

# Blocking Arabic Passive Nominalization: Unveiling the Syntax-Semantics Conspiracy

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This paper examines the apparent restriction against passive event nominalizations in Arabic, with a focus on Form VII templates ( $nC_1aC_2aC_3$ ). While Form VII verbs in the verbal domain allow both unaccusative and passive interpretations, only unaccusative readings are available under nominalization. The author argues that this asymmetry follows from a mismatch between the argument structure of Passive Voice and the semantic requirements of nominalization. Building on work in Distributed Morphology, he proposes that the nominalizing head  $n$  selects a VoiceP complement that must denote a saturated predicate of events. Passive Voice, however, introduces an external argument variable that requires semantic closure. The author argues that this closure is provided by a higher functional projection, which is neither syntactically available nor semantically interpretable in nominalizations. As a result, passive nominalizations lead to a type mismatch and are blocked.

*Keywords:* nominalization, passives, Arabic, non-active

## List of Abbreviations

∅	Null morpheme	S	Singular
1	1 <sup>st</sup> person	P	Plural
2	2 <sup>nd</sup> person	M	Masculine
3	3 <sup>rd</sup> person	F	Feminine
NAct	Non-Active	NMLZ	Nominalizer

## Introduction

Event nominalization has long been central to theories of the syntax-semantics interface. A key question concerns the extent to which verbal structure—particularly voice and argument structure—is preserved in nominal domains. Many approaches treat nominalization as structurally parallel to verbal projections, often assuming that nominalizing heads embed a portion of the verbal spine (Grimshaw, 1990; Alexiadou, 2001; Bruening, 2013). A recurring observation is that nominalization is akin to passivization (Grimshaw, 1990). However, the Arabic data examined in this paper challenge this parallel. Arabic<sup>1</sup> appears to systematically restrict passive event nominalizations, despite freely forming passive verbs. By way of illustration, consider the examples in (1) and (2), where the nominalization of passive verbs is blocked.

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<sup>1</sup> The variety of Arabic used in the data is the Saudi spoken Arabic.

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|--|--|
| (1) <u>Verbal Forms</u>  | (2) <u>Nominalized Forms</u>   |
| a. m-ʔakal      əl-lahm<br>NAct-ate      the-meat<br>'The meat has been eaten.'    | a. *m-ʔika:l      əl-lahm<br>NAct-eating      the-meat<br>'The meat's being eaten'     |
| b. m-ɖarab      l-walad<br>NAct-beat      the-boy<br>'The boy has been beaten up.' | b. *m-ɖira:b      əl-walad<br>NAct-beating      the-boy<br>'The boy's being beaten up' |
| c. m-farab      l-ma:ʔ<br>NAct-drunk      the-water<br>'The water has been drunk.' | c. *m-fira:b      əl-ma:ʔ<br>NAct-drinking      the-water<br>'The water's being drunk' |

The examples used in the data above invoke passive readings. Note that in the nominal domain, passive readings are degraded or unavailable.

This restriction is especially visible in Form VII templates (nC<sub>1</sub>aC<sub>2</sub>aC<sub>3</sub>), exemplified in Examples (1) and (2). In the verbal domain, Form VII realizes non-active voice and can yield both unaccusative and passive readings. In the nominal domain, however, only unaccusative interpretations are available, as shown in Examples (3) and (4).

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|---|--|
| (3) <u>Unaccusatives</u>  | (4) <u>Passives</u>  |
| a. m-dʒabar      l-ʕaðm<br>NAct-mended.3SG.M      the-bone<br>'The bone lined up.'        | a. m-dʒabar      ʕala s-safar<br>NAct-forced.3SG.M      on the-travel<br>'He was forced to travel.'                  |
| b. m-dʒiba:r      l-ʕaðm<br>NAct-mending      the-bone<br>'the lining up of the bone ...' | b. *m-dʒiba:r      sa:mi ʕala s-safar<br>NAct-forcing Sami      on the-travel<br>'Sami's being forced to travel ...' |

The central question is therefore: **Why does Arabic allow passive Voice in the verbal domain but restrict it in nominalizations?**

The author argues that this asymmetry follows from a mismatch between the semantics of nominalization and the argument structure of passive Voice<sup>2</sup>. Specifically, the nominalizing head *n* requires a semantically saturated predicate, while passive Voice introduces an unsaturated external argument variable. In the verbal domain, this variable is closed by a higher functional projection. In nominalizations, however, this closure is not available, resulting in a derivation that fails at the syntax-semantics interface.

It should be pointed out that the author does not commit to a specific label for the projection responsible for passive interpretation. Following the literature, this projection has been analyzed as Asp (Wood, 2015), which he assumes at face value. What matters for the present analysis is that “**passive interpretation requires a functional layer above Voice,**” and that this layer is not accessible in Arabic nominalizations. The analysis presented here is formulated within the framework of Distributed Morphology as described in Halle and Marantz (1993; 1994). The author claims that nominalization has no scope over Asp, which existentially binds the agent argument semantically introduced by Voice, as argued in Wood (2015). Moreover, he argues that the nominalizing heads

<sup>2</sup> This account differs from competition-based approaches, such as Ahdout and Kastner (2018), who argue for Hebrew that passive nominalizations are disfavored but not categorically excluded due to morphological competition.

in Arabic select a fully saturated VoiceP of type < s, t >; and he claims that blocking the nominalization of Form VII passives is attributable to semantic selectional clash. While nominalizing Form VII passives fulfills the criteria imposed by syntax, it falls short in satisfying the semantic requirements. This shortfall stems from the interruption in the passive formation caused by merging *n*, resulting in interpretation failure.

This paper is structured in the following order. Section 2 provides the background necessary to understand the distribution of the Form VII template. The author illustrates the different prosodic shapes (verbal and nominal) that are determined by the phonological input of the root, and he deploys the diagnostics that identify the boundaries between the different senses. Section 3 substantiates the core claim of this paper. He argues that Form VII unaccusatives meet the selection criteria imposed by nominalization, whereas passives fail to do so. In section 4, he provides some generalizations and conclusions and look at the predictions to which the analysis proposed in this paper can give rise.

### Background: Form VII and Non-Active Voice

A central empirical and theoretical component of this paper concerns the nature of Form VII in Arabic and its role in expressing non-active voice. Any account of the nominalization asymmetry introduced above must begin with a clear understanding of what Form VII encodes, and how its interpretation is derived. In particular, the analysis depends on two facts that must be established carefully: First, that Form VII is a morphological realization of non-active voice; and second, that this non-active morphology systematically gives rise to both unaccusative and passive interpretations. The coexistence of these interpretations within a single morphological template is not accidental, and it provides the foundation for the asymmetry observed under nominalization.

Arabic verbal morphology is organized around a root-and-template system in which lexical meaning is associated with a consonantal root, while grammatical and derivational information is encoded in vocalic patterns and affixes (McCarthy, 1981; McCarthy & Prince, 1990). Within this system, Form VII—traditionally represented as (nC<sub>1</sub>aC<sub>2</sub>aC<sub>3</sub>)—is characterized by the prefix *n*- and is commonly described as deriving a non-active counterpart of a Form I basic transitive verb (C<sub>1</sub>aC<sub>2</sub>aC<sub>3</sub>). Consider Example (5); a Form I verb meaning “break” corresponds to a Form VII verb meaning either “be broken” or “break (intransitive).” Importantly, this alternation is not idiosyncratic but highly productive across the lexicon.

#### (5) Active Alternation with Non-Active

- |  |   |
|--|---|
| a. <u>Form I</u><br>kasar ‘to break’ (causative) | b. <u>Form VII</u><br>mkasar ‘to refract / be broken’ |
|--|---|

The descriptive generalization that Form VII expresses *non-active* meaning is well established in traditional and modern grammars (Badawi, Carter, & Gully, 2015; Ryding, 2005; Wright, 1875). However, this label alone is not analytically sufficient. The crucial question is what structural and semantic properties underlie this morphology. A large body of work in Distributed Morphology and related frameworks has argued that apparent syncretism between passives and unaccusatives reflects a shared syntactic configuration at the level of Voice (Embick, 1998; Schäfer, 2008; Alexiadou et al., 2004, Alexiadou et al., 2006). In particular, both constructions lack a DP in Spec-VoiceP. This absence of a projected external argument is what underlies the morphological realization of non-active voice across languages that exhibit such syncretism.

However, the absence of a syntactically projected external argument does not entail identity at the level of semantic representation. A critical distinction, emphasized in work by Kratzer (1996), Bruening (2013), and Legate (2014), is that passives introduce an external argument variable even when it is not syntactically realized. Unaccusatives, by contrast, lack such a variable entirely. In other words, unaccusatives involve only an internal argument, whereas passives involve an implicit external argument that must be interpreted. Adopting this perspective, the author takes Form VII to realize a Voice head that does not project an external argument in its specifier. In other words, both unaccusatives and passives in Form VII lack a syntactic projection for the external argument, and this absence is what the morphological element *n-* encodes.

At this point, however, it is imperative to distinguish carefully between syntactic structure and semantic interpretation. While unaccusatives and passives have in common the absence of a projected external argument, they differ in whether an external argument is present in the semantic representation. Unaccusatives are standardly analyzed as involving only an internal argument; no external argument variable is introduced at all. Passives, by contrast, suppress the external argument syntactically but retain it semantically. That is, passive Voice introduces an external argument variable that is not realized as a DP but remains part of the interpretation. This variable is typically interpreted existentially, yielding the familiar meaning that a volitional entity performed the action.

This distinction is independently supported by a range of well-known diagnostics (Alexiadou, 2014; Alexiadou & Doron, 2012; Alexiadou & Schäfer, 2013; Alexiadou et al., 2004; Alexiadou et al., 2006; Bruening, 2013; Chierchia, 1989). For example, passives, but not unaccusatives, license *by*-phrases that make the external argument explicit. Similarly, passives are compatible with agent-oriented modifiers and purpose clauses, while unaccusatives are not. Conversely, unaccusatives, but not passives, allow *by-itself* modifiers that indicate the absence of any external cause. These diagnostics, widely discussed in the literature, confirm that the difference between the two constructions is not morphological but semantic: both share the same non-active morphology, yet they differ in the presence or absence of an external argument variable. Consider the data in Example (6), where the verb root  $\sqrt{kms}$  gives rise to an accusative reading.

- (6) a. m-kamaʃ-at    əl-mala:bis    mm    nafsaha:  
 NAct-shrank-F    the-clothes    from    themselves  
 ‘The clothes shrank on their own.’
- b. \*m-kamaʃ-at    əl-mala:bis    ʔala    jadd    ʔali  
 NAct-shrank-F    the-clothes    on    hand    Ali  
 ‘The clothes shrank by Ali.’
- c. \*m-kamaʃ-at    əl-mala:bis    bilʔa:ni  
 NAct-shrank-F    the-clothes    deliberately  
 ‘The clothes shrank deliberately.’
- d. \*m-kamaʃ-at    əl-mala:bis    ladʒl    tɪstawi    ʔaler  
 NAct-shrank-F    the-clothes    to    fit    on.me  
 ‘The clothes<sub>i</sub> shrank PRO<sub>i</sub> to fit me.’

The following data illustrates exactly the opposite grammaticality patterns to the previous one. Here, the Form VII verb *m-gatal* “to be killed” carries a passive significance.

- (7) a. \* m-gatal      l-walad      mm    nafsah  
 NAct-killed    the-boy      from    himself  
 ‘The boy was killed by himself.’
- b. m-gatal      l-walad      ʔala    jadd    ʕadi:g-ah  
 NAct-killed    the-boy      on    hand    friend-his  
 ‘The boy was killed by his friend.’
- c. m-gatal      l-walad      bilyʕa  
 NAct-killed    the-boy      unintentionally  
 ‘The boy was killed unintentionally.’
- d. m-gatal      ʔð-ða:lm      l-radʔ      ʔamθa:l-ah  
 NAct-killed    the-oppressor    for-detering    imitators-his  
 ‘The oppressor was killed PRO<sub>killer</sub> to deter his imitators.’

It can be observed that the grammaticality patterns of Example (7) are the opposite of those shown for the unaccusative reading in Example (6). Within this framework, the behavior of Form VII follows naturally. The prefix *n-* does not encode a specific voice type such as passive or unaccusative. Rather, it realizes a non-active Voice head that lacks a specifier. The interpretation of this structure depends on how the semantic component treats the external argument position. If no external argument variable is introduced, the result is an unaccusative interpretation. If a variable is introduced but not syntactically realized, the result is a passive interpretation.

A further step is required to derive passive meaning. As argued by Wood (2015), the external argument variable introduced by passive Voice must be bound by a higher functional projection. This projection applies existential closure, yielding an interpretation in which the agent is understood but not specified.

This structural requirement introduces an asymmetry between unaccusatives and passives that is not visible at the level of morphology. Unaccusatives can be interpreted directly at the level of VoiceP, since they involve no unsatisfied argument positions. Passives, by contrast, require additional structure to yield a well-formed interpretation. In the verbal domain, this requirement is satisfied by the presence of the higher projection responsible for existential closure. As a result, both readings are available for Form VII verbs.

The importance of this asymmetry becomes clear once we turn to nominalization. If nominalization targets a level of structure that includes Voice but excludes the higher projection responsible for binding the external argument, then a divergence between unaccusative and passive interpretations is expected. Unaccusatives should remain well-formed, since they do not require additional binding. Passives, however, should fail, because their interpretation depends on a structural element that is not present.

Before proceeding, one final clarification concerns the status of *non-active*. In the present analysis, non-active is not treated as a primitive syntactic feature. Instead, it is understood as a morphological reflex of a particular syntactic configuration—namely, a Voice head that does not project an external argument (Embick, 1998; Schäfer, 2008). This view avoids stipulating abstract features, such as [+non-active] and instead derives the observed morphology from independently motivated properties of syntactic structure. It also captures the fact that non-active morphology systematically groups together constructions that share the absence of a projected external argument, while still allowing for differences in semantic interpretation.

In sum, Form VII instantiates a non-active Voice configuration in Arabic, realized morphologically by the prefix *n-* and characterized by the absence of a projected external argument. This configuration gives rise to both

unaccusative and passive interpretations, which differ in whether an external argument variable is present in the semantics. Crucially, passive interpretation requires a higher functional projection to bind this variable. As the next sections will show, it is precisely the absence of this projection in nominalizations that leads to the restriction on passive readings.

### Analysis

The discussion in the previous sections established two key points. First, Form VII in Arabic realizes a non-active Voice configuration that gives rise to both unaccusative and passive interpretations. Second, these two interpretations differ not in morphology or surface syntax, but in their semantic composition: unaccusatives lack an external argument altogether, whereas passives introduce an external argument variable that must be bound by a higher functional projection (Bruening, 2013; Wood, 2015). This distinction, while invisible in the verbal domain, becomes decisive in nominalization.

The goal of this section is to derive the central generalization of the paper: Form VII unaccusatives nominalize freely, whereas Form VII passives are systematically restricted. The author argues that this asymmetry follows from the interaction between (i) the structural size of nominalizations and (ii) the semantic requirements imposed by the nominalizing head *n*. Specifically, he proposes that *n* selects a VoiceP complement and requires that this complement denote a saturated predicate of events. This requirement is satisfied by unaccusative structures but not by passive ones, because passive Voice introduces an external argument variable that cannot be bound within the nominal domain.

Two ingredients are therefore indispensable. First, we must determine the size of the structure embedded under *n*. Second, we must establish the semantic type that *n* requires. The present subsection addresses the first issue, while the next subsection develops the semantic account.

#### The Size of the Complement of *n*

A central question in the analysis of nominalization concerns the extent to which verbal structure is preserved in the nominal domain. In particular, does the nominalizing head *n* embed only the lexical core of the verb, or does it include higher functional projections, such as Voice, Aspect, or Tense? The answer to this question is critical, because the availability of passive interpretation depends on whether the projection responsible for binding the external argument is present.

A widely adopted view, argued for in detail by Bruening (2013), is that event nominalizations embed at least a VoiceP. Under this approach, the nominalizing head *n* selects a complement that includes the Voice layer, thereby preserving argument structure distinctions, such as transitivity and agentivity. At the same time, nominalizations are typically assumed to exclude higher functional projections, such as Tense and (in many cases) Aspect, resulting in structures that are syntactically smaller than full clauses.

The Arabic data provide strong support for the inclusion of Voice within the nominal domain.

First, nominalizations systematically preserve the argument structure of the corresponding verbs. Internal arguments are obligatorily realized, and external arguments—when available—can be expressed, for example, through genitive constructions. This indicates that the structure underlying nominalizations must include the layers responsible for introducing the external argument, namely Voice (Kratzer, 1996).

Second, nominalizations in Arabic are compatible with agent-oriented modifiers such as intentional adverbs. As argued by Bruening (2013), such modifiers target the external argument position and therefore provide

evidence for the presence of a Voice projection. The fact that these modifiers are licensed in nominalizations suggests that Voice remains structurally active in the nominal domain. Consider the following data.

- (8) a. *kasr* (zeid) *əl-koub*  
 breaking Zayd the-cup  
 ‘(Zayd’s) breaking the cup’
- b. *kasr* *əl-koub* *mm* *ħeir* *qaṣṭ*  
 breaking the-cup of no intention  
 ‘breaking the cup unintentionally’

It is worth pointing out that the absence of Voice has been put forward. For example, in his recent work, Wood (2023) argued that morphological evidence alone is insufficient to conclusively demonstrate that Voice is embedded in nominalization. Wood (2015, 2023) saw the possibility to analyze some Voice morphology in Icelandic, such as *-na* as a particular type of *v*. In his recent work (2023), he presents different arguments in favor of the absence of Voice in Icelandic nominalization. For example, he argues that when nominalizing verbs creates ambiguity between a passive reading and an unaccusative reading, it can indicate that Voice may be absent in these nominalizations. He substantiates his claim by drawing upon the nominalization of verbs that can be either transitive or unaccusative, such as *opna*, as shown in the following data.

- (9) Icelandic: (Wood, 2023, p.60)
- a. *guðrún* *opnaði* *hurðina*  
*Gguðrún.NOM* opened door.the.ACC  
 ‘Guðrún opened the door.’
- b. *hurðin* *opnaði-st*  
*door.the.ACC* opened-ST  
 ‘The door opened.’
- c. *skyndileg* *opn-un* *hurðarinnar*  
 sudden open.NMLZ door.the.GEN  
 ‘The sudden opening of the door.’
- (i) Passive reading (implicit agent)  
 (ii) Unaccusative reading (door opens on its own)

Note that the ambiguity arises between passive and unaccusative interpretations in the nominalized form in Example (9c), which Wood (2023) takes to signal the absence of Voice.

It is reasonable to question the presence of Voice in Icelandic nominalization, as per Wood’s analysis. However, in the context of Arabic, the evidence supporting the presence of Voice is quite compelling. Using Wood ambiguity test, exemplified in Example (9), verbs that are both transitive and intransitive are uncommon in Arabic, as a change in valency typically requires a change in verb pattern. Nevertheless, there are some verbs where the intransitive form can be derived from the default transitive form. The verb *fataħ* ‘to open’ (Form I) can be used as an intransitive verb, given the proper context, as shown in Example 10 below.

- (10) a. fataḥ ʕali l-ba:b  
 opened Ali the-door  
 ‘Ali opened the door.’
- b. əl-ba:b fataḥ (baʕd taʕjir əl-mafaʕil)  
 the-door opened after changing the-hinges  
 ‘The door opened (after changing the hinges).’
- c. faṭḥ əl-ba:b əl-mufa:dʒi  
 opening the-door the-sudden  
 ‘The sudden opening of the door.’  
 (i) External causation (implicit agent)  
 (ii) \*Internal causation (door opens on its own)

Note that nominalizing the verb *faṭḥ* does not retain the unaccusative reading found in the verbal expression Example (10b), thereby eliminating any potential ambiguity between passive and unaccusative readings, unlike in the Icelandic data above. Moreover, even when deriving the non-active pattern from its active Form I alternant *fataḥ*, no ambiguity arises in the nominalized form, which is the central focus of this paper. Consider the following non-active data.

- (11) a. m-fataḥ l-ba:b  
 NAct-opened the-door  
 (i) External causation (the door was opened by someone.)  
 (ii) Internal causation (the door opened on its own.)
- b. m-fitaḥ əl-ba:b  
 NAct-opening the-door  
 ‘The opening of the door.’  
 (i) \*External causation (implicit agent)  
 (ii) Internal causation (the door opened on its own)

Moreover, unlike Icelandic, the non-active morphology of Form VII shown in Example (11) cannot be analyzed as a realization of *v*, because it is part of an Arabic template that is built on top of the active Form I template. As discussed in the previous section, one could argue that Form VII verbs necessarily pick out a phrase that is otherwise Form I.

Another argument for the presence of Voice with the nominalization domain in Arabic stems from Fu et al.’s (2001) analysis of agentive adverbs in English nominalization, which they argue suggests a Voice layer. Consider their example in Example (12).

- (12) (While) the removal of evidence purposefully (is a crime), the removal of evidence unintentionally (is not).

Wood points out that adverbs of this sort are unthinkable in Icelandic. However, they definitely are not in Arabic, as shown in Example (13) below.

- (13) a. ʔɪɣfa:ʔ    əl-ʔadillah    ʕamdan    dʒari:mah  
 hiding    the-evidence.PL    intentionally    crime  
 ‘Hiding the evidence intentionally is a crime.’
- b. la:kɪm    ʔɪɣfa:ʔ    əl-ʔadillah    ɣaʔaʔan    ma: hu: dʒari:mah  
 but    hiding    the-evidence.PL    unintentionally    not    he    crime  
 ‘But hiding the evidence unintentionally is not a crime.’

Similarly, agentive *by-* phrases, as argued in Bruening (2013) and Legate (2014), pick out the VoiceP layer. Albeit rare, they are still possible in Arabic with a set of verbs that do require a sentient agent, including *gatal* “to kill” and *darab* “to hit.” Consider the following data where *ʕala jadd*, literally means “on hand of,” functions as a *by-* phrase.

- (14) gatl    əl-ʔabrija:    ʕala    jadd    əl-ʔuza:h  
 killing    the-innocents    on    hand    the-invaders  
 ‘The killing of the innocents by the invaders.’

To argue that Voice is absent in the structure of Arabic nominalization is to argue that these nominalized forms behave in a fundamentally different way from their verbal counterparts, which is not the case. The consistent retention of valency distinctions in both transitive and intransitive forms, as well as the sensitivity to agentive adverbs and *by-* phrases suggest that Voice remains involved in Arabic nominalizations.

Taken together, these diagnostics support the conclusion that VoiceP is included within the complement of *n* in Arabic event nominalizations. This conclusion is crucial for the analysis, because it ensures that the difference between unaccusative and passive interpretations is represented within the nominal domain.

At this juncture, we have established that Voice is found within the domain of *n* without being necessarily selected for. A pertinent question arises: does *n* perhaps select a structurally higher verbal layer, such as Asp? An examination of the Arabic data dispels this notion. It is crucial to recall that Arabic assigns lexical content to consonants and morphosyntactic content to vowels, resulting in expected variations in aspect morphology based on the constituent vowels. However, when scrutinizing nominalized patterns, discerning whether the aspect morphology is already incorporated becomes challenging. To illustrate, consider the following paradigm and observe the distinctions between the perfective and imperfective aspects, and then compare them to the nominalization forms.

(15) Aspect Morphology and Nominalization

FORM	PERF	IMPERF	NOMINALIZATION	GLOSS
I	katab	jaktub	kɪta:bah	<i>to write</i>
II	kattab	jokattub	takti:b	<i>to make write</i>
III	ka:tab	joka:tub	muka:tabah	<i>to correspond</i>
IV	ʔiktatab	jaktatub	ʔiktita:b	<i>to subscribe</i>

Apart from the agreement morphology on the imperfective aspect (j-), without which the stem is bound, observe that the two aspects exhibit a distinction through vocalic changes. Importantly, the nominalized forms exhibit no indication of incorporating either aspectual morphology.

Additional support for the claim that the nominalizing head does not have scope over AspP arises from the complementary distribution of *pro* and PRO (Chomsky, 1988; Hornstein, 1999; Landau, 2004; Rizzi, 1986,

among others). Without digging into the technical details of their distribution in Arabic, let us consider one aspect where they differ—namely binding relation. Consider the data in Example (16).

- (16) a. tr-ħıbb sa:rah<sub>i</sub> ϕ tr-şawwır *pro*<sub>i/j</sub> nafsaha:<sub>i/j</sub>  
 3SG.F-like Sarah that 3SG.F-photograph herself  
 ‘Sarah<sub>i</sub> likes that she<sub>i/j</sub> takes pictures of herself<sub>i/j</sub>.’
- b. ?a-ħıbb ϕ tr-şawwır sa:rah<sub>i</sub> nafsaha:<sub>i</sub>  
 1SG-like that 3SG.F-photograph Sarah herself  
 ‘I like that Sarah<sub>i</sub> takes pictures of herself<sub>i</sub>.’
- c. ?a-ħıbb ϕ tr-şawwır *pro*<sub>i</sub> nafsaha:<sub>i</sub>  
 1SG-like that 3SG.F-photograph herself  
 ‘I like that she<sub>i</sub> takes pictures of herself<sub>i</sub>.’

It is important to note that the null C (cf. ?Inn) specifically selects for a non-finite (subjunctive) clause, where the embedded verb must bear the imperfective aspect. Given this, if we posit that the nominalizing head selects VoicP as its complement, we can make the following predictions:

1. Event nominalization is aspect-neutral, thus allowing for adverbial modifications with different temporal references;
2. The subject of event nominalization cannot be *pro*, but rather PRO, because the head that licenses the former is no longer available.

First, consider the following data illustrating the aspect neutrality in event nominalizations.

- (17) taḏǧammu? ən-na:s { ?ams / bukraḥ / ku:l joum } bi-jızı:d maḡa:ṭr əl-ʕadwa  
 gathering the-people yesterday tomorrow every day will-increase risks the-  
 infection  
 ‘People’s gathering {yesterday / tomorrow / everyday} will increase the risks of in-  
 fection.’

The example in (17) confirms the first prediction, demonstrating the aspect neutrality of nominalized expressions in Arabic. Notably, various temporal adverbs grammatically modify the event nominalization, providing the first piece of evidence for the absence of Asp within the domain of *n*.

Consider now the following data.

- (18) a. tr-ħıbb sa:rah<sub>i</sub> taşwır PRO<sub>i/\*j</sub> nafsaha:<sub>i/\*j</sub>  
 3SG.F-like Sarah photographing herself  
 ‘Sarah<sub>i</sub> likes taking pictures of herself<sub>i</sub>.’
- b. ?a-ħıbb taşwır sa:rah<sub>i</sub> nafsaha:<sub>i</sub>  
 1SG-like photographing Sarah herself  
 ‘I like Sarah<sub>i</sub>’s taking pictures of herself<sub>i</sub>.’
- c. \*?a-ħıbb taşwır *pro*<sub>i</sub> nafsaha:<sub>i</sub>  
 1SG-like photographing herself  
 intended: ‘I like her<sub>i</sub> taking pictures of herself<sub>i</sub>.’

It is reasonable to posit that *pro* is licensed in the presence of aspect, regardless of T’s nature (finite or non-finite). This assertion was indeed held true for the non-finite clauses in Example (16 a&b). When Asp is

eliminated from a given structure, it results in removing the licensing of *pro*. The data in Example (18) clearly demonstrates that. Note that the object event nominalizations create an obligatory control environment, in the sense of Williams (1980) and Hornstein (1999). The subject of the nominalized object in Example (18a) is obligatorily bound by the matrix subject. Conversely, the absence of an antecedent for the embedded subject in Example (18c) renders the sentence ungrammatical. As previously noted, *pro* necessitates the presence of Asp. Consequently, if Asp is eliminated in response to the merging of *n*, it follows that all other functional elements in the verbal extended projection above Asp are also eliminated, which not only aligns with the Universal Spine Hypothesis, as described by Wiltschko (2014), but also respects the semantic selection requirement that the T head, in the absence of Asp, cannot bind the temporal variable to map the event argument onto the event runtime.

Building on the discussion established so far, it can be posited that nominalizations are large enough to include Voice and argument structure, but too small to include the functional layer, which, following Wood (2015), the author takes to be Asp, required for existential closure of the external argument. This structural limitation will prove decisive in explaining the asymmetry between unaccusatives and passives. Hence, the nominalizing head *n* can be argued to select a complement that has fully saturated its open arguments, and therefore, the author proposes the following denotation for the semantics of the nominalizing head.

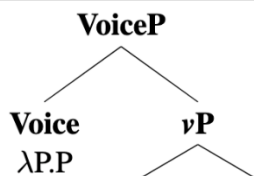
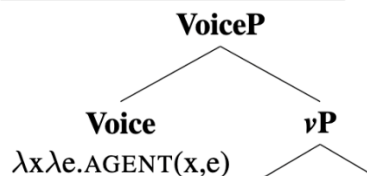
$$(19) \quad \llbracket n \rrbracket = \lambda P_{\langle s, t \rangle} . \lambda e_s . P(e)$$

The semantics attributed to *n* involves taking a predicate of an eventuality as its input. It is crucial to note that *n* neither introduces nor closes any entity arguments. Any argument that remains open at the VoiceP level leads to an interpretation failure, and the next subsection shows how the semantics of nominalization interacts with the structural configuration discussed above to derive the observed pattern.

### Solving the Puzzle

The starting point is a standard assumption about event nominalization, namely that *n* combines with a predicate of events and returns a nominal denotation of the same type. However, not every verbal structure denotes a predicate of events. In particular, structures that contain unsaturated argument variables are certainly not of type  $\langle s, t \rangle$  and therefore cannot serve as the complement of *n*. This condition is independently motivated by the fact that nominalizations inherent events without introducing new argument positions (Grimshaw, 1990; Alexiadou, 2001; Bruening, 2013; Borer, 2014). All arguments introduced in the verbal domain must therefore be saturated or bound prior to nominalization. In light of this analysis, the author is now in a position to account for why Form VII unaccusatives and passives differ in terms of their compatibility with nominalization such that passives, but not unaccusatives, cannot nominalize.

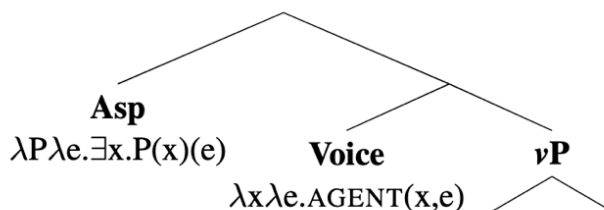
While unaccusatives and passives both sprout from a non-active Voice, they differ fundamentally in the makeup of the Voice head. Unaccusatives are internally caused, devoid of any implication of external argument agency. In contrast, passives suppress the external argument but retain its implicit agency. This distinction is captured in Schäfer's (2008) typology of Voice, wherein passivization is associated with thematic Voice, contributing to the semantics of the external argument, while unaccusativity is marked with expletive Voice for its inability to introduce such an argument. The following structures, adapted from Schäfer (2008, p. 175), illustrate this distinction.

(20) a. Expletive Non-Active Voiceb. Thematic Non-Active Voice

Note that  $Voice_{EXPL}$  contributes nothing to semantic computation, resulting in a  $VoiceP$  that has the same denotation as  $vP$ . Conversely,  $Voice_{THEM}$  in Example (20b) introduces a variable that corresponds to the external argument. In Kratzer's (1996) analysis of active Voice, the nominal element in the specifier of  $VoiceP$  saturates this variable. However, passivization, characterized crosslinguistically by the suppression of the external argument (Bruening, 2013; Bruening & Tran, 2015; Legate, 2014), leads to a  $VoiceP$  denotation that still maintains an open entity argument. It is reasonable to posit that this argument undergoes existential closure by a higher element in the verbal extended projection, which, following Wood (2015), the author identifies as *Asp*. In passive environments, Wood contends that *Asp* syntactically selects for an unsaturated  $VoiceP$  and, semantically, introduces existential closure to the open entity argument of  $Voice$ . This semantic operation is represented in the denotation provided in (21) below.

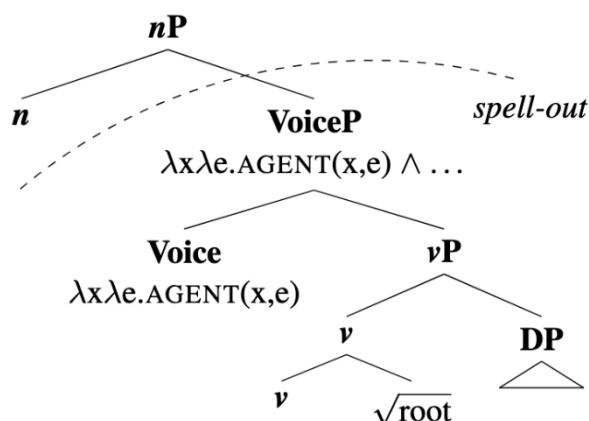
$$(21) \quad \llbracket Asp \rrbracket = \lambda P_{\langle e, \langle s, t \rangle \rangle} \lambda e \exists x. P(x)(e)$$

Notably, the domain of the function in Example (21) is an expression of type  $\langle e, \langle s, t \rangle \rangle$ , a specification that exclusively accommodates a thematic non-active voice, as defined by Schäfer (2008). According to this conjecture, aligning with Wood (2015), this particular alloeme of *Asp* is selected only in the presence of a thematic non-active voice. Consequently, in a passive context, the open argument introduced by  $Voice$  undergoes existential closure through the operation of *Asp*, as depicted by the following structure.

(22) Passive Voice Structure

The source of the asymmetry between passives and unaccusatives stems from the claim that passive  $Voice$  contains an unsaturated external argument variable that cannot be bound within  $VoiceP$ , remaining unsaturated at the point where  $n$  merges. Consequently,  $n$  cannot take a passive  $VoiceP$  as its complement due to a semantic mismatch, and it also cannot take  $AspP$  as its complement since it syntactically selects for  $VoiceP$ . Moreover, the intuition implemented here is that category-defining heads, such as  $n$ , trigger cyclic spell-out (Halle & Marantz, 1993; Marantz, 1995, 1997). Therefore, merging  $n$  with a  $VoiceP$  of type  $\langle e, \langle s, t \rangle \rangle$  initiates the spell-out of the verbal phase with an unsaturated argument, leading the derivation to crash. This concept is illustrated in the following configuration, where the arc indicates a cyclic domain.

(23)



This account derives the asymmetry without stipulating any special restriction on passive morphology or nominalization. Instead, the restriction follows from independently motivated assumptions about: (i) the structure of Voice, and (ii) the semantics of nominalization.

Given the proposed analysis, one can reasonably assert that the generative system adheres to the Fregean approach to semantic compositionality, wherein unsaturated arguments lead to interpretation failure (Heim & Kratzer, 1998). This perspective contrasts with Heim's (1982) assertion that semantically introduced free variables are quantified through a default operation of existential closure. While Heim's claim might be tempting to consider, the unsuccessful nominalization of Form VII passives reveals its blind spot; satisfying the syntactic requirement by merging with VoiceP does not compensate for the interpretation failure that ensues.

### Conclusion

This paper set out to explain a systematic asymmetry in Arabic: While Form VII verbs allow both unaccusative and passive interpretations in the verbal domain, only unaccusative readings are available under nominalization. The author has argued that the absence of passive nominalizations does not reflect a morphological gap or an arbitrary restriction. Rather, it follows from a systematic mismatch between the semantic requirements of nominalization and the structure of passive Voice. Unaccusatives meet these requirements; passives do not. He proposed that nominalization in Arabic involves a head  $n$  that selects a VoiceP complement and requires it to denote a saturated predicate of events. This requirement is independently supported by the general behavior of event nominalizations, which inherit argument structure. Since passive VoiceP fails to satisfy this condition in Arabic nominalizations, the external argument remains unsaturated, resulting in a type mismatch and a failed derivation.

The present analysis places Arabic within a broader cross-linguistic landscape. Languages, such as Hebrew allow minimal passive nominalizations (Ahdout & Kastner, 2018), suggesting that the restriction varies in strength. On the present account, Arabic represents a stricter system in which the relevant closure operation is unavailable, while other languages may permit limited repair strategies.

More broadly, the analysis challenges the notion of default existential closure, proposing instead that a cyclic domain containing a free variable must also contain existential closure to saturate it; sending a cyclic domain to the interfaces with an unsaturated argument leads to interpretation failure. Furthermore, the findings contribute to our understanding of how morphological syncretism interacts with syntactic structure and semantic

interpretation. The case of Form VII shows that identical morphology can correspond to distinct underlying representations, and that these differences may only become visible in specific grammatical environments. This underscores the importance of examining nominalization as a potential diagnostic for the internal structure of verbal predicates.

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