Raising and Verb Serialization in English and Arabic:
A Generative Transformational Approach

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Abstract
This article helps bridge the gap left unfilled in the analysis of serialization in classical Arabic of the pre-Islamic period and what follows it on the one hand and between English and classical Arabic on the other. This article's premise is that serialization can be hypotactic or paratactic, where the clausal structure in both types differs. Under the theoretical concept of Raising, adapted from the generative transformational model, this feature is treated in a comparative/ contrastive fashion in both English and Arabic to determine the points of convergence and divergence and how the referential and referential interpretation is conducted by applying the PRO element. Theoretical analysis is maintained by traditional examples from Qur'anic texts and other devised examples that serve the purposes of relevant analysis.
Keywords: Serial Verbs; Generative Transformational Theory; English; Arabic; Interpretation; Clausal Structure

INTRODUCTION

Research on classical Arabic related to serialization still needs to be completed. Some researchers, namely Husse (1990, p. 340), claim that serial verb constructions (now called SVC) do not exist in classical Arabic. This may apply to paratactic type serialization. However, in some other cases, serialization is hypotactic, whereas in some properties, the strict definition of paratactic serialization may not apply. Some constructions with approximation verbs in Arabic may appear to be paratactic, as in:

مِنْ بَعْدِ مَا كَادَ يَزِيغُ قُلُوبُ فَرِيقٍ مِنْهُمْ

1. Min ba3d-i ma **ka:d-a** **yaz*i:8-u-**M qulu:b-u-F fair:q-in minhum
From after that was-(he)-close-to deviate (the)-hearts (of)-a party of them
(After the hearts of a party of them had well-nigh swerved) (At-Tawbah: 117).

In this Quranic verse, two verbs (boldfaced) are annexed together consecutively without any str Cultura l intervention. Even the PRO element is hard to assign, unlike the other examples given in this article. The difficulty goes down to the deviation between the second in the sterilization (يَزِيغُ) which expresses masculinity and the subject (قُلُوبُ) which expresses femininity. Such notions will be low. Notice that in this example and all the rest that will follow, any element enclosed in brackets does not appear in the surface structure of Arabic examples but is implacably meant and incorporated in the deep structure. In this article, I adopt a more expansive definition of serialization. It is usually claimed that serialization (Hyma: 1975, p. 136) would call it collectivization) or what is known in the literature as "serial verbs " is a characteristic of Creole languages of West Africa, China, North and South A merica and other places (Sebba, 1987, p. 2;

Jarkey,2015, p. 70). Most research treats the paratactic type of SVCs, lending a blind eye to the hypotactic type. To the best of my knowledge, hypotactic serialization in Classica Arabic and English has not been given due investigation. This article will contrastively probe into serialization in English and Classical Arabic.

The current article is meant to answer the following questions: What is ser realization, and how can the initial controversy be bridged? What are the basic structural properties of SVCs? How do you treat areas of overlap between verb and verb-like serialization? How can it be applied to analyzing SVCs in English and Arabic? Is serialization different in English and Arabic? How do hypotactic serializations vary from paratactic ones?

The essential problem is that serialization is not for my definition d. Sometimes, it is widely defined to include additional semantic features. Some regarded it as a 'sticky business.' Many writers have introduced this idea (Lord, 1993: 1; Lam, 2003:117; Wa Chili, 2005: 86; R icc io, 2017: 79; Stewart, 2001: 3; Trage l, 2017:170). Some writers, like Li and Thomps (1973), narrow serialization to sequences of verbs or verb phrases structurally annexed to constitute a single predicator within the same clause jointly. Others, like Sebba (1987), w iden the range to include co-verb or verb- like elements. To solve this issue and bridge this gap, I tend to sub-c lassie y serialization into verb and verb-like, with the former divided into consecutive and non-consecutive. This will be my approach throughout this article. However, there are areas of overlap between verb adverb-like types of serialization, as will be explained.
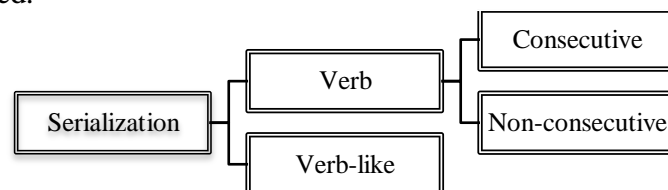

Fig. 1. Serialization Typology

Some writers define an SVC as a sequence of non-auxiliary verbs that act together as a single predictor without any overt marker of coordination, subordination, or syntactic dependency of any other sort; they might be 'continuous' or 'discontinuous' (Hyman, 1975, p. 136). Ser ia l verbs describe what can be conceptualized as a single event (Jarkey, 2015, p. 20). Others have related Durie names verbal co-compounds in Khmer language synonymic ser ialization (1997, p. 337). Walchli, on his part, sub-sum serialization under the lexical types of co-compounds (2005, p. 124). Despite the many arguments against it, others take the other way round and treat verbal co-compounds as a case of SVCs (Aikhenva ld, 1999; Bisang, 1995, p. 138; Lord, 1993, p. 233; Sebba, 1994). Moreover, such construction can be temporally ambiguous; as Li and Thomps (1973) maintain (Aikhe nva ld, 1999; Bisang, 1995, p. 138; Lord, 1993, p. 233; Sebba, 1994). Moreover, such construction can be temporally ambiguous; as Li and Thomps (1973) maintain, they can be interpreted in different temporal modes. The events in the SVCs can be:
1. Consecutive
2. Simultaneous
3. Alternating
4. Purposive (the second describes the purpose of the first)
5. (Resultative) I might add

This ambiguity leads to another problem: SVCs are problematic when giving them a for ma l grammatical account. Rare are those formal models that tackle d SVCs in a

detailed way, providing structural analysis of such construction. Riccio (2017) retains the same take in this regard, considering SVCs a "challenge "for formal models of grammar (p. 79). On a generative and minima list ground, it is maintained (Choms ky, 1965; 1981; 1986; 1994) that languages have in standard many features of their structural make-up organized in terms of the UG pr inc iples. Simultaneously, other features (called parameters) are language-specific and inapplicable to all languages. Chomsky (1965) distinguishes particular grammar from universal grammar. Stewart (2001) subsumes SVCs under that particular grammar, as he regards SVCs as a language-particular feature.

Many studies investigate dialectal l (e.g., Husse in 1990; a l-Ota ibi, 2023) and modern standard Arabic (e.g., a l-Ota ibi, 2021), not the classical traditional language of original l Arabs in pre-Isla mic and Is lambic period. So, I disregarded reviewing those studies, as they do not benefit the purposes of the current investigation much.

METHOD

The concept of *raising* is theoretically adapted to suit the comparative/contrastive purposes of the article. Each dimension of serialization is treated separately in terms of the adopted theoretical framework; hence, a comparative/contrastive analysis is conducted between English and Arabic. The examples used to substantiate the analysis and theoretical applications are taken from the Quranic text (when it comes to Arabic) or, in some other cases, devised by the author in a fashion that replicates the exact similar structures in both English and Arabic.

RESULTS AND DISCUSSION
Theoretical Frame Work And Application

The theoretical perspectives adopted in this article relate to transformational grammar and its evolutionary versions. The concept of "RASING" is the primary aspect of the transformational trend that has a close connection to the topic under discussion. Below, I will provide a concise characterization of the "RAISING" and "PRO" notions which bear much resemblance to Arabic grammatical theory of "al-'a:mil" (the governing operator). Yet, in Arabic the uses and applications of this concept is much more pervasive and expansive than in English. The PRO is usually implicit due to the tendency to not repeat lexical words. This tendency is known as structural priming (Kantola et.al., 2023). The implicitness of the PRO relates to its being contextually recognizable. Likewise, the referential predictability (Langlois et al., 2023) of the referent of the PRO element makes it easy to unravel ambiguity that might arise.

Originally, the concept of raising in transformational grammar is used to refer to the displacement of a subject-NP or a VP from its original position, raising it to a higher structural position, (leaving a vacant place which is said to be filled by a hidden element) (Burning, 2005; Chomsky, 1988; Cowper, 1992; Postal, 1974; Rosenbaum, 1967; Radford, 1981). The following examples clarify this point:

2. It seems that John is sick
3. John seems to be sick

Both sentences above have the same meaning, even though the SS and DS are different. John, in the second, is raised to occupy the main subject position, and likewise the VP "to be sick" which was "is sick" is raised, as well, to be the complement of the main verb "seem." This raising leads to empty slots after the VPs (seems and to be) which are filled with a non-overt element called the "PRO."

The "PRO" concept is adapted in a way to match the Arabic concept of "'add*ami:r al-mustatir," being close in nature and function. These movements are triggered by the effect of the "governing" verb seem which governs the non-finite infinitival subordinate formation "to be + sick" and causes it, together with the new subject "John," to have a higher superordinate clausal position, leaving behind a positional vacuum filled by the implicit referential pronominal element called "PRO." The "PRO" refers to that null pronoun used to represent an empty structural category in the sentence. It is a placeholder for an element that has been moved or deleted due to transformational movement operations. In Arabic as well, such concepts are used mainly in cases of deletion and ellipsis as will be shown below.

On the part of Arabic language, the relevant theoretical basis is to do with "'ad-d*ami:r 'al-mustatir" (implicit pronoun) which is treated under what is known in Arabic as "'al-istita:r" (implicitness). Pronouns in Arabic can be either explicit or implicit. Arab traditional linguists unanimously agree on this division, until the age of 'ibn Mud*a:' 'al-Qurtubi (1979) (died in 592 H.) who rejected it. This is outside the scope of our discussion in this paper. The implicit or hidden pronoun in Arabic, which is incorporated in the verb, does not appear in the surface structure of utterances, but in the deep syntactic/semantic structure. It is bound to the subject in the structure of a sentence, and it cannot be mentioned explicitly unless in case of apposition for the sake of emphasis (Sibawayh, 1988; 'ibn Ma:lik, (n. d.); Ibn al-Sarraj, 1996; Fischer, 2002): ()

اسْكُنْ أَنْتَ وَزَوْجُكَ الْجَنَّةَ

4. 'uskun   'anta wa   zawj-u-ka   l-janna-ta
   Dwell-V-(you) you and-CONJ wife-NOM-DEC-your the-paradise-ACC/OBJ
   (Dwell, you and your wife, in the paradise)

The pronoun, as shown, can be suffixed to the word (be it a verb "e.g., fa3alt-u", a noun "e.g., Kita:b-i:", preposition "3alay-hi, etc) or appear separately without being suffixed as in the example above where "'anta" is a separate appositive pronoun for emphasis, and the pronoun "ka" in "zawj-u-ka" is a suffixed one that implies the meaning of the separate deleted pronoun "'ant-a." According to Socin (1885), the pronoun is separated only when there is a need for that, as, for example, in cases of emphasis or when the nominal subject "mubtada'" and the predicate are determinate "allah-u huwa l-7ayy-u" (Allah, He, is the living one) to make a full predication.

The explicit pronoun "'anta" is not the grammatical subject, as the grammatical subject is the implicit pronoun denoting "'ant(a)." The second explicit pronoun that appears in the utterance is an appositive used for emphasis. That is why according to Sibawayh (1988), it not permissible to say "fa3al(a) huwa" with an explicit pronoun, except in case of apposition. This is because the denotation of the implicit pronoun is well-known to language users. However, saying that there is, for every verb, an implicit pronoun which is semantically merged with the meaning of the verb is a cognitive conception that might seem to me arbitrary. Thus, the implicit pronouns come in the nominative case only; while in the accusative and genitive cases, pronouns that do not have a lexical sign in the surface structure are said to be "ma7zu:f" (deleted) not "mustatir" (implicit). The basic characteristic of the implicit pronoun is that it does not appear at all, as it is part of the verb meaning and implicitly meant by the speaker. A deleted pronoun on the other hand can appear (Sibawayh, 1988). So, for example in:

5. Qad   ja:'-a   yad*rib-u-ni
   has   came-PST-(he)   beat-PRS-(he)-me-OBJ
   (He came to beat me)

the nominative pronoun "he" related to the verb "ja:'-a" is implicit, yet the pronoun "'ana:" related to the accusative pronoun "ni" in "yad*rib-u-ni" is elided (deleted). Arabs distinguish between types of deleted pronouns "manwi" (intended) and "8air manwi" (not intended) (ar-Rãd*i:, 1975). The first is part of the deep structure while the other is not. I see this distinction is a theoretical one that does not affect our understanding of the pronoun's meaning (implicit or elided) and its deictic significance. In the example above, the verb "ja:'a" is the governing operator in the SVC, and the whole circumstance clause "represented by "yad*rib-u-ni" (verb+ PRO+ pronominal object) is the operand which is controlled by the preceding governing verb which imparts to it an accusative circumstantial state.

        The idea of government controls such types of deletion and ellipsis where a presupposed element (known as 'al-'a:mil) is said to govern and control another element in the structure of sentence and affects its declension, as is the case in Arabic with utterances starting with an NP in the accusative case followed by a VP containing an anaphoric Pronoun referring back to the referent of the accusative NP, e.g.:

6. a) Zayd-an   d*ã rãb-tu-hu.
      Zayd-ACC/OBJ   beat-NOM/SBJ-(I)-him-REF/ANAPH
      (I beat Zayd)

There are in Arabic other syntagmatic options for the same utterance with almost the same meaning:

6. b) Zayd-un   d*ã rãb-tu-hu.
      Zayd-NOM/SBJ   beat-(I)-NOM/SBJ-him-REF/ANAPH
   c) Zaydan   d*ãrãb-tu
      Zayd-ACC   beat-(I)-NOM/SBJ
   d) D*ãrãb-tu   Zayd-an
      Beat-(I)-NOM/SBJ   Zayd-ACC/OBJ

Yet utterance "a" is the most marked one, as "Zaydan" is governed by a deleted presupposed verb "d*arab-tu." Arab traditional grammarians call this "'al-ishti8a:l," where the second verb is governed by the pronominal object "-hu," and thus there must be another element (3a:mil) that governs the accusative "Zaydan." It is the deleted presupposed verb "d*ãrãb-t-u" (Bohas et al., 1990; 'Ibn Hisham, 2004; Mace, 1998). This notion of government is a basic concept in transformational grammar, where the atomic syntactic units might be affected, in their linguistic and semantic behaviour by, constraints imposed by other elements or units, as, for examples, the constraints on predicate/ argument collocational compatibility that resulted in the emergence of the so-called thematic and "semantic roles" that affect the structural positioning of syntactic elements. Thus, the lexicalization of syntactic units at S-structure (e.g., NPs) is conducted only if they are juxtaposed to and c-commanded by the related nodes. The detailed explanation of this is prevalent in related books and references (Beeston, 1968; Buring, 2005; Cowper, 1992; Chomsky, 1981, 1995).

        The deletion in Arabic is made when the identity of the deleted element is conceivable either by other structural element in the text or by a pragmatic contextual sign that allows the speaker to dispense with explicit mention of a specific item. Such points are maintained by 'Ibn-i Hisham (2004), 'Ibn-I Jinni (1952), and many others. In

TG, this is done structurally only as for example in "Behave yourself," which is originally: "You behave yourself" where "you" is deleted by virtue of the existence of another structural element in the text "yourself" via which the deleted element can be identified. In Arabic, SVCs might occur in some specific cases when the verb is under the effect of some circumstance that eliminates its need for a subject. Arab linguists ('Ibn Ma:lik, 1990; 'al-5id*ri:, 2003; 'az-Zajja:ji:, 1979; 'Ibn l-'Anba:ri, 2016; 'Ibn Jinni, 1952) mentioned two cases: al-fi3l-u l-mu'akad (emphatic repetition of verb) as in for example:

7. qã:m-a   qã:m-a   Zayd-un
   stood-up-V/PST-(he)   stood-up-V/PST   Zayd-NOM/SBJ
   (Zayd stood up)

al-fi3l-u l-makfu:f like "qãllama," "6a:lama," etc., where "ma" makes the verbs dispense with the subject, e.g.:

8. qãllama   yaqu:m-u   Zayd-un
   Seldom   stand up-NOM-DEC   Zayd-NOM-SBJ
   (Zayd seldom standup; It is seldom that Zayd Stand up)

Thereupon, what can be understood from the previous discussion is that: the pronoun in the four cases of verb government in Arabic (transitive, intransitive, doubly transitive, or in case of prepositional verbs) does not appear in the surface structure unless it is appositively mentioned for emphasis. A prepositional verb construction has a preposition that governs the object, e.g.:

9. 'a5bar-na-hu   bit-tafa:s*i:l
   Informed-(we)-him   of-the-details.
   (We informed him of the details).

The concept of "al-3a:mil" is a basic one in the theory of government and dependency. It shows the dependency rules in the structure of a sentence; that is why Owen's (1988: 38; 2000: 291) takes this Arabic concept to be expressive of the notion of dependency in English theories. As Bohas et al. (2017, p. 59) state it, "al-'a:mil" is a governing operator (element in the structure of a sentence) which precedes and affects the "operand" (i.e., the element affected by the governing operator). The effect finds expression in the different states and movements of "'i3ra:b" (i.e., the grammatical function, declension). In Arabic, it is the verb that has the privilege of government; the verb is by default the basic governing operator in the structure of a sentence, as it assigns the nominal and accusative cases and sometimes the genitive case to the nouns that surround it. Likewise, in English government manifests itself in the relation between heads of constructions and other elements dependent on it.

Serialization Structural Properties And Instances Of Use

     In English, serial verbs of the paratactic type seem to be monoclausal, and have just one tense, aspect and polarity value:

10. I will (run) go get a taxi.

However, in Arabic, they vary in tense, as the first verb usually tends to be in the past tense which is the unmarked case to which many examples were given; yet other marked cases exist where present or future verb forms are used:

11. Rubba-ma ya't-u:na-ka   ya6lub-u:n-a   l-ma8firãt-a
   Perhaps   come-they-NOM/SBJ-you-ACC/OBJ   ask-they-NOM/SBJ   the-forgivness-ACC
   (They might come to you seek/ seeking (ask for) forgiveness)

12. Sa-ya't-u:na-ka   ya6lub-u:n-a   l-ma8firãt-a

     will-FUT-come-(they)-(you)   ask-(they)   the-forgiveness

     (They will come seek/ seeking your forgiveness)

       In these constructions, the first verb in the serial construction is the governing operator that controls the grammatical function of the second verb which is given an accusative case as a causative object (maf3u:l li-'ajlih-i) or as an active participle ('ism fa:3il) functioning as a circumstantial adverb. The context will decide whether one or even both of the interpretation obtain. The sentence thus is another structural version of:

13. Sa-ya'tunak-a   li-ya6lub-u: l-ma8firat-a

     Will-FUT-come-(they)-(you)   to-ask-(they)   the-forgiveness-ACC

     (They will come to seek/ seeking your forgiveness)

This first verb together with the implicit pronoun functioning as the subject represent the first clause, while the second verb plus its attached hidden subject-pronoun plus the nominal object will represent the second clause which is the operand controlled by the first verb (i.e., the governing operator). An additional governing operator in this last example is "la:m" in "li-ya6lub-u:" which affected the verb's final ending by deleting the "nu:n." When "la:m 'al-ta'li:l" (causative lam) is deleted, the second clause will be raised to be under direct control of the first verb in the serial construction, hence its ending will change by adding "nu:n" with the same implicit "PRO" for both verbs; a "PRO" represented by the pronoun "hum." This shows that "PRO" is in fact not a null element expressing void as some linguists defined it earlier, but a meaningful necessary element which is hidden and does not appear in the surface structure. As to polarity, it depends in Arabic on the particles used before the verb:

14. Ma   ja:'a

     Didn't   came-PST-(he)

     (He didn't come)

15. lam   yaji:'

     Hasn't   come-PRS-(he)

  (He hasn't come)

Serial verbs can also occur in other constructions where a bare verb form is appropriate:

16. They will come see me tomorrow.

As this looks to be monoclausal, it might be seen by others as multi-clausal where one verb clause is subordinated to the matrix one. Such constructions together with some other expressions like "let's go eat" and "come live with me" might be seen as deviating from mono-clausal property. In such constructions, the second verb would normally be regarded as a bare infinitive. They seem to be a transformed version of the structure containing serial infinitive, and coordinate verbs:

17. I will go to get a taxi.

18. Don't make me come and/ to get you.

Here, the deletion transformation is applied to get the serialized consecutive forms.

In English, verb-like infinitive phrases can be used consecutively to form serialized verb-like infinitival constructions which I named non-consecutive serialization:

19. John decided to start to try to continue to work to finish his dissertation.

This applies to Arabic as will be clarified in due place later. It seems to me in the light of Chomsky's concept of "selection restriction" (1965), due to some semantic and syntagmatic restrictions, not all verbs allow for this type of non-consecutive verb-like serialization, only those that can be colligated with "to," e.g., (seem, need, tend, want,

have, plan, etc.). In this connection, three common verbs in English take the "bare infinitive" without "to" (help, make, and let); the verb "dare" can do with or without "to."

18. No one dares (to) speak to him when he is angry.

Thus, according to my approach, the verb "dare" supports both types of serialization: verb and verb-like.

As we mentioned earlier, this verb and verb-like serial consecutive and non-consecutive formations exist in Arabic, where we can say:

19. a) Ja:'a   ya''5uz-u   l-kita:b.
    Came-(he)   take-(he)   the-book
    (He came (to) take the book)
  b) Ja:'a   li-ya''5uz-u   l-kita:b.
    Came-(he)   to-take-(he)   the-book
    (He came to take the book)

In Arabic, such structures are prevalent in circumstance clauses subordinated to a matrix verb clause:

20. 5arãj-a   ya7mil-u   s-sayf-a   fi yadih-i
    came out-PST-(he)   hold-PRS-(he)   the-sword-ACC/OBJ in hand-his
    (He came out holding the sword in his hand)

21. 5arãj-a   yuda:fi3-u   3an-i   l-madinah
    came out-PST-(he)   defend-PRS-(he)   for   the-city
    (He went out to defend the city).

In both sentences, we have the same structure, yet in the first both verbs are simultaneous, while in the second, both verbs are consecutive and purposive. This variance comes down to the difference in aktionsart of the second verb which adds a sense of consecutiveness, and hence the function of a causative object in the second sentence. This gives a meaning and function that are not available in the first. In some marked cases, the PROs of the two serial verbs are not co-referential:

22. Fa-bada'-a   ya'u:l-u   lahu   l-mulk
    Then-started-(he/it)   devolve-it   to-him   the-kingship
    (Then, the kingship started to devolve to him) (resultative).

Inchoative and Approximation Verbs
      These verbs denote the beginning of an action or a state in the aorist aspect of the past tense without further temporal limitation or implication (Forbes, 1863, p.310). Inchoatives and approximation verbs in Arabic might be considered an instance of serial-verb constructions, as in the following examples:

23. la   ta3ud taf3al-u   ka-za:lik
    Don't come back do-(you)   like-this
    (Never do this again)

24. ma 3a:d-a yufa:riq
    no   longer became- (he) abandon
    (He no longer abandons (me))

25. Kada   yaf3al-u   zalik
    Almost (close-he-was) do-(he) that
    (He almost did it; he was about to do it.)

26. ma-dumt-u   'amshi 3ala qãdam-i
    as-continue-(I) walk   on   foot-my

(As long as I can walk on my leg)

Some constructions might contain more than two verbs, i.e. three non-consecutive serial verbs, as in:

27. Fa-ja3al-a kullama marr-ã   bi-7ayy-i-him   nahaba-hum
    began-(he) whenever passed-(he) by-neighbourhood-their blunder-(he)-them
    (Then he began, whenever he passed/passes by them, he blundered/blunders them)

It might be noticed that, after the verb "ja3al-a," the second verb in most cases comes in the present form, but here in this example, the addition of the adverbial "kullama" allows for the past form of the second verb "marr-ã" and hence for the past form of the third verb "'a5az-a;" otherwise, the verb, after "ja3al-a" without the addition of kullama and the past form "marr-ã, should be in the present form "fa-ja3al-a yamurr-u". Further examples with the different types of serialized verbs might make the picture clearer:

28. Ja'a   ya'5uz-u   l-kitab (purposive/ consecutive)
    Came-(he) take-(he)   the-book
    (He came to take the book)

29. Qã:m-a   yurattib-u   mala:bisah-u   l-muba3tharãt-a (consecutive)
     Stood-(he) arrange-(he) clothes-his   the- scrambled-ADJ
     (He stood to arrange his scrambled clothes)

30. Ja'a   yabki (synchronicity/ simultaneity)
    Came-PST-(he)   weep-PRS-(he)
    (He came weeping)

In 28 and 29, the events denoted by the verbs are temporally ordered, while in 30, the event/ action named by the verbs are synchronic and seem to merge in terms of temporal occurrence, as they do not seem to be pragmatically discrete and separable. In other cases, the second verb might represent a result to the event named by the first:

31. Za:kir   tanja7 (resultative/ consecutive)
    Study-IMP-(you)   succeed-PRS-(you)
    (If you study, you will pass; study to pass)

In all these serial constructions, the two verbs are in different tense, where the first is in the past form, and the second in the present, except the final example where the first verb is in the imperative form, and the second in the present. In conditional constructions in Arabic, the addition of a conditional operator can affect the suppletive form of the verb which might alter to the past or present forms:

32. 'in tuza:kir   tanja7
    If study-(you) succeed-(you)
    (If you study well, you will pass)

Negation can be added to either verb or both of them:

33. 'in   lam tuza:kir   lam tanja7
     If   not study-(you)   not succeed-(you)
     (If you don't study well, you will not pass.)

34. 'iza za:kart-a   naja7t-a/ tanja7
     If   studied-(you) succeded-(you)/ succeed-(you).
     (If you studies well, you will pass)

Here in 34, both the past and present tenses can be used in the surface structure to signify something that will happen in the future and denote almost the same meaning. Form/function disparity is widespread in Arabic for some rhetorical purposes. In English, inchoatives do not function as is in Arabic. They are used to show the onset or change of

an action or state (Lakoff, 1970; Leech, 1969; Lipka, 1972; Jespersen, 1924; Shibatani, 1976) and do not enter into serial-verb formations; perhaps we can find them in verb-like (infinitive/ present participle) serial constructions:

35. It began to burn/ burning

In other unmarked cases, the inchoative verb is usually followed by an adjective, adjectival past participle, or even a noun, hence having a copular function:

36. He became rich
37. He got entangled.
38. The clothes will catch fire

Other inchoatives like make can have both functions:

39. a) This will make him regret
     b) This will make him happy
     c) This will make him a good student

In such cases as 35 and 39a, there is a divergence in one of the characteristics of serial-verb construction. In 35, the "PRO" of the infinitive clause refers to the same subject of the first verb began, while in 39a, the "PRO" of the second verb "regret" is not co-referential with the subject of the first verb make.

Additional Co-Verbs and Verb-Like Constructions

As some definitions of serialization includes, as manifest in (Sebba, 1987, p. 2) not only verbs but also verb-like sequences, a sequence of verb and participle (past or present) can be regarded as an exemplification of serialization:

40. a) The time they spent married to one another is only 3 weeks
     b) The time they spent marrying one another is only 3 weeks

Where "married to one another" and "marrying one another" represent adverbial participial phrases modifying the verb "spent." Further instances of verb-like serialization are:

41. He started to sleep/ sleeping
42. I saw him open/ opening the door

Some other structures allow for structural annexation of verbs:

43. I wonder who you think hit/ to have hit your car.

The question now is "can these constructions be considered instances of serialization?" According to Sebba's previous wide definition the answer is "yes." However, Li and Thompson (1973) tend to exclude these constructions from verb serialization, regarding them as "coverbs," for one element, usually the second, is a grammatical modifier of the other. However, adopting my taxonomy, any verbal construction of whatever type will be regarded as an instance of serialization.

In Arabic this type of co-verb and verb-like constructions is formed through the use of active present participles ('ism l-fa:3il), past participles ('ism l-maf3u:l), or action nouns (mas*dar):

44. Ja:'a   7amil-an   as-sayf-a
     Came-(he)   carrying-(he)-CIRCUM/PTCP   the-sword-ACC
     (He came carrying the sword).
45. Ja:'a   majru:7-an   bi-nas*l-i   s-sayf-i
     Came-(he)   wounded-(he)   by-blade-GEN   the-sword-ADNOM
     (He came wounded by the sword's blade).

Non-consecutive Verb Serialization

Sense verbs (see, hear, etc.) that take the bare infinitive have structural resemblance in English and Arabic:

46. a) I saw/ heard him open the door.
    b) I saw/ heard him   opening the door.

47. a) Ra'ayt-u-hu   yafta7-u   l-ba:b.
        Saw-(I)-him   open-(he)   the-door. (I saw him open the door)
     b) Ra'ayt-u-hu   fa:ti7-an   el-ba:b).
        Saw-(I)-him   opening-(he)   the-door. (I saw him opening the door)

Some writers (Tallerman, 2005; Wekker and Haegeman, 1985; Miller, 2002; Radford, 2004; Roberts, 2016) go for the option that a bare infinitive is an instance of complementation, where the main verb of the matrix clause selects a non-finite subordinate clause. From a transformational-generative-grammar view (Luraghi and Parodi, 2008, p. 156), the non-finite verb (bare infinitive, gerund, participle) has a nonovert or null subject which is syntactically represented and referred to as (PRO), standing for pronoun, which is referentially anaphoric with the antecedent subject of the matrix clause. Thus, in "Mary went to the store (PRO) to buy a book" contains a nonovert pronominal subject, anaphorically connected and controlled by the primary subject. As aforementioned, this seems similar to the so called "d*ãmir mustatir" in Arabic. This feature is called "raising" in TTG and GB, where null subjects are seen as representations of the movement transformation. Contrarily, in HPSG (Head-driven Phrase Structure Grammar), it is named a "trace" which is a phonetically null constituent that is not expressed physically in the sentence causing a gap, which is filled with a "filler" whose relationship with the gap is one of structure sharing rather than movement as in GB (Pollard and Sag, 1994, p. 4). The following structure is somewhat different:

48. All you need to do is stay silent.

Structural Variations Of Serial Verbs

    Surveying the different structural formation of serial verbs in English, I found that they might take these shapes:

1. X V V NP (This tactic will help save more money)
2. X V NP V NP (John will help you finish your assignment; I saw him open your office)
3. X V NP AdvP V NP (This will help you tremendously enhance your skills)
4. X V NP PP V NP (This will help you to a large extent enhance your skills)

where X refers to the subject, whether implicit or explicit, or whatever precedes the first verb in the serial sequence. Here, the two verbs do not deliver one single meaning as in the two examples given above, but each denote an event, process, etc., separate and different from that which the other verb denotes.

In Arabic, the structure is variant:

5. V X V X NP: Ja:'a ya7mil-u s-sayf (He came carrying the sword) (Simultaneous)
6. V X Circum P V X NP: Ja:'a musri3-an ya'5uz-u l-ma:l (He came hurriedly to take the money) (Consecutive, purposive)
7. V X (NP) (pronominal) (Adv. P) V X: Ja:'-u: 'aba:-hum 'isha:'-an yabk-un (The came (to their father in the evening) crying (Simultaneous)

8. V X V X (PP) (Adv. P/ PP) (Ja:'-u: yank-u:n li-'abi:-him 'isha:'-an/ fi l-'isha:')
    (They came crying to their father in the evening). The X refers to the PRO element
    (explicit or implicit).

Serialization And Transitivity

In certain cases with help and make, I notice that in English the second verb in the serial construction must be transitive, unless there be a subject of the second verb which is the object of the first. For example, in:

49. This powerful motor will help the car run at higher speed than ever before.

50. This powerful motor will help run (PRO) the car at higher speed than ever before.

Where the "PRO" non-overt element is used to anaphorically refer to the subject of the matrix, but exophorically to refer to a presupposed hypothetical subject of the verb "run" (e.g., you, us or even the dummy unspecified it). This structural subject verb switch requires a transitive verb:

51. The training will help your status improve.

52. The training will help improve your status.

If the second verb on the serial construction is intransitive, the case will be different as regards the possibility of switching the subject-verb position. If we compare the following sentence below, the idea will come close to clarity:

53. This medicine will help you sleep.

54. This medicine will help sleep (you).

As the verb sleep is intransitive, it requires an explicit subject before it. But with transitive verb the subject can be explicit or implicit. If infinitive verb-like constructions are ruled out as an instance of serialization; hence consecutive (uninterrupted) serialization in English cannot be formed with intransitive verbs. But in Arabic it is possible in both cases:

55. Bada'-a   ya6i:r
     Began-(he)   fly-(he)
     (He started to fly).

56. Bada'-a   yaktub-u   l-kita:b
     Began-(he)   write-(he)   the-book
     (He stared to write the book)

57. Rabb-i   'ari-ni'   andhur   'ilayk-a
     O' Lord-my   show-(you)-me   look-(I)   at-you
     (My Lord, show Thyself to me that I may look at Thee) (al-A'ra:f, 144)

In this verse, two verbs are serialized consecutively to formulate a serial verb construction in which both represent a holistic complex event wherein each verb denotes one componential dimension of the whole event. This kind of constructions is not prevalent in standard classical Arabic in the same way it is in other slang versions. Here, the object Pronoun -i: (which corresponds to "me" in English) is the grammatical object of the first verb 'ari-ni: (let me see) and the hidden pronoun (d*ami:r mustatir) "'ana:" is the subject of the second verb 'andhur (watch). The basic difference between both in my view is close to the difference between "see" and "watch" in English. Thus, "to see" (yarã:) is almost done unintentionally, and if it occurs intentionally, it is to visually perceive seen object as a whole without scrutiny. But "to watch" (yandhur) is an intentional event accompanied by visual scrutiny. Through raising, in the first clause composed of the imperative 'ari-ni:, the subject 'anta is implicit and the second object

"yourself" is deleted, with both leaving a "PRO". The first PRO is coreferential with the "PRO" implied in 'ilayk-a; the second PRO ('ana:) is coreferential with that of the first object "ni:" in 'ari-ni:. The second clause ('andhur 'ilayk-a) is raised to be under direct control and modification of the first clause ('arin-ni:) by deleting the causative operator (lam, kai, or 7atta:), hence it becomes a causative subordinate clause embedded in the bigger imperative clause ('ari-ni'andhur 'ilayk-a). It is generally maintained by many writers (Cristofaro, 1998; Noonan, 2007) that serialized verbs "usually" (but not always) agree in tense, aspect, mood, person, and cannot be independently negated. However, cases where one or more of these properties does not obtain are available either in English or in Arabic, as the examples clarify.

In this complex event, the subject of both verbs is different: that of the first 'ari-ni: is a hidden pronoun "'ant-a" that refers back to God, and that of the second is a hidden pronoun "'ana:." This is different from other cases where the subjects of both verbs refer to the same entity. "Subject identity" is one of the properties of regular SVC as Bisang (1998, p. 34) maintains, yet he expresses his doubt whether it is a general characteristic. This serial construction breaches a property of normal SVC which resembles in English "I saw him open the door" where verb identity does not obtain. In Arabic, sometimes the second verb in an SVC is equivalent to the adverbial present participle which complements the meaning of the verb, and hence a complement, as in:

58. Wa   ja:'-u: 'aba:-hum   3isha:'-an   yabk-u:n
    And   came-(they)   father-their   in-the-evening   weep-(they)
    (And they came to their father, in the evening, weeping) (Yusuf, 17).

Thus, in many cases, the SVC in Arabic corresponds to coordinate and complement (infinitival, participial) constructions, and so translated as in the narration in S*a7i7 Muslim:

59. 'arã'ayt-a   'in   ja:'-a   rãjul-un   ya'5uz-u   ma:l-i:
    Do-see-you   if   came-(he)   a-man   take-(he)   money-my
    (What do you see if somebody came to take my money by force?) (Muslim, p.124)

where "rãjul" is the subject of the first verb explicitly and of the second verb implicitly, assuming that there is, after the second verb, an implicit pronoun "huwa" which has anaphoric reference to "rãjul." In this regard, a syntactic-semantic difference might be noticed between:

60. a) Ja:'a   yabki.
       Came-(he)   weep-(he)
    b) Ja:'a   ya'5uz-u   l-kita:b.
       Came-(he)   take-(he)   the-book

In spite both verbs have the same structural position, they seem to have different declension or grammatical function. In the first yabki is a circumstantial accusative (7a:l); in the second, the verb clause ya'5uz-u seems to me to have the grammatical function of a causative object (maf3u:l li-'jlih-i) rather than a circumstantial accusative. Discerning the declensional category of the verb in such constructions depends on some pragmatic-semantic restrictions related to the nature of the event the verb describes.

Serial Verbs: Hypotactic Or Paratactic

In language, famous for their serial verb constructions, the two verbs are interpreted as a single predicator, there can be only one tense / aspect / negation marker; the clause involves only one proposition. This is not the case in Arabic and English, as

the two verbs might vary in tense and meaning. That is in most languages, the serial-verb construction is paratactic in nature, while, I would claim, in English and Arabic, they are of hypotactic relation. Many agree to this regarding serial-verb construction as belonging to the region between subordination and complementation (Foley and Olson, 1985, p. 43; Croft, 2001, p.323). However, paratactic verb-serialization does exist in English and Arabic, as in:

61. They will come see me tomorrow.
62. Ja3al-a   yaqrã'-u   bi-s*awt-in   3a:li:
    Began-(He)   read-(he)   with-voice   loud
    (He began to read in a loud voice/ loudly)

In spite of the possibility that some might deem the previous examples hypotactic, others might see them of paratactic relation with both verbs being one structural formation. It depends on whether they are seen as a matrix clause including a subordinate one, or a one clause composed of a verb phrase and a verb clause without assigning a PRO to the first verb. I am inclined to adopt the first hypotactic realization of this structure. In such structures as:

63. I heard him sing
64. I saw him going to his friend.

       These constructions are examples of complementation where the sentence is composed of two clauses: one matrix clause and a subordinate one with an infinite verb form (infinitival or present participial). Tallerman (2011, p. 86) speaks in agreement with this when she maintains that in similar constructions like the above there is an embedded clause that is subordinated to the matrix clause.

CONCLUSIONS

       The following table gathers primary conclusions reached in this article where the similarities and variances between English and Arabic regarding serial verbs are concisely mentioned:

Table 1. Serial Verbs in English and Arabic

Serial Verbs in English and Arabic	
Similarities	Serial-verb constructions are of hypotactic nature where a subordinate verb clause is embedded in a preceding matrix verb clause.
	The two verbs in a serial construction can be in the present if used in the imperative case: Compare: 'izhab 'a7d*ir l-kita:b/ go get the book.
	With certain verbs like see, hear, make etc., nonconsecutive serial-verb constructions allow for past and present-tense verbs in the first clause: Compare: I watched/watch him play the match and sha:hadt-u-hu/ 'usha:hid-u-hu yal3ab-u l-muba:arã-ta. In such examples, the second verb clause has a complement function in both languages: object complement in English and circumstantial accusative in Arabic.
	In certain cases with help (Yusa:3id), make (yaj3al), I notice that the second verb in the serial construction must be transitive, unless there be a subject of the second verb which is the object of the first, in such case the verb is intransitive:
	Compare: This medicine will make your health improve/ ha:za d-dawa:' sa-yaj3al-u s*i7at-a-ka tata7assan. (Here the second verb is intransitive).
	Compare: This medicine will make you improve your health / ha:za d-dawa:' sa-yaj3al-u-ka tu7assin s*i7at-a-ka. (Here the second verb is transitive).
Variances	In Arabic some inchoative verbs like ja3al-a tends to in the past form when they enter in a serial-verb construction: ja3al-a yafta7-u l-abwa:b. On the other hand, some verbs in English can enter in serial-verb formation in the future/present form not the past: Compare: I will come see you tomorrow and *He came see me.

	Compare: 'ata: yarã:ni:/ sawf-a ya'ti: yarani: (li-yarani:) 8ad-an.
	In Arabic with some specific verbs like ja:'a, etc., tend to take the past form unless attached to some jussive, accusative, or a future-tense operator: ja:'-a yabki (he came weeping), sa-yaji:'-u yabki (He will come weeping); lam yaji' yabki
	In English the verb-tense does not change by polarity, while in Arabic with some operators the verb-tense changes to the present:
	Compare: I didn't see him open the door/ lam 'arã:h-u yafta7-u l-ba:b. (Yet it can be both in the past and the present with ma:: ma: rã'ayt-u-hu ('ara:hu) yaafta7 l-ba:b.
	In English, The PRO of some verbs (like make, for example) occupying the first verbal clause cannot be implicit, while other verbs (like help, for example) allow for both cases: implicit and explicit PRO. In Arabic, the PRO is always implicit unless made explicit in the surface structure by apposition for the sake of emphasis.
	In some marked cases in Arabic, the PROs of the two serial verbs are not co-referential

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