A Syntax of Verbs From a Nominal Point of View

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0. Introduction

The purpose of this paper is to show that the 'standard' structure of the verb phrase (VP) for Germanic and Romance languages in current syntactic theory cannot account adequately for some empirical facts of Standard Arabic (SA), especially the nature of the morphological complexity of verbs and the adjectival manner modification construction.[1] The standard VP-structure of transitive verbs within the Principle-and-Parameters framework (cf. Chomsky 1991, 1993) is presented in (1).

(1) $[_{VP}$ DP$_{SPECifier}$ $[_{V'}$ V^{o} $[$ DP$_{COMPLement}$ $]]]$

Within structure (1), the distinction between external and internal arguments plays a dominant role in current syntactic theorizing. To adequately capture some empirical facts of SA (and English), I will argue that the internal argument of transitive (action) sentences, the so-called direct object, is in fact a complement of a zero-*nominal* head rather than a zero-verbal one, contrary to the configuration posited in (1). The enrichment of the complement relation within the VP-structure that I will defend is meant (a) to find a syntactic implementation of the (Davidsonian) insight that action sentences (in English) are Existentially Quantified sentences within the syntactic structure of the sentence and (b) to reflect the projection of Event(uality) Structure of verbs in syntactic structure.

More specifically, following the spirit of much work on the VP-structure of languages such as English and Dutch (e.g., Larson 1988, 1990 and Mulder 1992, among others), I will propose an analysis of the VP-structure of (dynamic) verbs which introduces a more articulated structure. I will defend a noun incorporation-analysis of verbs in SA.

1. Motivating the decomposition of verbs

The most salient difference between Semitic languages such as SA and Germanic

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languages such as English and Dutch with respect to the morphology of verbs is that the roots of verbs in the former, unlike the latter, never appear autonomously, and this is due to the fact that the constitution of roots of verbs in Semitic languages is purely of (tri-)consonantal nature. The immediate consequence of this difference is that the morphology of Semitic languages, unlike that of Germanic languages, is basically non-concatenative. A decomposition-based analysis of verbs in SA seems to be partly justified on the grounds that in the morphological patterns ('?al?abniya') of SA both vowels and consonants make distinct contributions to the meaning of the whole complex. Consider for example the sentences in (2), where all the main verbs have the skeleton /ʕ-l-m/ in common with each other, and with the corresponding noun ʕ*ilm* 'science/knowledge':

(2) a ʕ**alim-a**   ʕaliyy-**un**   l-xabar-**a**
        got-knowledge-3MS   -Nom   the-news item-Acc
        'Ali knew the news item.'

   b ʕ**ulim-a**   l-xabar-**u**
        was-PASS-known-3MS   the-news item
        'The news item was/got known.'

   c ʕ**all**a**m-a** Zayd-**un**   ʕaliyy-**an**   l-fann-**a**
        taught-3MS   -Nom   -Acc   the-art-Acc
        'Zayd taught Ali art.'

   d taʕ**allam-a** ʕaliyy-**un**   l-fann-**a**
        learned-3MS Ali -Nom   the-art-Acc
        'Ali learned art.'

   e ?a-ʕ**lam-a**   Zayd-**un**   ʕaliyy-**an**   ?anna-hu sa-ya-thhab-u
        CAUS-knew-3MS -Nom Ali -Acc that-him   will-leave-3MS
        'Zayd informed Ali that he will leave.'

As the glosses indicate, SA seems to grammatically encode tense/aspect, inchoativization, and causativization through vowel and consonant *affixation* to the core nominal roots. In (2a), the complex ʕ*alim* consists of (at least) the triconsonantal root /ʕ*LM* / and a set of vowels functioning as predicates over the nominal root, namely possession, and perfective past. That vowel melody in SA corresponds to free verbal morphemes in other languages such as English is clearly demonstrated in the verbal passive sentence (2b). The counterpart of the English verbs *teach* and *inform* in SA is realized in causative form, (2c) instantiating the gemination of the second consonant strategy and (2e) the prefixation of the glottal stop one. Interestingly enough, the inchoative counterpart of the causative in (2d) displays an overt morpheme *t* - which is prefixed to the causative complex ʕ*allam*. These concrete surface complexes are obtained via the amalgamation of the stranded heads through the application of successive cyclic movement of the nominal triconsonantal root.

   The second argument for the postulation of more structure in the VP-structure

is the desire to find a syntactic home for the insight that action sentences involve
implicit quantification over events. Davidson (1967: 107,1980: 166-167) suggests
to provide each verb of action or change with an event-place in the logical form
of English action sentences in order to capture the logic of adverbial modifiers.
Under Davidson's proposal that adverbials are predicates of the event argument of
the verb, the fact that (3) entails (4) and (5) is easily captured by representing the
logical forms of these sentences as (6), (7), and (8), respectively.

(3)   Zayd hit the donkey strongly with a stick.
(4)   Zayd hit the donkey.
(5)   Zayd hit the donkey with a stick.
(6)   (Ee)[hit (Zayd, the donkey,e) & strong(e) & with (e, a stick)]
(7)   (Ee) (hit (Zayd, the donkey,e))
        ('There was an event e such that e is a hitting of the donkey by Zayd.')
(8)   (Ee)[hit (Zayd, the donkey,e) & with (e, a stick)]

Davidson, however, does not provide a syntactic source for the presence of
(implicit) quantification in action sentences. To my knowledge, Chomskyan
generative syntacticians have never tried to project the Davidsonian event variable
as a *nominal* maximal projection in the syntactic structure of the sentence. Pollock
(1989), for example, argues that the verbal trace in the head-chain at LF provides
the event variable for the temporal operator Tense so that a violation of the ban
on vacuous quantification would not ensue. The immediate consequence of
Pollock's (1989) manoeuvre is that (syntactic) variables can be both of verbal and
nominal nature, thus introducing a disjunction in the potential objects that
constitute a variable. If we, however, adopt the assumption that variables in
natural language are nominal in nature on conceptual and empirical grounds, we
need to find a nominal argument position in the VP-structure of the verb. Our
strategy of decomposing action verbs such as *Darab* 'hit' into two lexical
predicates allows us to substantiate the claim that *Darab* is in fact a three-place
predicate rather than two-place one. Moreover, if we assume that the head-chain
at LF is in fact *nominal* rather than verbal by virtue of the fact that the nominal
features of the foot of the chain percolates up, we can ascribe a variable status to
the nominal head that has to be bound by the temporal operator encoded in Tns to
prevent a violation of the ban on vacuous quantification.

   The third argument for the decomposition of (at least dynamic) transitive verbs
comes from the fact that we can naturally account for the syntactic projection of
manner adverbs of the kind adjective+*ly* in English. If we decompose transitive
verbs such *cut* and *package* into two heads, one corresponding to an abstract
activity verb (i.e. DO/ACT), the other to a resultative noun, we can provide two
possible adjunction/modification sites, either the constituent that denotes the
activity/process subevent (i.e. VP), or the constituent that denotes the resulting
stative subevent (i.e. NP). Angelika Kratzer (p.c.) has suggested to me that the

adverbs in (9) are modifiers of the result of the activity rather than the activity itself.

(9) a Jan cut the union *coarsely*.
        (cf. The cutting of the onion by Jan was coarse.)
     b Jan packed the parcel *nicely*.
        (cf. The packing of the parcel by Jan was nice.)

In (9a), the adverb *coarsely* modifies the result of a cutting of the onion by Jan; in (9b), the adverb *nicely* modifies the result of the action in which there was an activity of packing of the parcel by Jan and the result of that activity was nice. If this observation is correct, the internal event structure of dynamic verbs of Pustejovsky (1991), given in (15) below, is rightly mirrored in the syntax, because the suffix *-ly* could be taken as the counterpart of the SA reduplicated noun that heads the result noun phrase and the adjective *coarse /nice* is Chomsky-adjoined directly to the result NP complement of the activity verb at the underlying structure, as (12) and (19) below illustrate. Note that manner adverbs do not always characterize the result of the activity described by the verb as in (9a-b). Often, they do predicate something of the activity described by the verb, as expected under a Davidsonian analysis. This is shown in (10a-b):

(10) a Jan chopped the onions *carefully*.
      b Jan packed the parcel *slowly*.

2. *The NOVH and the supporting evidence*

2.1. The VP Structure in SA: the NOVH. In this subsection, I will consider the claim that the VP-structure of transitive dynamic verbs such as the SA verb *Darab* ('hit') requires the NOVH. I propose that the VP-structure of *Darab* in (11) must (minimally) look like (12).

(11)   Darab-**a**   Zayd-**un**   l-Himaar-**a**
         hit-PST-3MS   -Nom the-donkey-Acc
         'Zayd did a hit of the donkey / hit the donkey.'

(12) $[_{VP}$ DP$_{ext}$ (Subj) $[_{V'}$ V° (=DO) $[_{NPint1}$ $[_{N'}$ N° (=resultative) $[DP_{int2}$ (Obj)$]]]]]$

I take the head V° to represent an (abstract) activity verb selecting two arguments, the initiator DP$_{ext}$ subject *Zayd* being projected into the syntax as an external argument, and the resulting stative subeventual complement NP$_{int1}$ which is an internal argument of V°. The head N° of the NP$_{int1}$ complement selects one argument, the DP$_{int2}$ complement *l-Himaar-a* 'the donkey' which delimits/

measures out the hitting event performed by Zayd, and is projected as the COMPL of N^o. The head V^o enters into a selection relation with the head of its complement NP, which is filled with the eventive *nominal* root /Drb /. The concrete surface verbal complex *Darab* is obtained via the amalgamation of the zero-level heads through the application of successive-cyclic movement of the eventive triconsonantal root originating as the head of the NP_{int1} complement. Thus, sentences such as (11) roughly mean that Zayd performs an activity that brings about the resulting state in which the donkey is hit in the past.[2]

One crucial point of our proposal concerns the fact that the so-called direct object is projected as the complement of N^o rather than its specifier. The main reason has to do with the fact that overt epistemic verbs such as *¿alm* 'know' originate from nouns that select a CP argument and CPs normally do not occupy the external argument position of lexical categories. This is illustrated in (13).

(13) $[_{VP} DP_{ext} [_{V'} V^o (=HAVE) [_{NPint1} [_{N'} N^o [_{CPint2} that$ S]]]]]

As indicated (implicitly) in (13), I take epistemic verb construction to be a sort of inalienable possession verb construction underlyingly. The VP is headed by an abstract possessive verb which selects two arguments, the possessor/experiencer subject being projected into the syntax as an external argument and the possessed mental state denoted by the NP_{int1} complement as an internal argument. The head of NP_{int1} selects a CPint2 as a complement, which identifies the content of the mental state denoted by the nominal head. Moreover, the plausibility of the assumption that the direct object is projected into a complement position rather than a Spec position comes from the fact that the so-called small clauses selected by perceptual verbs, exemplified in (14), cannot occupy the external position of the perceptual N^o, since they are clausal constituents of the category AgrP (see Khalaily 1992).

(14)   ra?a-a   Zayd-**un**   [$_{SC}$ ¿aliyy-**an**   **ya-¿bur-u**   sh-shaari¿-a]
         saw-3MS   -Nom   -Acc 3MS-cross-3MS the-street-Acc
         'Zays saw [$_{SC}$ Ali cross the street].'

The internal structure of the NP_{int1} complement of V^o constitutes neither a problem for Case theory nor for the Projection Principle and the Theta-Criterion of Chomsky (1981).

If we assume, following Baker (1988), that a NP whose head noun is incorporated does not need to receive Case, the NP_{int1} complement can pass the

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[2] There is one point of our proposal that I will not provide full justification for, and that is the fact that the complement of the head V^o is not a determiner phrase (DP) whose head D^o filled with an overt element, because such state of affairs would block both head movement of N^o across a filled D^o and XP- movement of DP_{int2} outside a DP complement of V^o.

Case Filter through head incorporation into the verb. Moreover, under the assumption that Structural Case is licensed exclusively through Spec-Head agreement of functional projections, we are forced to allow the complement DP_{int2} to move into the Spec of Agr_o to check/ receive its Objective Case.

As far as the Projection Principle and the Theta-Criterion are concerned, the postulation of two internal complements is not problematic, since the decomposition of the complex *Darab* into two lexical heads, one verbal the other nominal, guarantees the satisfaction of the Projection Principle, which requires that the theta (or lexical) structure of lexical items be directly mapped into phrase structure at each level: D-structure, S-structure, and LF. The presence of the nominal trace after noun incorporation preserves the lexical property of V^o and the presence of the DP_{int2} the selectional property of N^o.

The VP-structure in (12) clearly has advantages over the one in (1). It encodes the event structure of accomplishment in almost a transparent way. The assumption that all accomplishments are semantically analyzed as involving two subevents, an initial dynamic subevent and a resulting stative subevent (cf. Pustejovsky 1991), as shown in (15), is mirrored in (12).

(15)   Event = Activity & (Change of) State

The activity subevent corresponds to the verbal component of (12) and the nominal one to the resulting stative subevent. Our VP-structure also captures the fact that the activity denoted by the abstract V^o $_{DO}$ is logically prior to the stative resulting subevent denoted by the NP_{int1} complement. The head V^o selects the head of NP_{int1} complement and not vice versa. The decomposition of the verb allows us to project the obligatory arguments aspectually: the initiator argument of the complex event in (11) is aspectually more prominent than the object argument of the resulting state by virtue of the fact that the former belongs to the *first* subevent and the latter to the *second* one.

2.2. Evidence From Manner Adjectival Modification. One piece of evidence for the incorporation of the nominal root into the selecting V^o in (3) comes from the obligatory phonological realization of the incorporated noun in manner modification, as shown in (16).[3]

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[3] Interestingly enough, the obligatory phonological realization of the incorporated noun in manner modification also shows up in stative verbs, as exemplified in (i-ii).
(i) ?aHabb-**a**   Zayd-**un**   Yasmin-**a**   Hubb-**an**   ¿uthriyy-**an**
      loved-3MS   -Nom   -Acc LOVE-Acc pure   -Acc
      'Zayd loved Yasmin platonicly.'
(ii) kariH-**a**   Zayd-**un**   Yasmin-**a**   kurH-**an**   shadiid-**an**
      hated-3MS   -Nom   -Acc HATE-Acc strong-Acc

(16) a Darab-**a**   Zayd-**un**   l-Himmar-**a**   *(Darb-**an**)qawiyy-**an**
      hit-PST-3MS   -Nom the-donkey-Acc   HIT-Acc   strong-Acc
      'Zayd gave the donkey a strong hit/ hit the donkey strongly.'

   b *Darab-**a**   Zayd-**un**   l-Himmar-**a**   Rafs-**an** qawiyy-**an**
      hit-PST-3MS   -Nom the-donkey-Acc   Kick-Acc strong-Acc
      'Zayd <u>hit</u> the donkey a strong <u>kick</u>.'

The remarkable fact about (16) is that the event modification of the action denoted by the complex word *Darab* is *adjectival* rather than adverbial.The presence of the adjectival modifier *qawiyyan* 'strong' in the sentence necessitates the obligatory realization of the eventive noun *Darban* 'HIT'. Adjectival modification of nouns in both English and SA requires the overt presence of the noun, as demonstrated in (17).

(17) *(?al-rajul) l-mariiD
     the-man   the-sick
     'The sick *(man)'

The first thing to notice about (16) is that the hypothesis that word formation may take place in a presyntactic morphological component as an alternative to the syntax of noun incorporation (NI) *à la* Baker (1988) cannot be maintained. To demonstrate this, let us assume for the sake of argument that the VP of the complex word *Darab* at D-structure looks like the configuration in (18).

(18) $[_{VP}$ *Zayd* $[_{V'}$ $[_V$ N° + V° =*Darab* $[_{DPint}$ *l -Himaar* $]]]]$

If we take (18) to be the correct VP-structure of the relevant part of (16), it does not seem to be possible to account for the fact that adjectival modification in SA requires the overt realization of the eventive noun *Darb* 'HIT' in the sentence. We cannot establish a relation between the nominal subpart of the higher V° and the reduplicated noun in (16) because of opaqueness of words. Moreover, if adjunction is a syntactic process rather than a lexical one, it is not clear how the presyntactic approach to word formation would predict the reduplication of the noun in adjectival modification. This fact remains a mystery under this approach.

    The syntactic head-to-head movement offers a more promising alternative, however. A way to capture the fact about adjectival modification is to argue that the incorporated eventive N° *Darb* leaves a **copy** in its base position as in Chomsky's (1993) theory of XP-(= maximal projection) movement, as a last resort to get to a well-formed structure for adjectival modification.[4] The AgrsP-

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    'Zayd hated Yasmin strongly.'
  Thus, the NOVH should carry over to stative verbs, as well.
[4] I believe that we can attribute the appearance of cognate objects in English only when modified,

structure of (16) at S-Structure is given in (19).

(19) $[_{\text{AgrsP}}$ *Daraba* $_j$ $[_{\text{TnsP}}$ *Zayd* $_1$-**un** $[_{\text{Tns'}}$ t''' $_j$ $[_{\text{AgroP}}$ *l-Himaar* $_k$ -**a** $[_{\text{Agro'}}$ t'' $_j$
$[_{\text{VP}}$ t$_1$ $[_{\text{v'}}$ t'$_j$ $[_{\text{NP}}$ $[_{\text{NPint1}}$ N^{0}=*Darb* $_j$-**an** $[_{\text{DPint2}}$ t$_k$] $[_{\text{AP}}$ *qawiyy* -**an**]]]]]]]]]]]

The thematic subject *Zayd-un* and the so-called direct object *l-Himaar-a* target their designated positions, the SpecTnsP and SpecAgr$_o$P, respectively, for Case-assignment/checking. A crucial argument in favour of the claim that DP$_{int2}$ must move into the SpecAgr$_o$ at S-Structure comes from strings such as (20).

(20)   *Darab-a   Zayd-**un**   Darb-**an**   qawiyy-**an**   l-Himaar-**a**
hit-PST-3MS   -Nom   hitting-Acc   strong-Acc   the-donkey-Acc
'Zayd did the donkey a strong hit/ hit the donkey strongly.'

Under our analysis of (16), the ungrammaticality of (20) is predicted: The complement of N^{o}, *l-Himaar-a* remains in situ, resulting in a violation of the Case Filter. To rule the string in (20) in, the complement of N^{o} must target an accusative Case-position to recieve/ check its Case. If we assume, following Chomsky (1993), that Structural Case is checked under Spec-head agreement, DP$_{int2}$ must raise into the SpecAgr$_o$. What is more interesting is the fact that even if we assume that the DP$_{int2}$ *l-Himaar* in (20) occupies the SpecAgr$_o$P-position, the adjunction position for manner adjectives in SA cannot be higher than the constituent that denote the resulting stative subevent (i.e. the NP$_{int1}$), and hence the copy of the incorporated noun which occupies the foot of the head chain shoud remain adjacent (at PF) to the adjective, cf. (21):

(21) a   *Darab-**a**   Zayd-**un**   Darb-**an**   l-Himaar-**a**   qawiyy-**an**
hit-PST-3MS   -Nom   HIT-Acc   the-donkey-Acc strong-Acc
'Zayd did the donkey a strong hit/ hit the donkey strongly.'
     b   *Darab-**a**   Zayd-**un**   qawiyy-**an**   l-Himaar-**a**   Darb--**an**
hit-PST-3MS   -Nom   strong-Acc   the-donkey-Acc HIT-Acc

That the SpecVP, *Zayd-**un**,* also needs to move to its designated Case-position to receive/check its Case in the SpecTnsP-position is evident from strings such as (22).

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as exemplified in (i-iii), to the   fact that a well-formed structure for adjectival modification is satisfied.
(i)   Zayd died *(a gruesome) death.
(ii)   Zayd died (* a gruesome).
(iii)   *Zayd died a death.
Therefore, the modification of the complement reation in (11) should carry over to English, as well.

(22)   *Darab-a   l-Himaar-**a**   Zayd-**un**   Darb-**an** qawiyy-**an**
        hit-PST-3MS   the-donkey-Acc   -Nom   HIT-Acc strong-Acc
        'Zayd did the donkey a strong hit/ hit the donkey strongly.'

The thematic subject in (22) has not moved to its designated Case-position, the SpecTnsP, resulting in a violation of the Case Filter (cf. also Khalaily 1994).

A further correct prediction that our proposed account of (16) makes is that when the modification of the event denoted by the complex *Darab* is encoded via a prepositional phrase (PP) rather than an AP, the NI of the eventive noun does not leave a copy, as shown in (23b).

(23) a   Darab-**a**   Zayd-**un**   l-Himaar-**a**   [$_{PP}$ **bi**   qiwwat-**in**]
         hit-PST-3MS   -Nom the-donkey-Acc   with strength-Gen
         'Zayd did the donkey a hit with strength / hit the donkey strongly.'
     b   *Darab-**a**   Zayd-**un**   l-Himaar-**a**   Darb-**an** **bi**   qiwwat-**in**
         hit-PST-3MS   -Nom the-donkey-Acc HIT-Acc   with strength-Gen
         'Zayd hit the donkey with strength.'

The Palestinian Arabic data in (24) seem to suggest that languages show variation with respect to the question whether or not adjectival modification require the overt lexicalization of the modifiee.

(24)   Ziid Darab   l-Hmaar   (**Darb**) ?awi
        hit-3MS   the-donkey HIT   strong
        'Ziid hit the donkey strongly.'

Our proposed account of the adjectival modification in (16) is further confirmed by the fact that the morphological case that appears on both the eventive noun and the adjective is the accusative one. This fact suggests that the activity verb $V°$ is endowed with the capicity of assingning inherent case to its thematic NP_{int} complement. The morphological case on the adjective can be accounted for if we assume that the case features that the NP receive percolates down to its head and the AP adjoined to it.

If our account of the derivation of dynamic verbs with respect to adjectival modification is correct, we predict other languages to show similar phenomena. The English light verb construction provides further evidence for our proposal.

2.3. Evidence from light verb construction in English.   Before we get into the light verb construction in English, I want to show that our proposal predicts manner adjectival construction in SA to exhibit the definiteness effect (DE), on a par with the DE that shows up in existentials, as shown in (26).

(26) a *Darab-**a** Zayd-**un** l-Himaar-**a** **D**-Darb-**a/** **kull-i**   Darb-**i**
         hit-PST-3MS -Nom   -Acc the-HIT-Acc every-Gen   HIT-Gen
         '*Zayd did the hit/every hit of the donkey.'
     b *There is the man/every man in the garden.

When the eventive noun gets lexicalized, it cannot be closed off by the strong determiner *?al 'the'* or the quantifier *kull* 'every'. The DE shown in (26a) can be explained as follows: first, we can argue that the presence of the D^o/Quantifier necessarily blocks the incorporation of the eventive noun *Darb* into the (abstract) V^o-position, thus giving rise to no copy because the head incorporation of *Darab* could not go through. Secondly, even if *Darab* were incorporated into the activity verb DO, the fact that eventive noun cannot be closed off by a strong determiner can be attributed to a violation against the ban on vacuous quantification: if we assume that Tns is some kind of temporal operator at LF, the closure of the variable that is encoded by (the trace of) the eventive noun by the strong D/Q which function at LF as (nontemporal) operator brings about a situation in which the Tns operator quantifies vacuously, hence the ungrammaticality of (26a). Remarkably enough, light verb constructions in English exhibit the DE as well:

(27) a Zayd gave Mary **a** (nice) kiss.
     b *Zayd gave Mary **the/every** (nice) kiss.

If we interpret (27a) as (28), our explanation of the DE in (26) carries over to the one in (27b).

(28)   Zayd kissed Mary (nicely).

Moreover, it forces us to choose the second explanation over the first one. The main reason for choosing the second account of the DE is due to the fact that the activity verb V^o can be spelled out by a 'light' verb at S-Structure, and hence no incorporation of the eventive head of the NP_{intl} complement is necessary. I propose (29) as S-Structure for the relevant part of the Agr_sP-structure of (27a).

(29) $[_{AgrsP}..gave_i..[_{AgrO-P} Mary_j..[_{VP}..t_i [_{NumP} a [_{NP} nice[_{NP} kiss[_{DP} t_j]]]]]]]$

Since the event denoted by the main predicate in fact derives from the eventive noun *kiss*, the latter has to move at LF to substitute the light verb. If this senario is correct, we need to postulate that the eventive noun is specified for the feature [+activity] as a result of entering a head-to-head selection with the abstract V^o that is lexicalized at S-Structure by GIVE, and this feature needs to be checked off for **Feature-compatibility** with the activity verb at LF. Another way to motivate the movement of the head of NP complement is Case theory. Since the NP complement needs to be Case-licensed, the only way that is available for it is

head incorporation into the selecting V^o at LF. Surprisingly enough, light verb construction provides an argument for the presence of the direct object in the SpecAgr$_o$P-position at S-structure (or before SPELL OUT) in English, because if the DP$_{int2}$ complement *Mary* remains in situ, i.e. does not move into the SpecAgr$_o$P-position, the string would be ungrammatical (cf. *Zayd gave a nice kiss Mary).

2.4. Evidence from verbal passive construction. The last argument in favour of the VP-structure in (12) comes from the fact that the modified eventive noun can undergo passivization (or A-movement), as shown in (31).

(30) a Durib-**a**   Darb-**un**   qawiyy-**un**
        hit-PASS-3MS HIT-Nom   strong-Nom
        'There was hit a strong hitting.'
    b *Durib-**a**   Rafs-**un**   qawiyy-**un**
        hit-PASS-3MS HIT-Nom   strong-Nom
        'There was <u>hit</u> a strong <u>kick/kicking</u>.'

Without going into the details of the derivation of verbal passives in SA, it is a remarkable fact that the modified eventive noun can occupy the Nominative Case-position in postverbal position like any ordinary subject, SA being a VSO language. This fact supports our proposal that the complement relation within the lexical VP must contain a complement position for the eventive noun, because it may target the Nominative Structural Case-position when there is no other argument available. This fact presumably has to do with the Extended Projection Principle which requires sentences have subjects.

3. Conclusion

To conclude, I believe I have shown that a NI-analysis of the syntax of verbs in SA can at least account for the adjectival modification of the syntactic correlate (or origin) of the Davidsonian event argument in (16). The null hypothesis is that the NOVH should be universal, if our analysis is correct. One of the theoretical implications of the NOVH is that lexical verbs are not specified in the lexicon, but rather derived by a Bakerian theory of syntactic noun incorporation. The second implication is that the process involved in the derivation of denominal verb formation and unergatives in Hale and Keyser (1993: 53) should be purely *syntactic* rather than 'almost certainly *lexical*'. Given the fact that noun incorporation is necessary for the event-interpretation of action sentences, it provides an empirical argument for the existence of LF, since LF is considered to be the input for semantic interpretation within the P&P-model and LF is necessary

for interpreting light verb and cognate object constructions. Surprisingly enough, our proposal agrees rather well with the observations and intuitions of the traditional grammarians, namely, that verbs are derived from nouns and that the cognate object is the 'real' object (cf. Sibawayhi ed. 1970).

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