

The Impact of Speech Act Projections on Categorization: Evidence from Ostensible Lexical Categories in Arabic

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1. Introduction

The study of a language begins with defining its lexical and functional categories. This leads grammarians to set tools and properties to distinguish those categories. Ibn Malik in his *Alfiyya*, a one thousand-rhymed poem of Arabic grammar composed in the 13th century and Aḍud Addain Al'agī in his *Risalat Al-waḍ*, commentaries composed in 1355, cited in Weiss (1976) and Owens (1989), have developed a three-fold classification system to distinguish the categories of the Arabic language. Their classification system operates upon three major categories: noun (*ism*), verb (*fi' il*), and particle (*ḥarf*). Their categorization system depends on 'alāmāt 'observed features' of those categories. This system is comparable with those approaches that consider verbs and nouns as basic categories (Chomsky, 1970; Baker, 2003). However, their system is technically different. The features in their system are not distinctive; that is, those features are accumulative. They are the result of a process called 'istqrā' 'inductive examination of specimens' (Weiss, 1976, p. 23). This inductive process sets features exclusive for nouns and verbs only. This means that a particle is any element that does not fit the specification of either nouns or verbs.

This system had difficulty with a class of lexical items because of their behavior this class of words shows properties of nouns, verbs and interjections. Grammarians (e.g., Owens, 1989; Alshawa, 2006; Hasan, 2012; Levin, 2011) refer to this class of words as 'ism alfi' il 'Name of the Verb' or alḳālfa 'the uncategorized' because of their apparent mixed properties. We refer to this class of lexical items as ostensible lexical categories (OLCs). The following examples are illustrative.

1.

- | | | |
|----|--|-----------------------------|
| a. | hākum
take.OC:2PL.M
'Take the book.' | al-kitāb-a.
DEF-book-ACC |
| b. | 'ilīk
take.OC:2SG.M
'Take the book.' | al-katāb-a.
DEF-book-ACC |
| c. | dunk
take.OC:2SG.M
'Take the book.' | al-katāb-a.
DEF-book-ACC |

- d. hayyā 'ilā al-madr̥sa.
go.OC:2SG to DEF-school
'Go to the school.'
- e. ḥajjā ḡala ḡas-salāh.
come.OC.IMP.2M.SG to DEF-prayer
'Come to prayer.'
- 2.
- a. šatān mā bayn al-'ilm w al-jahl.
differ.OC:1SG PART between DEF-knowledge and DEF-ignorance
'There is a difference between knowledge and ignorance.'
- b. hayhāt ḡal-ḡawd-u ḡilla ḡaḏ-ḏull-i.
impossible.OC.PL DEF-going.back-NOM to DEF-disgrace-GEN
'Going back to disgrace is impossible.'
- c. hayhāt ḡan yaḡūdda ḡal-radjul-u.
impossible.OC.PL SUBJ.PAR come.back DEF-man-NOM
'It is impossible for the man to come back.'
- d. ḡāx-in min hal ḡayyā.
hurt.OC.1SG-NUN from this life
'I complain from this life.'

This paper reexamines this class of words. We show that this category interacts syntactically with Speech Act Projections (SAP) (Haegeman & Hill, 2013; Hill, 2007, 2013). This interaction is evident on both the derivation of this category and its syntactic behavior. With that in mind, this study shows that SAPs have direct impact on morphological derivations. This means that SAPs can modify morphological roots. Additionally, we provide evidence for the impact of SAPs on syntactic patterns which are associated with this class of words.

The paper is organized as follows. Section 2 provides a theoretical background. This section aims to present verbs, nouns, and interjections in the Arabic language. The section presents a detailed description of categorization systems. First, it presents the three-fold categorization system of Ibn Malik in his *Alfiyya* and the categorization system of Aḏud Addain Al'agī in his *'ilm Al-wad*. Second, the section compares those categorization systems with Chomsky's (1970) binary categorization system. Then, the section presents Baker's (2003) model on categorization. Additionally, this section solidifies the concept of ostensible categories to describe those categories that show mixed properties. Section 3 introduces the Minimalist Program (Chomsky, 1995) and its extension to the syntax-pragmatics interface (Haegeman & Hill, 2013; Hill, 2007, 2013). This section unfolds overlooked components of *speech acts* and *common ground* to enhance the literature. Those sections help in building a set of diagnostics to test OLCs in section 4. In this section, we reassess the claims that categorize OLCs with verbs, nouns or interjections. We show evidence that distinctive properties of those categories only make OLCs look like verbs, nouns and interjections. Section 5 analyzes the data from two perspectives; it draws a connection between allocutivity and imperative interpretation (Kaur, 2018), and it shows the impact of expressivity on lexical items. Section 6 provides the implications of this proposal on English. The final part concludes the study.

2. Background

2.1 Parts of speech in Arabic

Traditional Arab grammarians (Ibn Malik in his *Alfiyya* and Aḍud Addain Al'agī in his *Risalat Al-waḍ*, cited in Weiss (1976) and Owens (1989)) have established two interconnect categorization systems to define the categories of their language.

Ibn Malik in his *Alfiyya*, cited in Weiss (1976) distinguishes three parts of speech in the Arabic language: nouns (3), verbs (4), and particles (5). This system is descriptive and depends on *'alāmāt* 'observed features.' Based on an inductive examination of words, Ibn Malik sets descriptive features for those categories. The descriptive features of a noun are: "the genitive case, the nunation, the vocative, the definite article, the presence of a predicate (*musnad*) in relation to which a noun is a subject" (Weiss, 1976, p.23). The descriptive aspects of a verb are: "the suffixal *tā*' (as in *fa'alta* 'you did') and the energetic *nūn*, [a suffix appears with verbs for emphasis]" (ibid). In his system, words that do not match features of nouns or verbs are classified as particles.

3. Noun: *qalam* 'pencil'

- a. al-qalam
DEF-pencil
- b. qalm-un
pencil-NUN
- c. qalam-i
pencil-GEN

4. Verb: *'akala* 'ate'

- a. 'akal-ta
ate-2M.SG
- b. l- 'a'kula-na
PAR-eat-EMPH

5. Particle: *'alā*

on
'on'

(Based on Ibn Malik's description)

Aḍud Addain Al'agī in his *Risalat Al-waḍ*, cited in Weiss (1976), enhances Ibn Malik's categorization system. His system does not depart from Ibn Malik's classification of nouns, verbs and particles. However, he depends on a rational description of categories rather than a descriptive one. Weiss (1976, p. 24) describes this approach as a "non-empirical and non-investigative." In this approach, a noun "is [a part of speech] which signifies a meaning in itself and does not qualify this meaning as to time (i.e. past, present and future)" (ibid), a verb "is that [part of speech] which signifies a meaning in itself and qualifies the meaning as to time" (ibid) and a particle is that [part of speech] "which signifies a meaning in something

else” (ibid) (the reader is invited to read Weiss (1976) for a thorough description of those features). In addition to verbs and particles, this approach includes seven classes of nouns: *'ism al-jins* ‘the generic noun’(6.a), *'ism al-masdar* ‘verbal noun’(6.b), *'ism al-maštq* ‘the derived noun’(6.c), the proper noun (6.d), the personal pronoun (6.e), the demonstrative pronoun (6.f), and the relative pronoun (6.g) (Weiss, 1976, p. 25).

6. Seven types of nouns

- a. rajul
a.man
- b. waḍū'
ablution
- c. sāmi'
person.listening
- d. salim
Saleem
- e. huwa
'he'
- f. hādā
this
- g. al-laḍī
DEF-that

(Based on Aḍud Addain Al'agī's description)

The two classification systems propose that nouns, verbs and particles are the only parts of speech of the Arabic language. Note further that those systems do not look at adjectives and adverbs as separate categories. For those systems, adjectives are nouns, and adverbs, prepositions, conjunctions and interjections are particles (Weiss, 1976, p. 23).

Owens (1989, p. 211) notes that Ibn Malik and Aḍud Addain Al'agī's systems are problematic because they have exceptions. He shows that not all nouns can have nunation or can have all case inflection. Additionally, he notes, in agreement with Aḍud Addain Al'agī's system, that not all nouns have the definite article. Most striking and important exceptional case appears with *'ism alfi'il* ‘Name of the Verb’ or *alkālfā* ‘the uncategorized’, (1) & (2) and with other types of verbs such as verbs of exclamation, such as *'imīliḥahū* ‘how.good.behave’ and verbs of feelings, such as *bi'sa* ‘defame’ because such words show mixed properties, as we stated earlier. This class of words is the focus of the current study.

2.2 Other approaches to parts of speech

Chomsky (1970) proposed a binary approach to distinguish parts of speech. This approach depends on two binary distinctive features [+ or -]. Those features characterize verbs and nouns. The possibilities of multiplying those two features give the distinction required for setting nouns, verbs, adjectives, adpositions apart (Jackendoff (1977) added adpositions to this system).

Baker (2003) calls for revisiting Chomsky's (1970) categorization system. He notices that

parts of speech show distinctive syntactic behaviors. Baker (2003) goes further and proposes that all languages have only three lexical categories: nouns, verbs and adjectives. He sets a syntactic basis for distinguishing those categories. Nishiyama (2005) summarizes Baker's (2003) system¹ as follows.

Verbs are defined as licensors of subjects. Nouns are defined as bears of a referential index. Adjectives are not theta role assignors in and of themselves, and they need the help of a functional category to assign a theta-role. There is no need to define adjectives because they are the elsewhere lexical categories.

(Nishiyama, 2005, p. 134)

Note that Chomsky (1970) and Baker's (2003) approaches match Ibn Malik and Aḍud Addain Al'aḡī's systems. All these systems show that verbs and nouns are basic categories. Baker's system matches Aḍud Addain Al'aḡī's idea that those categories that show a behavior *by themselves* are different from those categories that show a behavior *in something else*. For Baker (2003), adjectives "are not theta-role assignors in and of themselves, and they need the help of a functional head to assign a theta-role" (Nishiyama, 2005, p. 135). For Aḍud Addain Al'aḡī, cited in Weiss (1976), only a particle "signifies a meaning in something else." Those aspects, among others, build a foundation for categorization. Verbs and nouns are basic. Languages also have space for a third category (probably more) that is in contrast with those two categories.

2.3 Ostensible lexical categories

The problem with earlier approaches is that parts of speech must fit the specification of verbs or nouns to qualify for a noun or a verb. Those approaches do not accommodate categories of mixed properties. This is evident in Carnie's (2011) argument against Baker's (2003) approach. Our approach refers to such parts of speech as ostensible lexical categories. Those categories include lexical items whose functions cannot be determined from their surface forms. The basis of this approach is where all earlier categorization systems meet. Nouns and verbs are fundamental. A word has a probability to be a noun (C1), a verb (C2) or something else (Cx). Notice that this classification does not depart from earlier approaches in its principle. It, however, departs from them in its conceptualization. In our system, categories do not block each other. This means that there is a chance for C1 and C2 to overlap or mix. The same applies to their interaction with Cx.

A metaphor may help. RGB² screens have three sets of colors: Red, Blue, Green. Those colors are basic ingredients for creating other colors. The basic ingredients of the yellow color, for example, are red and green. However, describing this color by red or green only is problematic.

¹ Carnie (2011) and Nishiyama (2005) show problems in Baker's (2003) system at the level of its theoretical concepts and its applicability empirical data that shows mixed properties. We will not discuss those problems here, but the reader is invited to read Carnie (2011) and Nishiyama's (2005) arguments against this approach.

² https://commons.wikimedia.org/wiki/File:Diagrama_de_colors.jpg.

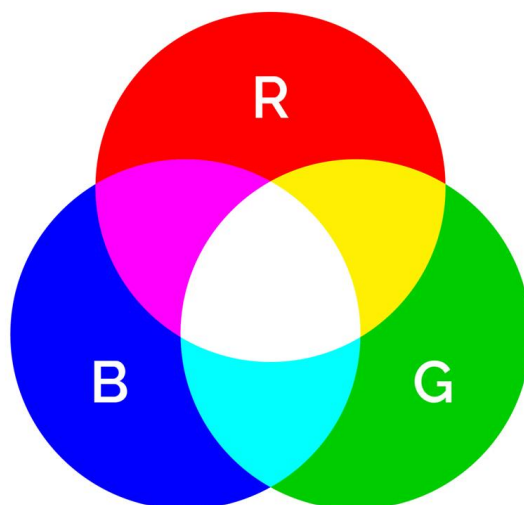


Figure 1: Mixing RGB colors

Across languages, we observe similar patterns. Imagine that Red stands for nouns (C1), Green stands for verbs (C2) and Blue stands for a language specific element (Cx). This means that some parts of speech could mix features or could surface in ostensible forms or have specific functions. Categories that behave like the yellow color are opaque because they cross share features from two other colors, red and green. Our system is an RGB categorization system.

3. Syntax-pragmatics interface

The syntax-pragmatics interface operates on Austin's (1962) speech act theory and Clark's (1996) joint action theory. We introduce those theories briefly, and then we move on presenting their integration with syntax. For that purpose, the section unfolds the technicalities of those theories, and it presents the Minimalist Program (Chomsky, 1995) and Cartography (Rizzi, 1997) briefly.

3.1 Speech act theory

Speech act theory postulates the idea that “people manage to do things with words they utter or the texts they write.” (Cooren, 2015, p. 1). In this theory, Austin (1962) describes performative utterances. “The issuing of [those] utterances is the performing of [specific] actions” (Austin, 1962, p. 6) denoted by a performative verb. This type of utterances appears in statements such as ‘I order you to stand up,’ I invite you to dinner,’ and the like.

Every speech act has its own conditions; that is, performing an action by utterances must abide using specific words with specific people and at the right circumstances. Austin (1962) refers to such conditions as the felicity conditions. In addition, Austin (1962) distinguishes three aspects for performative acts: locutionary act, “the very act of saying something” (Cooren, 2015, p. 4), illocutionary act, “the act performed in saying something” (ibid) and perlocutionary act, the effect of the utterance on the audience (Austin, 1962, p. 101).

Illocutionary acts do not have the same strength (Searle and Vanderveken, 1985). Requests and insisting, for example, have similar features except that insisting is stronger than requests. This matters for our analysis because we will establish that categories have degrees of

strength, which can only be interpreted at the syntax-pragmatics interface.

3.2 Joint action theory

According to Clark (1996), language use does not depend on social nor individual perspectives, but it is how individuals process and synchronize their actions based on an obvious knowledge of each other's intentions in their effort to accomplish their social targets. For him, language use is a joint action. The joint action theory departs from pragmatic theories in that communication must abide those two factors. The joint action theory (Clark, 1996) describes speakers and hearers' communication based on their shared understanding. Clark (1996, p. 3) states that by saying

Language use is more than the sum of a speaker speaking and a listener listening. It is the joint action that emerges when speakers and listeners – or writers and readers- perform their individual actions in coordination, as ensembles. (Clark 1996:3)

This theory builds on grounding in communication (Clark and Brennan, 1991; Clark et al., 1983). Clark and Brennan (1991) define grounding (common ground) as “the collection of mutual knowledge, mutual beliefs, and mutual assumptions” (Clark, 1996, p. 12) that exist to facilitate efficient communication between interlocutors. This means that speakers will rely on information that is stored in the mind of their hearers, or they will try to build up a new ground of information through their interaction.

Speakers and hearers must coordinate their actions based on their common ground (personal and communal). Clark (1996, p. 156) argues that to achieve this level of coordination, speakers and hearer must look for signals that are part of a complex signaling system. The signaling system includes all types of signs – linguistic and non-linguistic ones. Those signals help in highlighting what is stored in the mind of speakers or hearer. Those signals include hesitation markers, pauses, confirmationals and the like.

Understanding this approach and the speech act theory (Austin, 1962) will help in introducing the syntax-pragmatics interface.

3.3 The interface

Against the background of speech act theory, Ross (1970) sets the foundation of the syntax-pragmatics interface. His view is that all syntactic clauses should be governed by some hidden performative verbs that restrict the illocutionary force of those clauses. For example, in giving a command, a hidden performative verb or a hidden construction must control the structure of the command(7.

7.

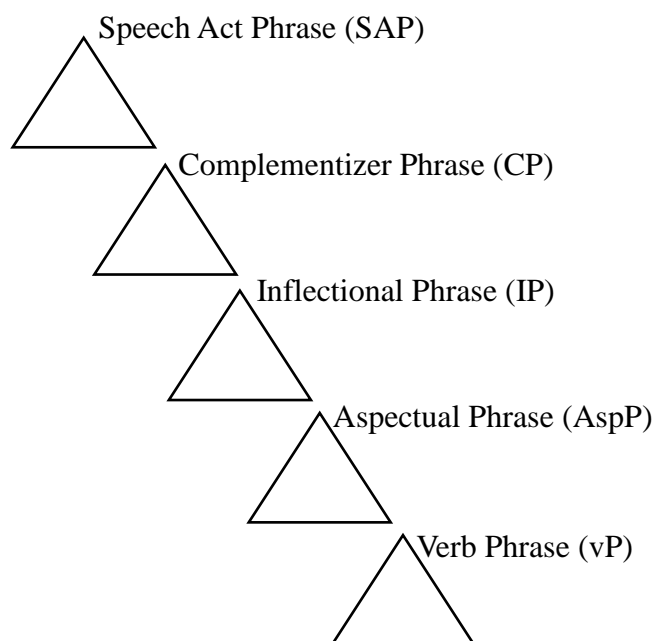
- a. Open the door.
- b. [I order you to] open the door.

The approach, however, has received several criticisms; the major argument against this approach is that it is hard to set a specific performative verb in this position (for a full argument, see Speas & Tenny (2003)).

Speas and Tenny (2003) revive and enhance Ross' (1970) idea; they claim that while it is true

that defining performative verbs is not clear from a generative perspective, all languages show some patterns that call for mapping discourse participants, i.e., SPEAKERS and HEARERS. Based on that, they propose a new layer to govern clauses, Speech Act Projections (8).

8.



Investigations on the nature of SAPs have proposed that SAPs can involve syntactic *shells* and *layers* (Haegeman & Hill, 2013; Hill, 2013). This projection has provided answers to various constructions. For example, Miyagawa (2017) shows that understanding agreement relations in Japanese is not restricted to person and number. Agreement can appear in connection with hearers.

Other models (Thoma, 2016; Wiltschko & Heim, 2016) have also looked at the role of discourse participants in syntax from a functional perspective. Those models call for Grounding Projections. For this approach, SAPs and Grounding Projections are two sides of the same coin. However, a full understanding of the complexity the joint action theory (Clark, 1996) and its signaling system will demand enhancing those models (Thoma, 2016; Wiltschko & Heim, 2016), in order to account for the linear order of such signals. This, however, is beyond the scope of this paper.

4. Data and diagnostics

The analysis of OLCs in the Arabic language is crucial because those lexical categories led earlier to disagreements on whether they should pattern with nouns or verbs. Neutral views see that those lexical categories should belong to a new part of speech of their own; hence, they refer to them as *'ism alfi 'il* 'Name of the Verb' or *alkā'ifa* 'the uncategorized' (Levin, 2011). Recently, those categories are classified as pure interjections. In the encyclopedia of Arabic language and linguistics (Lutz & Jong, 2011), it is stated that "unlike interjections in other languages, Arabic interjections

may be followed by certain grammatical cases”, and “if a verb governs nominative and accusative, an interjection also governs two cases” (Eisenstein, 2011). This points to a problem in describing the nature of those categories because they look like verbs, nouns, and interjections.

This section presents diagnostics to bring out the real nature of this class of words. The section will show that those categories are pragmatically motivated. This makes this class of words expressive phrases at some point. That is, the syntax-pragmatics interface has a direct impact on their morphological derivation and syntactic patterns.

4.1 Distribution and optionality

This test examines whether OLCs have specific syntactic and morphological patterns that set them with phatic interjections. It also explores if those lexical items are optional like phatic interjections or not. Additionally, the distribution test reveals those morphological patterns that made the categorization of OLCs hard. The optionality test highlights what is essential for grammatical syntactic structures (9). If OLCs are essential for a syntactic derivation, then they must depart from phatic interjections because phatic interjections are optional. Additionally, interjections can co-occur.

- 9.
- a. read a book.
 - b. *(read) a book. [*read* is not optional for this order.]
 - c. *read open a book.

In the Arabic language, OLCs must appear clause initially and must not co-occur. They are not optional and not elliptical because their complements require them. That is, they must appear to count a structure as a grammatical one. Departing from those features accounts for the ungrammatical structures in (10).

- 10.
- a. hajhāta ʔal-ʕawd-u ʔilla ʔaḏ-ḏull-i.
impossible.OC.PL DEF-back-NOM to DEF-disgrace-GEN
‘Going back to disgrace is impossible.’
 - b. hāk ʔal-kitāb-a.
take.OC:2SG DEF-book.ACC
‘Take the book.’
 - c. *hāk ʔāx ʔal-kitāb-a.
take.OC:2SG hurt.OC.1SG DEF-book-ACC
‘Take the book.’
 - d. *ʔal-ʕawd-u ʔilla ʔaḏ-ḏull-i.
DEF-back-NOM to DEF-disgrace-GEN
‘Going back to disgrace is impossible.’
 - e. *ʔal-kitāb-a.
DEF-book-ACC
‘Take the book.’

This shows a clear evidence that OLCs are not phatic interjections because those properties do not restrict interjections.

4.2 Adverbial modification

This test examines if OLCs resembles verbs in their interaction with adverbs or not. This test is crucial because verbs in the Arabic language do not ban adverbs (11). This test also provides access to the internal structure of OLCs because some types of adverbs show a relation with the subject of the verb, such as adverbs of intentionality like ('deliberately', 'intentionally', 'on purpose', and conversely 'unintentionally', 'by accident', etc.), as noted by an anonymous reader.

11.

- | | | | |
|----|--------------------------|-------------|--------------|
| a. | xuḏ | ʔal-kitāb-a | bi-quwah. |
| | take.2M.SG | DEF-book | in-strong |
| | ‘Take the book firmly.’ | | |
| b. | bi-quwah | xuḏ | ʔal-kitāb-a. |
| | in-strong | take.2M.SG | DEF-book |
| | ‘Firmly, take the book.’ | | |

OLCs show incompatibility with adverbs (12); this is also applicable to all adverbs, including adverbs of intentionality. The following data confirms this.

12.

- | | | | | | |
|----|--|--------------|---------------|------------------|--------|
| a. | *hāk | ʔal-katab-a | ‘amdān. | | |
| | take.OC:2SG | DEF-book-ACC | intentionally | | |
| | ‘Take the book intentionally.’ | | | | |
| b. | *hāk | ʔal-katab-a | qaṣḏān. | | |
| | take.OC:2SG | DEF-book-ACC | deliberately | | |
| | ‘Take the book deliberately.’ | | | | |
| c. | *hajhāta | ʔal-ʕawd-u | ʔilla | ʔaḏ-ḏull-i | jadān. |
| | impossible.OC.PL | DEF-back-NOM | to | DEF-disgrace-GEN | very |
| | ‘Going back to disgrace is very impossible.’ | | | | |

4.3 Negation

In the Arabic language, negation occurs by using a set of particles, such as *la* ‘not’, *lam* ‘not’ and *laysa* ‘there is no X.’ The choice of a negating particle affects “the following phrase by requiring a particular case on a noun or noun phrase, or a particular mood of the verb” (Ryding, 2005, p. 641). The first two particles are compatible with verb phrases. The third one is compatible with noun phrases. This test provides clear-cut distinctions between OLCs and verbs and nouns because a compatibility with any of those particles means that OLCs belong to one of those categories. Additionally, this test reveals about the structure of orders (Rivero, 1994; Rivero and Terzi, 1995). In this language, imperative verbs (13.a) are negated by using *la* ‘not’ (13.b). This particle changes verb forms morphologically to jussive (13.b). The use of this particle without changing the morphological form of the verb leads to ungrammatical structure (13.c).

13.

- a. ḡiḑhab ḡila ḡas-suq.
go.IMP.2SG to DEF-market
'Go to the market.'
- b. la ta-ḑhab ḡila ḡas-suq.
NEG.PRT 2SG-go.JUS to DEF-market
'Do not go to the market.'
- c. *la ḡiḑhab ḡila ḡas-suq.
NEG.PRT go.IMP.2SG to DEF-market
'Do not go to the market.'

In (14), the examples show that OLCs are incompatible with negating particles. In the case of commands, altering the morphological form of imperative OLCs (14.b) does not lead to grammatical structure. The same applies to the example in (15).

14.

- a. hāk ḡal-kitāb.
take.OC:2SG DEF-book
'Take the book.'
- b. *la ta-hāk ḡal-kitāb.
NEG.PRT 2SG-take.OC:2SG DEF-book
'Do not take the book.'
- c. *lam hāk ḡal-kitāb.
NEG.PRT take.NOV:2SG DEF-book
'Do not take the book.'
- d. *laysa hāk ḡal-kitāb.
NEG.PRT take.OC:2SG DEF-book
'Do not take the book.'

15.

- a. hajhāt ḡan-ndġāh-u bi-lā-ḡamal.
impossible.OC.PL.PAST def-success-NOM with-out-work
'Success was impossible without work.'
- b. *la/laysa/lam hajhāt ḡan-ndġāh-u bi-lā-ḡamal.
NEG.PRT impossible.OC.PL.PAST DEF-success-NOM with-out-work
'Success was not impossible without work.'

Those examples show evidence that OLCs in the Arabic language are not verbs or nouns because none of the negating particles are compatible with them. This also makes OLCs not subject for negation. Based on the judgement of native speakers of the Arabic language, the only way to negate those examples is to think of a synonymous verb. This leads us to the next tests, substitution and coordination.

4.4 Substitution and coordination

The coordination test relies on the fact that "only constituents of the same type can be coordinated" (Radford, 2009, p. 53). In the Arabic language, several coordinators can be used to connect constituents with each other, including *w* 'and,' *ḡaw* 'or,' *lakin* 'but,' *ḡumma* 'then' and others. Notice

that in (16.a) the coordinator *w* ‘and’ conjoins two Determiner Phrases (DPs). The same applies to clauses headed by OLCs (16.b). This pattern is not unusual across languages.

16.

- a. *xaraja* ʔal-walad-u *w* ʔal-fatat-u .
 went.out.3M.SG DEF-boy-NOM and DEF-girl-NOM
 ‘The boy and the girl went out.’
- b. *ʃattān* *bein* ʔaθ-θaraa *w* ʔaθ-θurajjaa
 set.apart.OC between DEF-mud and DEF-treasure
w *hajhāta* ʔan *jatasawa* ʔas-saffh-u *maʃ*
 and impossible.OC SUB meet DEF-land.NOM with
 ʔal-qimmah .
 DEF-mountain.top
 ‘Mud and treasures are apart, and it is impossible for land and the top of a mountain to meet.’

While the earlier tests show that OLCs are different from interjections, verbs and nouns in some respect, verbs can substitute OLCs (in negation), and verbs can coordinate with some (not all) OLCs.

17.

- a. *hajhāta* *w* ʔibtasud-at ʔal-ʔajja ʔamam ʔal-ʃadʒiz .
 impossible.OC and went.away-3F.SG DEF-goal.3F in.front.of DEF-desperate
 ‘The goal is impossible and never reached by desperate people.’
- (Hasan, 2009)
- b. **hāk* *w* *xuḏ* ʔal-kitāb .
 take.OC:2SG and take DEF-book
 ‘Take the book.’

18.

- a. ʔilaika ʔal-kitāb *w* ʔiqraʔ ʔad-dars ʔal-ʔawwal .
 take.OC:2SG DEF-book and read DEF-lesson DEF-first
 ‘Take the book and read the first lesson.’
- b. **ʔiftari* *datfar-an* *w* *dunka* ʔal-waraq .
 buy notebook-NUN.ACC and take.OC:2SG DEF-paper
 ‘Buy a notebook and take the paper.’

Those aspects show that OLCs are not interjections or nouns. Additionally, they show that they are not verbs because their coordination patterns are restricted to some classes, and they also impose strict ordering.

4.5 Morphological alternation and speech situation

The syntactic tests presented above show that OLCs are distinct from interjections, verbs and nouns in some respect, but in other respect they behave like verbs. OLCs pattern with nouns in their morphological forms. Notice that the examples in (1.a) shows that some OLCs are compatible with the use of a suffix *-k* that is associated with nouns, verbs or prepositions. This inseparable suffix show

that OLCs are nouns, verbs or prepositions in this respect. Note Benmamoun's (2011) classification of this suffix.

Table 1. The Classification of *-k* in Benmamoun's (2011, p. 145-146) analysis

Second Person	Category	Singular	Dual	Plural
object clitics in perfective	Verbs	<i>ʃakara-ka</i>	<i>ʃakara-kumaa</i>	<i>ʃakara-kum</i>
object clitics in imperfective	Verbs	<i>ya-ʃakara-ka</i>	<i>ya-ʃakara-kumaa</i>	<i>ya-ʃakara-kum</i>
genitive clitics	Nouns	<i>kitābu-ka</i>	<i>kitābu-kumaa</i>	<i>kitābu-kum</i>
oblique clitics	Prepositions	<i>maʕa-ka</i>	<i>maʕa-kumaa</i>	<i>maʕa-kum</i>

However, the table above overlooks the pattern in which *-k* appears with OLCs. Their pattern does not match any of those categories because *-k*, in OLCs, is not an object clitic, a genitive clitic nor an oblique clitic because *take* (as an OLC and as a verb) is a monotransitive verb. It selects one object. In those patterns the OLC and the verb select *ʔal-kitāb-a* 'the book' as their direct object.

19.

- a. *hāk* *ʔal-kitāb-a*.
take.OC:2SG DEF-book.ACC
'Take the book.'
- b. *xuð* *ʔal-kitāb-a*.
take.2M.SG DEF-book
'Take the book firmly.'

In this respect, the OLC *hāk* looks like a noun because it only selects a **definite** DP (like a construct state, an indefinite noun selecting only a definite noun in a genitive phrase). However, to qualify for a noun, it must code a possessive relation. This is not applicable to OLCs. Another morphological pattern that calls for nouns appears in the glossing of (2.b) and (2.d), for example. Some OLCs are plural and are suffixed by a nunation marker. Other OLCs show diminutive forms (we refrain from presenting those forms for brevity).

Those morphological alternations and syntactic restrictions have pragmatic bases. That is, the speech situation triggers the use of OLCs and impacts their morphological derivation and their syntactic outputs. Miyagawa (2017) shows that SAPs are the source of allocutive agreement. This means that a representation of a hearer can surface on categories. This is what we observe in those OLCs suffixed by *-k*. Furthermore, in morphology, morphemes are categorized into two classes: inflectional and derivational morphemes. The boundary between those classes is that the former reflects a grammatical aspect, while the later establishes new categories. Other types of morphemes, however, do not function this way. Wiltschko (2005) shows that nominal affixes can attach to verbs without changing their morphological category. That is, a plural affix can attach to roots before defining the category. Her observation is true, but it is not motivated. Potts (2007) bridges this gap and argues that that language use can affect morphology.

What about OLCs? Speakers of the Arabic language use those categories to express a strong feeling or attitude. This appears clearly with the use of OLCs in contexts where they express how interlocutors feel about a proposition. It means that nunation, plural and diminutive aspects of OLCs serve such a purpose. Additionally, notice that OLCs select only definite nominals. Clark's (1996) grounding system is based on two ideas: shared knowledge and signals to highlight this knowledge. Definite articles reflect that a nominal is part of the shared knowledge of a speaker and his hearer. Otherwise, speakers must use the indefinite article. This situation strengthens our conclusion.

OLCs are context sensitive in that using the OLC with the imperative meaning of *take* must show at the time of the utterance. This means that both the speaker and the hearer must be present at the speech situation/context, unlike regular verbs. The same argument applies to those OLCs where a speaker is expressing his feeling. This situation does not involve a command; however, it involves exaggeration. This exaggeration is realized morphologically by using morphemes, such as plural and diminutive forms and nunation. Nunation, a suffix appears, normally, with indefinite nouns, involves using a stressed nasal sound. This makes this suffix sound like energetic nun, a suffix used for emphasis with verbs. This means that the use of nunation with OLCs gives a similar function because it does not allow a definite counterpart. With that in mind, OLCs look like verbs, nouns and interjections. This means that they must appear in a structure that enables such integration. We argue that SAPs are the source of such a process. The remainder of this paper deals with how such a complex behavior is generated syntactically.

5. Analysis and discussion

SAPs qualify for deriving and governing OLCS because they exist as the topmost projection, they project for speakers and hearers, and they embrace pragmatic roles and features. Those aspects are critical for the analysis of OLCs. Our proposal operates upon three theoretical grounds. First, pragmatics changes roots. Second, SAPs create expressive verbal categories/phrases (enhancing Gutzmann (2019), we argue that expressivity is phrasal and impact categories). Third, SAPs generate conjunct asymmetries.

5.1 Morphological generation

Neutralizing OLCs morphologically has immediate consequences on their apparent forms. One of the remarkable features of *hajhāt* 'impossible' is that it shows a plural form. This form is parallel with plural nouns such as *wajllāt* 'agonies.' While it is possible to retain the singular form of the noun *wajllāt* 'agonies,' (*wajl* 'agony') the OLC *hajhāt* does not have a singular counterpart. This makes it appear as a noun, even if it does not behave like one.

20.

- a. \sqrt{wjl} + PLURAL » [wajll-*āt* [\sqrt{wjl} PLURAL -at]]
- b. \sqrt{haihat} + PLURAL » [$\sqrt{haihāt}$ [\sqrt{haihat} PLURAL]]

The noun *wajl* has a plural and a singular form because its plurality is morphologically derived. For OLCs, plural forms are not affecting agreement, interpretation, nor any structural aspect. This means that such plural forms take place at the root level by merging PLURAL with a root base-generated form of \sqrt{haihat} . This is evident in that such forms never appear without the pluralizing suffix *-at*:

*√*haih*. This explains other OLCs apparent forms, such as diminutive forms and forms with nunation. This means that those categories are modified pragmatically because a speaker expresses his attitudes either by exaggeration (plural forms), deprecation (diminutive forms), and emphasis (forms affixed by nunation).

The OLC *hāk* is different, but it follows the same spirit. The suffix *-k* has a second-person feature. This feature creates the imperative interpretation (see, Kaur, 2019) because it directs the attention of the hearer to an immediate order. This means that *hāk* consists of those morphemes *ha-* and *-k*. But those morphemes are bound; that is, they are inseparable. This makes such OLCs always get associated with addressees. This is evident in that this OLC does not appear with first-person or third-person affixes. This morpheme qualifies for allocutivity and derives imperative OLCs (see Abdelhady, 2020 for other functions of this morpheme with DPs and DemPs).

5.2 Syntactic derivation

The morphological generation of OLCs suggests that they incorporate bound pragmatic affixes. Those affixes make such a category opaque for normal categorization patterns. This also impacts their syntactic patterns. This raises two questions: how does morphology access SAPs? How does this alternation impact syntactic derivations and linear ordering? The answer to those questions is that syntax must have expressive phrases. We explore such a possibility and its implications in this section.

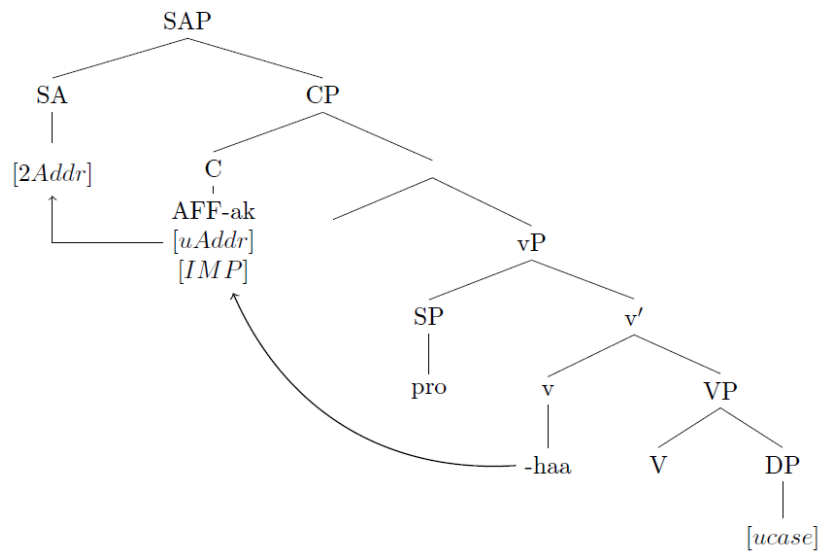
We noticed earlier that the second-person marker does not qualify for any slot in Benmamoun's (2011, p. 145-146) classification of *-k*. What is the role of this second-person marker? The answer is that this marker represents a hearer, so it qualifies for an agent (thematic role) or a hearer (pragmatic role). To qualify for the former, this suffix must attach to verbs. However, the Arabic language does not permit this suffix to mark subjects because the language allows the suffix *-t* in this position (21).

21.

- a. ra'y-t al-wald-a.
saw-2SG.M DEF-boy-ACC
'You saw the boy.'
- b. *ra'y-k al-wald-a.
saw-2SG.M DEF-boy-ACC
'You saw the boy.'

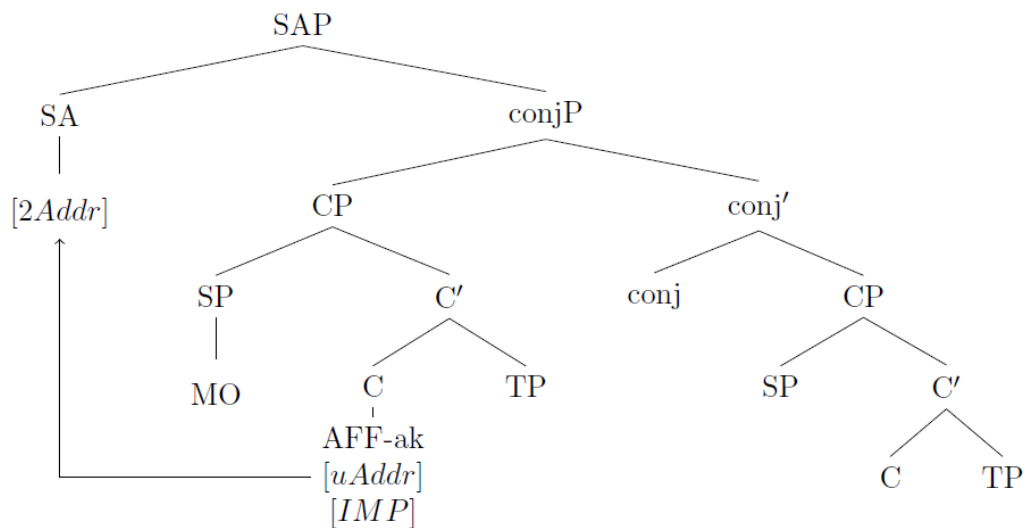
This means that *-k* is an allocutive marker that agrees with SAPs. More specifically, *-k* agrees with the second-person valued feature in the hearer projection. The imperative interpretation of this type of OLCs requires that this suffix must have an imperative feature or position. This makes the C head a good place for this suffix (note that it is also possible to assume that this suffix originates in the hearer head with unvalued imperative feature that agrees with a valued imperative feature in C). The outcome is a strong bound affix with a second person and imperative interpretation. This affix attracts *ha-* from a verbal position. This position is required to assign case to its complement before *ha-* moves to attach to *-k*. The outcome is the OLC *hak*. This means that this lexical item does not exist below the CP but above it.

22.



This pattern also accounts for asymmetrical conjunct patterns under the impact of the Attract Closest Condition which states that “a head which attracts a given kind of constituent attracts the closest constituent of the *relevant kind*” (italics mine) (Radford, 2009, p. 183). In its simplest representation, we illustrate this case of asymmetry because of the impact of SAPs on coordination.

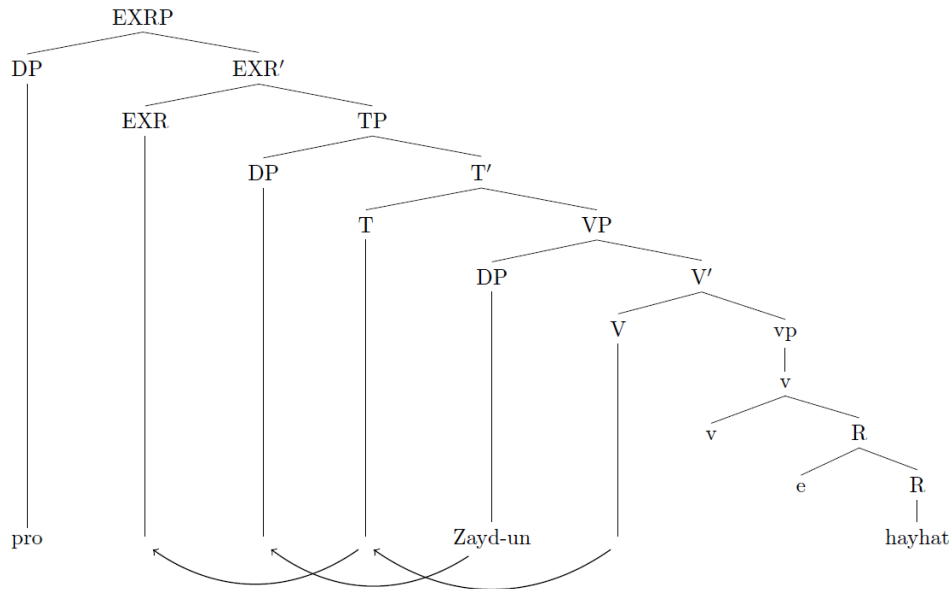
23.



Expressive OLCs require a slight modification because their structure demands precategorical association with expressive functional items. This means that those lexical items have an expressive feature/affix. This type of morpheme also requires movement to a SAP to account for their linear order and behavior (they are not subject for negation or adverbial modification). This movement is triggered because we argue that SAPs have an expressive functional head. This head is strong and attracts those expressive elements. The result is an expressive phrase. Like the earlier analysis, those items originate in a position that makes them able to assign case and have subjects before they move to the Expressive Phrase (EXRP). This makes them look like verbs, nouns and interjections at the

same time because at this position they are specified by a speaker, rather than the subject.

24.



6. Implications

The analysis of OLCs has both theoretical and empirical implications and breaks a new ground in syntactic and morphological models. The implications, however, are based on my judgement (and the judgment of two speakers of Canadian English), and they are to the best of my understanding.

From a pragmatic point of view, orders must have different degrees. Speakers must express urgent commands to their hearers immediately. That is, lexical items expressing strong orders must be directly oriented to the hearer; any lag in presenting the command weakens its seriousness/expressive function. Based on a quick scanning of the use of *Hush!* (i.e., exclamative) in English, we observe that *Hush* in most of its use may direct an order, but it should appear before other elements.

25.

- a. Hush, sweetheart, it's OK now.
- b. Hush! You'll wake the baby.
- c. Hush, now. Try to get to sleep.
- d. Hush, Darby, stop it.
- e. Hush my baby!
- f. Hush, Eureka!
- g. *If your father speaks, hush!

The conclusion that we reach here is based on the multiple categorizations of this word: a verb and interjection. But notice that even in its use as an interjection, *Hush* denotes a command. Notice further that all vocative phrases such as *Sweetheart* (25.a), *Darby* (25.d), *My baby* (25.e), *Eureka* (25.f) show that *Hush* in this context is different from its use just as a regular verb. It precedes the vocative phrase for giving an expressive order. It is not exclamative (!), but it is an expressive phrase.

The norm in syntactic derivations is to associate imperatives with CPs (Complementizer Phrases). This means that any command should project into a CP. However, this does not always work for what is categorized, in English, for example, as interjections because an interjection such as *Shh* gives a command. Assuming that it is a CP is wrong. Additionally, looking at it as a verb is equally problematic. However, we cannot disagree that this word will meet the pragmatic specifications of speech acts as defined by Austin (1962) and Searle (1968): illocution (the intended action) and perlocution (the actual effect of an utterance). At the pragmatic-syntactic interface, Speech Act Projections c-command CPs. C is the source of Force (e.g., imperatives, interrogatives, declaratives, exclamatives and others). This means that C and SAPs should fuse to obtain the direct, immediate imperative interpretation. The existence of this item in a SAP makes this item an interjection in the sense that it does not require further associations. This fortifies the claim that the higher the element is, the more subject the element is for pragmaticalization (Biberauer, 2018).

Another empirical outcome is that those interjections (26) that behave like verbs can fit neatly in this domain.

26.

a. “oh me!”

b. “O me miserum” (Latin)

INT 1SG.ACC miserable.ACC

(obtained from an anonymous reader)

Our model shows that is a speaker who is expressing his attitudes – not a subject of the interjection “oh”. If we are tempted to think that interjection has a subject and assigns accusative case, then we are categorizing ‘oh’ as a verb, which is wrong. Our model of analysis looks at such a construction as an Expressive Phrase; there is a speaker who is expressing his attitudes. Notice further that the model presented shows that such a phrase ‘oh me’ does not permit negation. (* “no oh me!” / “not oh me!”), it does not interact with tense **ohed me yesterday*, and it does not allow the DP ‘me’ to be in a focus position (**me oh!*). However, the phrase ‘oh me’ can be understood to have a present interpretation. The interpretation is present at the time of expressing attitudes, not the time of ‘oh’ itself; this can be supported by the idea that the interjection ‘oh’ cannot inflect for past ‘*ohed*’ or future ‘*will oh*’. This may be applicable to the Latin example.

7. Conclusion

This paper accounts for the behavior of OLCs in the Arabic language. The paper shows that those categories behave at once like nouns, verbs and interjections. This pattern shows up because those categories are pragmatically motivated, which makes the syntax-pragmatics interface a good tool for their derivation and generation. The paper develops the following theoretical assumption: pragmatics can alter morphological patterns, and this impacts syntactic derivations. The morphological form of this class of words shows that, in the Arabic language, nunation, plural morphemes and diminutive morphemes can attach to roots without altering the morphological output of lexical items. Those morphemes are used for emphasis, exaggeration or deprecation. In addition, the study shows a marker for a hearer. The tests show that this marker does not alter roots, but it defines other bound morphemes. The output is a class of lexical items that are only used for orders. This class can coordinate with imperative verbs, on the condition that it comes before any other element. This means

that SAPs shape categories in a complex way, change their forms and restrict their syntactic ordering. This confirms Biberauer's (2018) observation that SAPs can constitute a "grammaticalization target" for pragmaticalization-oriented processes." This means that OLCs may pattern with interjections only if they undergo a process of pragmaticalization.

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