiih*' occurs in spec-TP in unaccusative verbs construction. Similarly, Sudanese Arabic and Standard Arabic analyses of unaccusative verbs also employed there-insertion as a diagnostic test by moving the expletive '*hinnak*' from spec-vP to Spec-TP (AlRashed, 2012; Taha & Mohammed Sultan, 2022).

5.2 Locative inversion

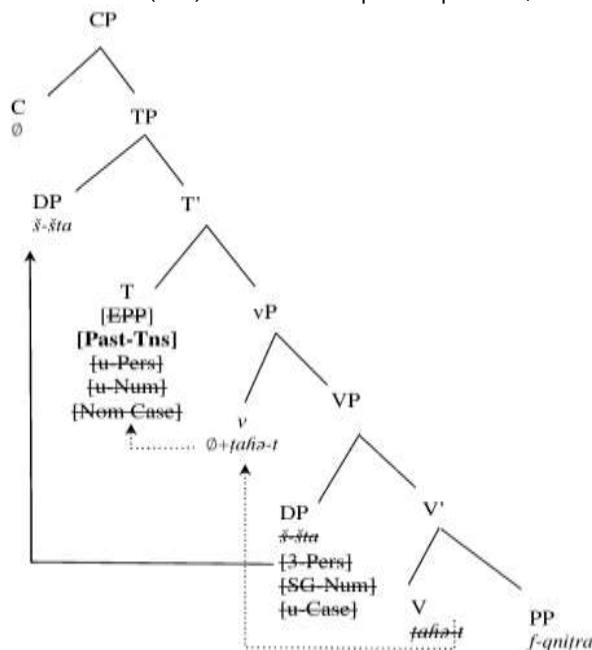
As mentioned in the previous section, unaccusative verbs in MA can occur in a specific construction in which they take an optional PP complement. The VP shell structure illustrates that the PP and DP occur internally within the vP shell which lacks a specifier. The adjunct is the daughter of a bar projection of the lexical V and the theme. In contrast, the theme argument is merged internally as a core argument in the spec of VP. This aligns with the UTAH principle.



The order of merger of the two complements follows the merger condition (Radford, 2009), where the DP and PP originate internally within VP, and the DP is the last one merged. the VP shell enables us to account for this construction. For instance, the sentence (13d) *ṭaḥā-t š-šta f-qniṭra* (it rained in Kenitra) is represented in VSO order as in the following.



The sentence (13d) is derived as follows: First, the lexical verb *ṭaḥā-t* merges with the PP as the complement of V to form the V-bar *ṭaḥā-t f-qniṭra*. Next, it is merged with the internal argument DP in spec-VP, which bears a theme θ -role. The resulting inner VP shell merges with the light affixal verb *v*. Subsequently, the lexical verb raises to adjoin the null verb, leaving behind a deleted copy. The formed vP is merged with a null finite T, which has an interpretable past-tense feature and uninterpretable (unvalued) ϕ -features; thus, the *v* is raised to T. T acts as a probe and locates the DP *š-šta* (rain) as the closest active goal due to its unvalued case feature. Since the DP is ϕ -complete, it values and deletes the person/number feature on the T, and conversely, the probe T values the case feature of the DP as nominative in situ and deletes it. The resulting TP is then merged with a null declarative complementizer $\emptyset$ to form CP. Thus, the PP *f-qniṭra* (in Kenitra) and DP *š-šta* (rain) complements of V are positioned internally within the VP shell. This analysis provides further evidence that unaccusative verbs in MA require internal arguments rather than external ones. Hence, the Split-VP analysis is appropriate to account for unaccusative verbs in MA. Further evidence in support of the split VP analysis is represented in the SVO order of unaccusative verbs in MA. For instance, the sentence (13c) *š-šta ṭaḥā-t f-qniṭra*, where the theme DP *š-šta* (rain) occurs in the spec-TP position, is accounted for as follows.

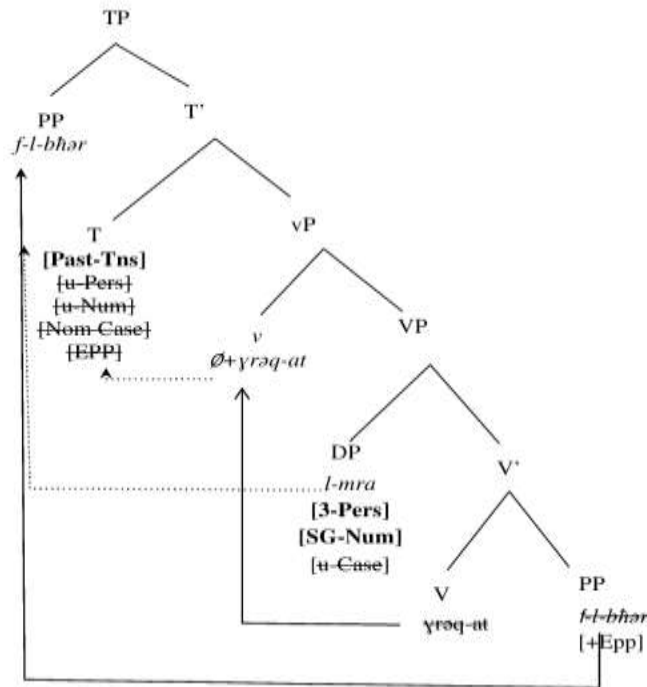


The derivation of the SVO sentence follows the same steps as the previous sentence. However, the probe T carries an [EPP] feature, which is satisfied (and thereby deleted) by raising the theme *š-šta*, to [spec-TP] which was already assigned nominative case in situ. Subsequently, unaccusative verbs in MA can take a (locative) PP complement. Similarly, Jordanian and Sudanese Arabic unaccusative verbs can have two internal arguments; a DP and PP respectively. Another property of these verbs is their ability to occur in locative inversion constructions, where the locative expression precedes the verb. This property is considered by Levin and Hovav (1995) to be a diagnostic test that distinguishes between unaccusative and unergative verbs. Therefore, further evidence in support of the claim that unaccusative clauses have a split VP structure comes from the fact that it enables us to account for locative inversion in unaccusative MA verbs. The following examples showcase MA unaccusative verbs which appear in locative inversion constructions.

15)

- a) *f-qniṭra ṭaḥā-t š-šta*
in-Kenitra fell-3SG-F rain
b) *f-qniṭra š-šta ṭaḥā-t*
in-Kenitra rain fell-3SG-F
In Kenitra it rained.
ṭaḥāt: V: < Locative, [theme] >

In MA, locative inversion can be observed in the above examples, where the focus is on the location or setting rather than the subject. In unaccusative verbs, the PP moves from its lower position to occupy the spec-TP position and exhibits the property of a canonical subject. In contrast, the theme DP stays within the VP. The vP shell analysis enables us to account for these constructions. Thus, we can derive the locative inversion structures as follows:



The verb *ṭaḥāt* (drowned) merges with its PP complement *f-l-bḥar* (in the sea) and its specifier *l-mra* (the woman) to form the VP *l-mra ṭaḥāt f-l-bḥar* (the women drowned in the sea). The VP then merges with the affixal light verb which triggers movement of the verb *ṭaḥāt* from V to v. The resulting vP is merged with a finite T constituent, which carries an unchecked [EPP] feature (in addition to ϕ -features/tense). Given that both PP complement *f-l-bḥar* and the DP *l-mra* both belong to the same maximal projection vP. There are two options for checking the EPP feature. The DP moves to spec-TP, which allows us to derive an SVO structure. Alternatively, the PP moves to spec-TP to check to [Epp] feature while the DP remains in situ. Hence, to derive a VS structure, we suppose the T carries some kind of feature that enables it to attract the PP *f-l-bḥar* to move to spec-TP (instead of the DP). The DP *l-mra*, which has nominative case (due to agreement with T) in the canonical word order of the locative inversion construction, stays in situ within VP. This movement of PP to spec-TP is under a minimalist analysis and follows economic considerations. Both the PP and the DP are in the minimal domain of the intransitive head v. Therefore, following the principle of minimality, the DP *l-mra* does not block the movement of the PP *f-l-bḥar* to Spec-TP. Additionally, this movement

satisfies another economic principle of move which is Greed. In which a constituent does not move unless it satisfies certain conditions. Accordingly, the PP moves to fulfil its own feature of [EPP], since it has subject-like properties in locative inversion structures. Furthermore, the fact that locative inversion can occur as complements of C proves that the locative does not occupy the Spec-of CP position.

- 16) a) *sməʃ-t bælli f-l-bħər ɣraq-at l-mra*
 heard-Pres-1SG that in-the-sea drown-Past-3Sg-F the-woman
 I heard that in the sea drowned the women.
sməʃ-t [CP [C *bælli*] [TP *f-l-bħər ɣraq-at l-mra*]]

However, a problem posed by this analysis is how the PP moves to the spec-TP, which is an A-bar position; thus, it cannot be occupied by adjuncts? Therefore, to account for this, we assume that in the examples (14-15), the inverted locative PP exhibits presentational focus. For instance, the proposed PP *f-l-bħər*, in (15a-b), is identified as a syntactic topic that is emphasized and can undergo further movement to a focused projection as follows:

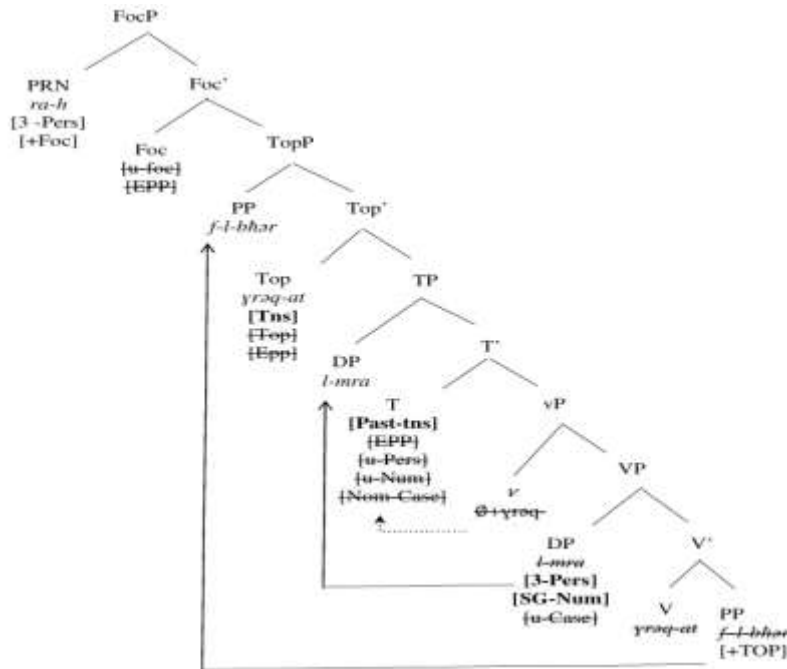
We assume that the sentences (16a-b) present old information that is topicalized to show emphasis. The PP *f-l-bħər* (in the sea) expresses contrastive information. The speaker means that the woman drowned in the sea, not in the pool or in another place. Normally, it should occupy the spec of FocusP, however, this position is not available as shown by the grammaticality of the following sentence such as:

- 1) b) *ra-h f-l-bħər l-mra ɣraq-at*
 see-it in-the-sea drown-past-3SG-F the-woman
 There in the sea drowned the woman.
 [FocP *ra-h* [Foc $\emptyset$] [TP *f-l-bħər ɣraq-at l-mra*]]

Additionally, the example (16a) provides another empirical evidence to the fact that the PP cannot occupy the Spec-Focus position. This is because the complementizer *bælli* (that) occupies the focus in the Split-CP version. We cannot have the PP in spec-focus while the C is situated in the focus head.

- (16) c) **f-l-bħər bælli ɣraq-at l-mra*
 in-the-sea that drown-past-3SG-F the-woman
 in the sea that the women drowned.
 *[FocP *f-l-bħər* [Foc *bælli*] [TP *f-l-bħər ɣraq-at l-mra*]]

As mentioned earlier, we supposed that the expletive 'rah' occupies the spec-FocP to check the Epp and focus feature of the Foc head, and the DP occupies the spec-TP. Hence, to account for the derivation of (16b), we assume that the inverted PP occupies the only available position between the Focus phrase and the TP, which is the Topic phrase (locus of a focused PP). Thus, PP moves to occupy spec-TopicP to check an uninterpretable topic feature. Therefore, to derive sentence (15), we can suppose that the head Top of the TopP contains an [EPP] and an uninterpretable topic feature and this attracts the PP which carries a matching interpretable topic feature, to move to spec-TopP. If we assume that Top is a weak head that does not carry a [Tns] feature, we can account for the SV order as in (15a), where the verb *ɣraq-at* remains in the strong T position. Otherwise, if Top carries a [Tns] feature (and the Foc is weak head), we can derive the VS order such as in (15b).



In sum, unaccusative verbs in MA can appear in locative inversion constructions, in which the locative PP moves to the Spec-TP, whereas the theme argument stays in situ. This PP locative can undergo further movement to occupy the spec-TopP in SVO and VSO orders. This was accounted for through the insertion of the expletive *rah* in the spec-FocusP, where FocusP is positioned above the Topic phrase.

5.3 Passivization

Another diagnostic test for unaccusativity suggested by Levin and Hovav (1995) is passivization. Intransitive unaccusative verbs in MA are characterized by their inability to undergo passivization. Thus, these verbs do not merge with the passive morpheme (tt- or t-) used in MA to form passive verbs. Accordingly, the following sentences are deemed ungrammatical in MA:

- 17) **t-dab t-talʒ*
melt-Pass-3SG the-ice
The ice was melted.
- 18) (35) **t-yraḡ-at l-mra*
drown-Pass-3sg-F the-woman
The woman was drowned.
- 19) (36) **t-nʃef-u l-ḥwajeʒ*
dry-Pass-3PL the-clothes T
he clothes were dried.
- 20) (37) **t-mat l-kelb*
die-Pass-3SG the-dog
The dog was died.
- 21) (38) **t-bərd-at l-qəhwa*
cool-past-3SG the coffee
The coffee cooled (became cool).
- 22) (39) **t-waʃl-u l-bnat*
Arrive-Pass-3Pl.the-girls
The girls were arrived.

The passive morpheme {t-} is used to encode the agentivity of the action. So, it semantically implies the existence of a doer of the action; an external argument. This is motivated by the fact that the prefix {t-} appears only with agentive verbs (Loutfi, 2022). Since unaccusative verbs in MA do not have an agent (external) argument performing the action, the ungrammaticality of the sentences (17-22) above is accounted for. This is also in line with Taha and Sultan's (2022) analysis of unaccusative verbs in Sudanese Arabic, which cannot undergo passivization.

5.4 Alternating Unaccusative Verbs

However, these verbs can be altered to have a transitive form in MA through a morphosyntactic derivational process termed causative alternation. This is achieved through the use of overt morphological markers to induce the derivational form *ḥāṣal* (Ben Jilali, 2023).

23) *l-wəld* [Agent] *dəwwəb təlʒ* [Theme]
the-boy-Nom melt-Past-3SG the-ice-ACC

The boy caused the ice to melt.

24) *ḡarraḡ ḥmad* [Agent] *l-mra* [Theme]
drown-Past-3sg-M Ahmed-Nom the-woman-ACC

Ahmed caused the woman to drown.

25) a) *l-bənt* [Agent] *bərrəd-at l-qəhwa* [Theme] (causative)
the girl-Nom cool-Past-3SG the-coffee-ACC

The girl caused the coffee to cool down.

This causative alternation is considered in the study of unaccusative verbs. The causative verbs above can be passivized in MA by adding the passive morpheme {t-}, thus deleting the Agent. These passive verbs are intransitive and act as unaccusative verbs in MA in that they have only one Theme argument which bears Nom-case. For instance, in (25) the object or internal argument *l-qəhwa* of the causative transitive verb *bərrəd-at* is the subject of the passive (unaccusative) variant *t-bərrəd-at*. The theme theta role is preserved in this alternation. This further proves that unaccusative verbs require one internal argument θ -marked as Theme.

(25)

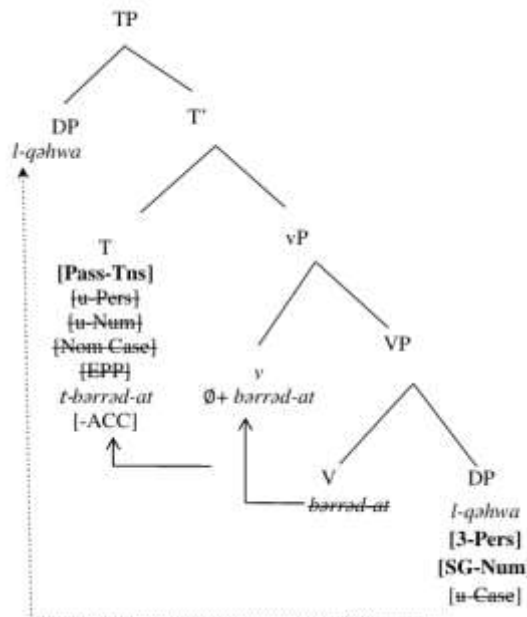
b) *t-bərrəd-at l-qəhwa* [Theme] (passive)

cool-Pass-3SG the-coffee-Nom

The coffee was cooled.

c) *l-qəhwa* [Theme] *t-bərrəd-at*
the-coffee-Nom cool-Pass-3SG

The coffee was cooled.



Since the passive verb is intransitive (unaccusative) it does not assign accusative case to the DP *l-qəhwa*. Rather, the theme argument is assigned Nom case by the T head in situ. Accordingly, the derivation proceeds as follows: The verb *bərrəd-at* first merges with the DP complement *l-qəhwa* to form the VP. The VP is then merged with the intransitive light verb, with no external argument, to form the vP shell $\emptyset + \text{bərrəd-at } l\text{-qəhwa}$. Since the vP is merged with the passive T constituent containing the passive morpheme {t-}. The verb is raised to T in order to check the tense feature; thus, it is ultimately spelled out in the PF as the passive form *t-bərrəd-at*. At this point in the derivation, the T serves as a probe and locates the DP *l-qəhwa* as a goal which is active by virtue of its unvalued case feature. T agrees with, assigns nominative case to and attracts the DP *l-qəhwa* to move to spec-T. Alternatively, in VSO order, the DP is assigned Nom case in situ and remains there since T does not have an EPP feature. The resulting TP is merged with a null declarative complementizer, deriving the CP.

Consequently, intransitive unaccusative verbs do not undergo passivization. However, MA unaccusative verbs can have a transitive form via causative alternation. Additionally, transitive causative verbs can be passivized in MA. These passive verbs are unaccusative in that they require only one argument that is theta marked as Theme and assigned the nom case via agreement with T. thus, they can be accounted for via a split VP analysis. This is in line with Ayeche (2018) findings, in which she claims that the thematic subject of the passive verb in SA is assigned Nom-case in situ via agreement with T. The behaviour of unaccusative verbs in terms of transitivity requires further investigation.

Furthermore, a problem posed by this study is the behaviour of unergative verbs in contrast to their unaccusative counterparts. For instance, the unergative verb 'dħək' (laugh) also has an alternative causative form in MA, unlike in English. Hence, causative alternation is not limited to unaccusative verbs in MA. Similarly, the unergative verb cannot undergo passivization as in (26c). Unergative verbs' participation in causative alternation and passive constructions was not given much attention in the literature; hence, it requires further research.

(26)

a) *ʕali dħək* (unergative)

Ali-Nom laugh-Past-3SG

Ali laughed.

b) *ʕali deħħək l-bānt* (causative)

Ali [Agent] laugh-Past-3SG the-girl[theme]

Ali caused the girl to laugh.

c) **t-dħək*

laugh-Pass-3SG

He was laughed.

In conclusion, the Split-VP projection hypothesis introduced by Larson (1988) can be applied to account for unaccusative verbs in MA. This analysis followed a minimalist approach by abiding by economic principles. The findings showed that unaccusative verbs in MA are represented by two shell a VP thematic shell that includes the core internal argument of the verb and an outer vP shell which lacks a specifier. This vP shell lacks a specifier because unaccusative verbs do not require an external argument in VSO and SVO orders. Rather, unaccusative verbs in MA require one internal argument that bears a Theme theta-role, originates within VP, and receives a nominative case in situ via agreement with the functional head T. Furthermore, unaccusative verbs in MA can appear in expletive-insertion and locative inversion constructions but are unable to undergo passivization.

6. Conclusion

This paper examined the characteristics of unaccusative verbs in MA in light of the unaccusative hypothesis by Perlmutter (1978) and under the Split-VP framework (Larson 1988). The findings of the study concluded that unaccusative verbs in MA take one obligatory internal argument in their thematic grid. This argument originates within VP and is assigned a Theme θ -role. To prove that arguments of unaccusative verbs are internal, two pieces of evidence were explored. First, the insertion of an external argument resulted in ungrammaticality, since it bears an [Agent] theta role. Secondly, the insertion of expletive 'rah' (there) in spec-TP is grammatical since it is a non-thematic argument. Furthermore, the VP split is in line with the UTAH principle, which imposes that specific theta roles hold unique syntactic positions in all structures. Accordingly, the structure of the verb phrase is split into two projections: a high vP projection headed by a light verb and an embedded lower VP projection headed by a lexical verb. The Split VP structure enables us to account for a number of constructions. First, it allows us to account for the derivation of unaccusative verbs in alternating SVO and VSO orders. The internal DP argument of the unaccusative verb originates within the VP shell and is assigned a [Theme] theta-role in situ, it agrees with the functional head T which assigns to the DP argument a Nom case in situ. In VSO order, the T head has a strong EPP feature which is satisfied via movement of the DP to Spec-TP. In order to derive SVO order, the probe T is assumed to lack the EPP feature; thus the DP remains in situ. Secondly, the VP shell analysis accounts for there-insertion in MA unaccusative constructions. The expletive 'rah' is used for focus scope in both VS and SV order. In VSO, the non-thematic expletive 'rah'(there) is inserted in the external argument position Spec-vP where it moves to Spec-TP to satisfy EPP of T and moves to spec-FocusP to check the focus feature. In SVO, the expletive 'rah' is merged externally in Spec-FocusP. Thirdly, the VP shell analysis accounts for locative inversion. The inverted PP has subject-like properties. Thus, it moves from its lower position to occupy the spec-TP position, while the theme DP stays in situ. The analysis also accounted for the PP movement to Spec-TopP. Finally, intransitive unaccusative verbs in MA are unable to undergo passivization. However, their transitive causative counterparts can be passivized. These intransitive passive verbs are syntactically and semantically similar to unaccusative verbs. Hence, they can occur within a Split VP projection.

Nevertheless, there is still much research to be conducted regarding the internal structure of the VP of unaccusative constructions. The present paper did not analyze the transitivity of unaccusative verbs, nor did it account for the semantic conditions of unaccusative constructions and the semantic conditions for alternating causative unaccusatives. Thus, further research is recommended to investigate unaccusative mismatches and the semantic conditions of unaccusatives in MA and cross-linguistically.

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References

- [1] Abdel Wahed, M. M. (2021). The VP-Split Analysis and Unaccusativity: A comparative study of Classical Arabic and Modern English. *Buhuth Journal*, 1(3), 47–78. <https://doi.org/10.21608/buhuth.2021.59157.1042>
- [2] Achab, K. (2012). *Internal Structure of Verb Meaning: A Study of Verbs in Tamazight (Berber)*. Cambridge Scholars Publishing.
- [3] Adger, D. (2003). *Core Syntax: A Minimalist Approach*. Oxford University Press/Oxford. <https://doi.org/10.1093/oso/9780199243709.001.0001>
- [4] Alonini, T. M. (2022). Unaccusative verbs in Modern Standard Arabic. *Saudi Journal of Language Studies*, 3(1), 47–58. <https://doi.org/10.1108/sjls-03-2022-0039>
- [5] Al-Qadi, M. (2015). Intransitivity and the causative alternation phenomenon in Arabic [MA thesis]. <https://repository.asu.edu/items/29841>
- [6] AlRashed, M. (2012). *Argument Structure in Arabic: Lexicon or Syntax?* Arizona State University.
- [7] Announi, I. (2021). The problem of word order and verbal movement in Moroccan Arabic. *International Journal of Linguistics Literature & Translation*, 4(4), 34–54. <https://doi.org/10.32996/ijllt.2021.4.4.6>
- [8] Ayeche, R. B. (2018). Phase-based analysis of verbal passive in Standard Arabic. *International Journal of Arabic Linguistics*, 4(2), 271–292. <https://revues.imist.ma/index.php/IJAL/article/download/14798/8239>
- [9] Ben Jilali, O. (2023). Crosslinguistic interference in the acquisition of English middle verbs by Moroccan EFL learners. *Crosslinguistic Interference in the Acquisition of English Middle Verbs by Moroccan EFL Learners*, 6(1), 23–53.
- [10] Burzio, L. (1986). Italian Syntax. In *Studies in natural language and linguistic theory*. <https://doi.org/10.1007/978-94-009-4522-7>
- [11] Castillo, Concha. 2014. "On the trigger of V-to-T movement". *Miscelánea. A Journal of English and American Studies* 49: 29-51.
- [12] Chomsky, N. (1981). *Lectures on government and binding*. Foris
- [13] Chomsky, N. (2015). *The minimalist program* (20th anniversary edition). The MIT Press.
- [14] EL Haddari, Y. (2025). Unaccusative Verbs in Moroccan Arabic: A Minimalist Approach [Unpublished Master's thesis]. Ibn Tofail University.
- [15] Fehri, A. F. (1993). Issues in the structure of Arabic clauses and words. In *Studies in natural language and linguistic theory*. <https://doi.org/10.1007/978-94-017-1986-5>
- [16] Levin, B., & Hovav, M. R. (1995). *Unaccusativity: at the Syntax-Lexical Semantics interface*. MIT Press. <https://www.fulcrum.org/epubs/ws859j456?locale=en#page=9>
- [17] Perlmutter, D. M. (1978). Impersonal passives and the unaccusative hypothesis. *Proceedings of the Annual Meeting of the Berkeley Linguistics Society*, 4, 157. <https://doi.org/10.3765/bls.v4i0.2198>
- [18] Radford, A. (2004). *Minimalist Syntax: Exploring the Structure of English*. Cambridge University Press.
- [19] Radford, A. (2009). *Analysing English Sentences: A Minimalist approach*. Cambridge University Press.
- [20] Rizzi, L. (1997). The Fine Structure of the Left Periphery. In L. Haegeman (Ed.), *Elements of Grammar* (pp. 281–337). Springer Netherlands. https://doi.org/10.1007/978-94-011-5420-8_7
- [21] Smadi, A. M., Al-sayyed, S., & Jaber, M. S. (2022). Transitivity and split VP shells in unaccusative constructions. Evidence from Jordanian Arabic. *Eurasian Journal of Applied Linguistics*, 8(2), 231–248. <http://dx.doi.org/10.32601/ejal.911557>
- [22] Taha, M., & Mohammed Sultan, F. M. (2022). Defining Unaccusatives in Sudanese Arabic. *Southeastern Philippines Journal of Research and Development*, 27(1), 1–20. <https://doi.org/10.53899/spjrd.v27i1.172>
- [23] Trask, R. (2013). *A Dictionary of Grammatical Terms in Linguistics*. <https://doi.org/10.4324/9780203393369>
- [24] Van Gelderen, E. (2013). *Clause Structure*. In Cambridge University Press eBooks. <https://doi.org/10.1017/cbo9781139084628>