A LOCALLY DETERMINED VERB TYPOLOGY[*]

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We propose to derive typological transgressions among transitive, unergative and unaccusative verbs from the interaction between semantic properties and syntactic structure. More specifically, variation in transitivity follows from the way syntax computes the relation between verb and complement, while the semantic and the syntactic properties of the verb are constant. We capitalize on the fact that there are two ways in which selectional features in the verb-complement relation may pass the checking operation: either by virtue of their semantic similarity (s-selection), or by matching the categorial features of the complement against the formal (grammatical) features of the verb (c-selection). The dichotomy between s- and c-selection allows us to reduce the traditional transitivity typology to a syntactic constraint on the complement. That is, computation of the complement by s-selection only (unergatives), by c-selection only (unaccusatives) or by both s- and c-selection (transitives). This distinction accounts for the empirical observation that verbs may transgress their typological groups, and that the transgression takes place only in certain directions.

1. INTRODUCTION

This paper focuses on the typology of transitivization in verbs (i.e., transitive *versus* intransitive), which, in generative grammar (since Burzio 1986), amounts to a classification in three groups: (*i*) transitive (e.g., *buy/eat something*), (*ii*) unergative (e.g., *sleep, smile*); and (*iii*) unaccusative (e.g., *arrive, leave*).[1] The specific issue we discuss concerns the cross-linguistic property of verbs to transgress their group, and the fact that this transgression occurs between the transitive and the intransitive groups, but not in-between the intransitive groups (i.e., unergatives cannot become unaccusative and vice-versa).

[1] The binary typology in traditional grammar became a tertiary typology in generative grammar because the latter factored in the materialization of Case, besides the ways in which thematic roles are grammaticalized. Thus, transitives have both subjects (Nominative) and objects (Accusative), unergatives have only subjects (Nominative), unaccusative have only objects which take the subject Case (Nominative).

The analysis we propose, couched in the framework of the Minimalist Program, derives the typological transgression from the interaction between semantic properties and syntactic structure. The semantics-syntax interface has been much explored in the literature, and, in general, analyses rely on intrinsic "differences". That is, either the verb semantics is different (e.g., *eat* has two lexical entries, one transitive and one intransitive), or the syntactic configuration projected by the verb is different (e.g., *eat* may project two configurations: one can license a complement, the other one cannot).

The analysis proposed here takes the opposite approach, that is, "uniformity" of semantic and syntactic properties. More precisely, variation in transitivity follows from the way syntax computes the relation between verb and complement, while the semantic and the syntactic properties of the verb are constant. For example, *eat* has one (*versus* two) lexical entries, and its syntactic behavior is constant, insofar as it merges at the root with a complement (as in Roberge 2002) in both transitive and intransitive structures.

The core assumption in the Minimalist Program is that any syntactic merge (including verb-complement) is triggered by uninterpretable selectional features, which must be checked before the syntax forwards the derivation to the interpretive system. We capitalize on the fact that there are two ways in which selectional features in the verb-complement relation may pass the checking operation: either by virtue of their semantic similarity (s-selection), or by matching the categorial features of the complement against the formal (grammatical) features of the verb (c-selection).

The dichotomy between s- and c-selection allows us to reduce the traditional transitivity typology to a syntactic constraint on the complement. That is, computation of the complement by s-selection only (unergatives), by c-selection only (unaccusatives) or by both s- and c-selection (transitives). This distinction accounts for the empirical observation that verbs may transgress their typological groups, and that the transgression takes place only in certain directions. That is, unergatives and unaccusatives cannot "trade places", because their selectional features undergo diametrically opposed checking operations (i.e., s- *versus* c-selection). On the other hand, transitives are compatible with both operations, therefore, they allow for transgression to/from either group of intransitives.[2]

2. THEORY versus EMPIRICAL OBSERVATIONS

Understanding the typological transgressions of verbs means understanding the ontology of *transitivity* and how this concept interacts with the *verbal* property of a lexical item. This section provides a survey of the relevant theoretical discussion on these issues.

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[2] Acquisition facts from English show that unaccusatives are sometimes used as transitives: e.g., *climb me upstairs*.

2.1. Determining transitivity

Approaches to the "locus" of transitivity specifications in grammar are divided in two general camps: lexical and syntactic.

The first camp assumes that transitivity is lexical in nature. A verb is thus intrinsically specified as transitive, unergative or unaccusative in the lexicon. In order to handle transgressions or alternations, lexical approaches can use a variety of mechanisms:

- Lexical rules that allow a transitive verb to be used intransitively. An example of such rule saturates in the lexicon (prior to syntax) the thematic role that would normally be assigned to the direct object (Rizzi 1986).
- Different lexical entries for verbs that exhibit variable behavior. For a verb such as *eat*, there would be two entries, one for the transitive use (i.e., 'ingest food'), and another for the intransitive use (i.e., 'have a meal').
- Mapping rules that allow certain verbs to map to different argument structures. Thus, a verb may project a complement position or not, depending on the thematic roles it has to saturate in syntax.

Crucially, all lexical approaches are projectionist in that the syntactic representation of the argument structure of a verb is projected from lexical specification. Any variation in behavior must thus be handled prior to syntax. Lexical approaches also tend to rely more or less heavily on the lexical semantics of a verb in an attempt to derive the various uses in a less stipulative manner.

The second camp proposes to handle transitivity in syntax. According to one particular instantiation of this view, the array of arguments present in a syntactic structure is not determined by the verb (or other predicate) itself, but rather by the functional makeup of the clause or phrase. For instance, Borer (2004) proposes that a direct object is merged as the specifier of an eventive functional projection above the vP/VP in order to assign range to the open value found in the functional head. Thus, in keeping with a strictly minimalist approach, verbal complements exist for interpretive reasons. In fact, the semantics of the verb are not responsible for the presence or absence of the direct object.

How these two camps can handle transitivity transgressions is open to debate. The syntactic view generally predicts a high degree of freedom in transitivity. However, we are arguing here that empirical observations do not support a totally free approach to transitivity. On the other hand, a complete lexical approach to these transgressions cannot be more successful; there is a certain level of generality to these transgressions (generalizations can be established), and it is far from obvious that they should be treated in the lexicon as idiosyncratic phenomena.

2.2. Determining category status

While we do not believe that the "locus" of categorial determination is crucial to the work presented here, the parallelisms between this debate and the one

surrounding transitivity determination are striking, and may, thus, help resolve some issues. Again, there are currently two general syntax-oriented approaches:

- Baker (2003) argues that the category of a lexical item is determined by the local configuration of the expression.
- Marantz (1997) and Borer (2003) consider that the category of a lexical item is a function of the functional category that takes that expression as a complement.

In both approaches the category of a lexical item is ultimately determined by the syntactic configuration, not in the lexicon (except in some very specific cases). Basically, this general view (in both versions) renders obsolete a lexical approach to *verbal* transitivity, since it is only in the syntax that the *verbal* nature of a root would be fixed.
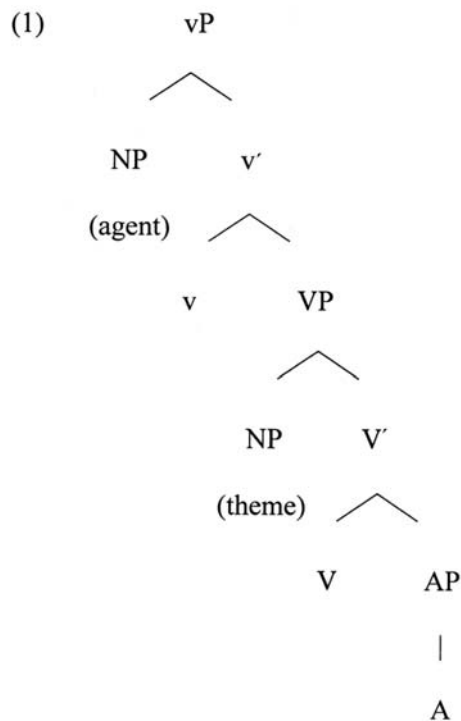
2.3. Syntactic transitivity

We adopt the view that transitivity determination is given by the local configuration of the verb (i.e., the structure of the vP shell). In order to account for what appears to be the lexical component of transitivity determination (i.e., when a certain verb is unergative), this configuration must interact with the internal semantics of the verb. Certain current approaches are compatible with this view.

Various researchers independently suggest*, in passim* or in more developed accounts, that the complement position of V is an obligatory position in VP (although proposals vary in how radical they are in implementing this option). Hale and Keyser (1993, 2002) argue that unergatives have a transitive lexical relational structure universally. In their earlier work, they propose that conflation (or incorporation) of a cognate object to a light verb results in an unergative verb (e.g., 'dance {a dance}'). In their later work (Hale and Keyser 2002), they abandon the hypothesis that conflation is the lexical operation responsible for the representation associated with unergatives. Rather, they propose that the unergative verb enters into a relation with a null N complement (e.g., 'dance e_N'). This is a relation of classificatory licensing, whereby "the verb identifies the complement to some sufficient extent" (p. 92).

As pointed out by Dobrovie-Sorin (1998: 408), Hale and Keyser's representation is lexical in nature. In fact, she states that "this view of the lexical representation of unergatives does not oblige us, and perhaps does not even authorize us, to assume that the traces of the incorporated cognate objects are projected in the syntax." However, it is quite possible to reinterpret their representations as syntactic. Dobrovie-Sorin (1998: 408) actually states the necessity of this: "what we need is a theory of the representation of unergatives at S-structure rather than in the lexicon." To do so, she suggests that unergatives and transitives may both take a direct object optionally. Her approach, thus, consists in

unifying transitives and unergatives as verbs that can take direct objects (see also Pesetsky and Torrego 2004). Roberge (2002) goes a step beyond in forcing the presence of an object position with all verbs and claiming that transitivity transgressions are directly attributable to this requirement.[3]

For his part, Baker (2003) defends the view that a verb is a lexical category that takes a specifier. The general structure he adopts is given in (1).

(1)

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                    vP
                   /  \
                 NP    v′
              (agent)  / \
                      v   VP
                         /  \
                       NP    V′
                    (theme)  / \
                            V   AP
                                |
                                A
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Typically, A, V and v conflate into a surface verb. The determination of transitivity properties is almost entirely attributed to the nature of the verbal heads (v and V). The difference between a transitive or unergative verb and an unaccusative verb is that the latter is included in a structure with a non-th-marking v; there can, thus, be no agent. As for the distinction between transitives and unergatives, he tentatively suggests that V is non-th-marking in unergative VPs; there can, thus, be no theme. However, since the Spec position in VP (and vP) is necessary, Baker does not exclude the possibility that it be occupied by a silent cognate object *à la* Hale and Keyser in unergative vPs.

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[3] Note that these proposals naturally cover instances of merge at V root of NP, DP, CP, AP or other "complements" such as low ApplP.

2.4. Empirical problems

These theories do not seem to provide an adequate account for a series of empirical observations, which we shall explore on the basis of Romanian data. In particular, we focus on transitivization frames for unergatives (2a vs. b) and unaccusatives (3a vs. b), that we compare with regular transitive frames (4).

(2)   a.   Ion doarme.
           Ion sleeps / 'Ion is sleeping.'
       b.   Ion își doarme nopțile prin vecini.
           Ion REFL sleeps nights-the among neighbours
           'Ion is sleeping around.'
(3)   a.   Maria a ajuns acasă.
           Maria has arrived home
       b.   Maria l-a ajuns din urmă.
           Maria him has arrived from behind
           'Maria has caught up with him.'
(4)   Maria (și)-a vopsit casa.
           Maria REFL has painted the house
           'Maria has painted the/her house.'

The comparison between structures as in (2), (3), (4) points to a series of empirical contrasts, as follows:

- asymmetric distribution of cognate objects, preferred by transitivized unergatives (5a), rare with transitive verbs (5b vs 5c), and ruled out by transitivized unaccusatives (5d):

(5)   a.   și-a trăit traiul; și-a vorbit vorba; a muncit muncă grea
           REFL-has lived life-the; REFL-has spoken word-the; has worked work hard
           'S/he has lived her life; has had his/her say; has gone through hard work'
       b.   *a   pictat pictura; *a   creat   creația; *a dăruit darul
            has painted painting-the; has created creation-the; has presented present-the
       c.   a   scris scrisoarea; a cântat cântecul
            has written letter-the; has sang song-the
       d.   *a coborât coborârea *vs*. ok a coborât scara
            has descended descent-the *vs*. has descended stairs-the
            *a sosit sosirea *vs*. ok l-a sosit (ceasul) pe Ion (DEX 1998)
            has arrived arrival *vs*. him has arrived the time pe-Ion

- asymmetry in the internal structure of the direct object nouns, which may or may not have articles with transitives (6a), disallow articles with transitivized unergatives (6b), and have obligatory articles with transitivized unaccusatives (6c).

(6)   a.   Cumpără casă/casa/case/casele.
           buys house/house-the/houses/houses-the

b. Vorbeşte prostii(*le)/ Plânge lacrimi(*le) amare.
speaks stupidities-the cries tears-the bitter
'S/he speaks non-sense.'/'Cries rivers.'

c. Coboară scara/*scară/scările/*scări.
descends stair-the/stair/stairs-the/stairs

- asymmetry in the type of constituents in complement position; that is, nouns may serve as direct objects in all three structures, but CP is possible with transitives (7a) and transitivized unaccusatives (7b), not with transitivized unergatives (7c).

(7) a. Spune că trebuie să mai plătim.
says that must SUBJ more pay-1PL
'S/he says that we must pay more.'

b. A ieşit că trebuie să mai plătim.
has come-out that must SUBJ more pay-1PL
'It came out that we must pay more.'

c. *Vorbeşte că trebuie să mai plătim.
speaks that must SUBJ more pay-1PL

These empirical observations prompt us to look for a new approach to transitivity.


3. THE STRUCTURE OF VP SHELL

In this section we present the standard structure of vP adopted in the Minimalist Program (Chomsky 2001). This configuration will serve as the structural framework for the investigation of selectional features.

In the current version of the Minimalist Program, a transitive verb merges with a complement at the root, and with a subject in the extended vP domain. The constituents compatible with the complement positions are DP, CP, or ApplP.[4] Thus, the constructions in (8) have the argument structure in (9).

(8) a. A scris un poem. DP-object
has written a poem

b. A scris că nu vine. CP-object
has written that not comes
'S/he wrote that s/he's not coming.'

c. Şi-a scris poemul din nou. ApplP-object
REFL has written poem-the of new
'S/he re-wrote her/his poem.'

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[4] We adopt the analysis of low Applicative Phrases (ApplP) from Cuervo (2003); that is, in a clause like *Mama i-a cusut Mariei bluza* 'Mother DAT has sawn Mary-DAT the blouse/Mother has sawn Mary's blouse', the constituent in direct object position has the structure: [$_{ApplP}$ Mariei [$_{Appl'}$ i [$_{DP}$ bluza]]]. For an investigation of Applicative Phrases in Romanian see Diaconescu (2004).

(9)   vP

Subject   v'

v   VP

V   DP/CP/ApplP
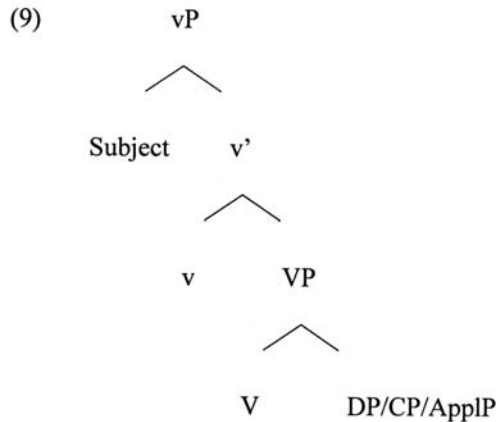
For Chomsky (2001) vPs are phases whose edge is closed by a cluster of features (i.e., EPP) that probe into the VP. One of these features is [specificity], which triggers direct objects with D-features to move to Spec,vP (above Spec,vP for subjects). Thus, probed direct objects are [+specific], and they either move to Spec,vP or Agree with it from their in-situ position; non-probed direct objects are [-specific], and they stay in-situ. How does the specificity probe work for Romanian?

In assessing the data, we rely on the following criteria:

(a) The free SV/VS word order allows a bare quantifier in subject position to be spelled-out in-situ, in Spec,vP;[5]

(b) Adverbs such as 'never' merge relatively low in the inflectional domain (Cinque 1999), but above Spec,vP for subjects;

(c) Bare quantifiers in subject position are incompatible with Topic-like positions (Cinque 1990), such as those involved in right dislocations. That is, in the VS order the bare quantifier cannot be lower than Spec,vP.

According to these criteria, the [specificity] probe must be situated between 'never' and the bare quantifier in Spec,vP for subjects. If the direct object checked for [specificity] moves, then it must be able to be spelled-out in between 'never' and the post-verbal subject. For transitive verbs, these conditions on direct object probing give the results in (10).

(10) a.   Nu serveşte niciodată (*?sarmale) nimeni (sarmale) în sos picant.
             not serves never cabbage-rolls nobody cabbage-rolls in sauce hot
             'Nobody serves cabbage rolls in a hot sauce.'
      b.   Nu serveşte niciodată (sarmalele) nimeni (sarmalele) în sos picant.
             not serves never cabbage rolls-the nobody cabbage rolls-the in sauce hot
             'Nobody serves the cabbage rolls in a hot sauce.'

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[5] That bare quantifiers in subject positions must stay in A *vs*. A' positions up to LF has been shown since Cinque (1990). For recent analyses of subject positions in Romanian we refer the reader to Alboiu (1999) and Hill (2002).

In (10) both [+/-specific] direct objects may appear immediately after the post-verbal subject, which we may assume to be the in-situ position. However, when movement to the vP phase edge position takes place (i.e., between 'never' and 'nobody'), only the definite direct object yields acceptable results. Thus, Romanian conforms to the predictions on specificity checking.

Having established the default structure of a transitive vP, and the conditions for specificity checking, we now turn to constructions with transitivized unergatives, to see how these conditions are met.

4. TRANSITIVIZATION OF UNERGATIVES

In this section, we point out a striking restriction on the specificity of direct objects with unergative verbs. First, we account for this restriction through the syntactic configuration that arises at the merge with unergative V roots; namely, a Spec,VP is not projected. Then, we justify the absence of Spec,VP through the options for checking the selectional features; that is, although selectional features may be checked either through c- or s-selection, unergative roots operate only with s-selection.

4.1. Empirical puzzles

If the argument structure in (9) is constant across verb types, and if we assume (Roberge 2002) that the complement position always merges at V root, then we do not expect to see restrictions on the type of constituents that fill the complement position. However, such restrictions are obvious for transitivized unergatives.

First, the examples in (6) point to the lack of articles on direct complement nouns, as further documented in (11a).

(11) a.   Munceşte (*o) muncă grea în mină.
            works   a   work   hard in mine
            'S/he doing hard work in the mine.'
      b.   Plânge (*nişte) lacrimi amare.
            cries INDEF tears bitter
            'S/he cries rivers.'

We may assume that some semantic reason forces a non-specific reading on the direct objects in (11a, b), but we cannot explain why such a reading must exclude the use of indefinite articles. An inactive specificity probe cannot be held responsible for such a restriction that discriminates against DPs, in favor of NPs in complement position. Thus, DPs in these frames appear only when a specific/referential reading is available, as in (12).

(12) a.   I-a muncit tare pe copii.
            them has worked hard pe-children
            'S/he made the children work hard.'

b.   Țara asta e de plâns.
        country this is of cried-SUPIN
        'This country is to be pitied.'

At the other extreme, ApplP direct objects must always carry definite articles and have a specific reading, as in (13).

(13) a.   Îşi munceşte copilul/*un copil.
            REFL works child-the/a child
            'S/he's making his/her child work.'
      b.   Îşi plânge anii pierduți/*ani pierduți cu el.
            REFL cries years-the lost/years lost with him
            'S/he's crying over the years spent with him.'

The interdiction on indefinite morphology and non-specific reading does not occur with regular transitive verbs, as shown in (14), and it is not expected under the argument structure in (9).

(14) Îşi vopseşte casa/o casă.
      REFL paints house-the/a house
      'S/he's painting the house/one of his/her houses.'

If we can understand these restrictions on the constituent structure in complement position, we can also understand the source of other contrasts noticed in section 2.4, namely, the variation in CP complementation and the distribution of cognate objects.

4.2. Proposal

Specificity effects, such as noticed in section 4.1, lead us to postulate a structural difference within the configuration in (9), consisting of the presence versus absence of a Spec position around VP, close to the complement site. This section defines this position as Spec,VP and derives it from licensing conditions on direct objects at the interface between lexicon and syntax.

4.2.1. *Structural distinction*

In order to understand the source of specificity contrasts in (11) to (14), we must consider again the basic structure of a transitive vP, as represented in (9), this time in light of the specificity variation allowed on direct objects, as in (10), repeated below.

(10) a.   Nu serveşte niciodată (*?sarmale) nimeni (sarmale) în sos picant.
            not serves never cabbage-rolls nobody cabbage-rolls in sauce hot
            'Nobody serves cabbage rolls in a hot sauce.'
      b.   Nu serveşte niciodată (sarmalele) nimeni (sarmalele) în sos picant.
            not serves never cabbage rolls-the nobody cabbage rolls-the in sauce hot
            'Nobody serves the cabbage rolls in a hot sauce.'

In (10), the direct object surfaces low when [-specific] (10a), but it may surface either high or low when [+specific] (10b). If both (10a) and (10b) rely on the representation of vP in (9), then the variation in the placement of the direct

object in (10b) has only one account: the direct object can be probed either in its in-situ complement position, through structural Agree, or through movement to Spec,vP. Movement is, therefore, optional.

However, the Minimalist Program, in which (9) is adopted, has strong objections to optionality of movement. That is, the grammar has only one parametric setting for the features of probes: they are either strong (and trigger movement) or weak (checked through Agree). If we want to reconcile the theory with the placement variation of direct objects seen in (10b), then we must assume that the probed direct object always moves. So the lowest setting of the [+specific] direct object in (10b) is not the same as the setting of the [-specific] direct object in (10a), but somewhere in between Spec,vP and the complement position. This observation confirms Baker's (2003) hypothesis that there is a Spec,VP associated with the theme theta-role. While preserving the obligatory merge at V root hypothesis (Roberge 2002), we integrate Baker's Spec,VP hypothesis in the basic configuration of vP shell, and obtain the representation in (15a) for a regular transitive frame.

(15) a. transitive vP shell
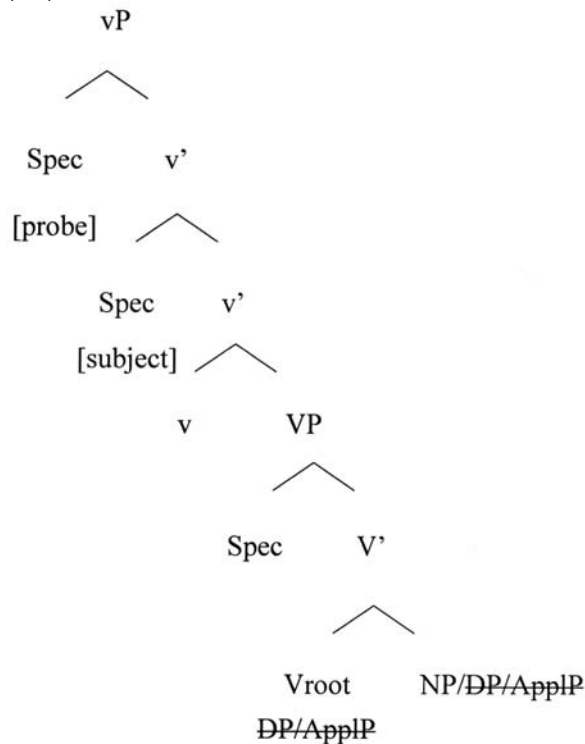
In (15a), probed DP always moves; unprobed DP stays in the complement position, or if it moves to Spec,VP, it is attracted for different reasons (to be determined) than [specificity] checking. Constituents probed for [specificity] may move to different degrees (i.e., Spec,VP or Spec,vP), depending on the interaction

with other probes (e.g., topic, focus) that belong to the 'low' information structure field at the vP edge (Belletti 2003). This analysis covers not only the placement of direct objects in (10), but also the alternation between [+] and [-specific] DPs in (14).

Having the more articulated structure of the vP shell in (15a) to work with, we can look back at the specificity restrictions in (11) to (13), and see what this structure can tell us about their distribution. Crucially, the obligatory specific reading on DP (12) and ApplP (13) is associated with some form of high movement; that is, clitic movement across vP (12a, 13), or high DP movement (11b). Non-specific reading, on the other hand, is associated with bare NPs, to the exclusion of indefinite DP (11, 13). This contrast indicates that direct objects either stay in situ, when unprobed for specificity, or move very high, when probed, and a more intermediary degree of movement (i.e., Spec,VP) is not available, as in (15b).
(15) b. unergative vP shell
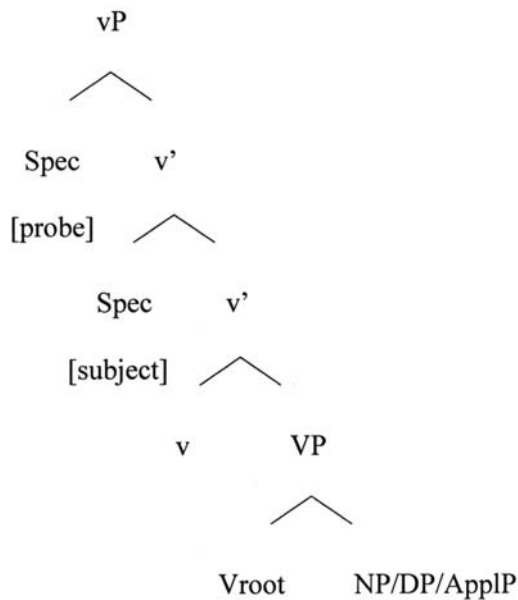
The structure in (15b) differs minimally from (15a) through the lack of a Spec,VP. Thus, the response to the specificity probe in (15b) yields more polarized effects than in (15a). In particular, the specificity probe is an intrinsic D feature probe (being part of the EPP cluster) that looks for constituents with both D and [specificity] features. Accordingly, it cannot probe NP or indefinite DP (unless the indefinite DP has its specificity ensured in some way). This did not seem to be a problem in regular transitive frames (e.g., 10a). Why is it a problem in the transitivized frames? In the next section, we relate this puzzle to the absence versus presence of Spec,VP.

4.2.2. *Deriving the structural distinction*

The background assumption in this section is that the complement position is the locus of semantic identification of direct objects (s-selection), while the Spec position is used by the direct object to establish grammatical linking (for functional identification) with the verbal root head (c-selection), as in (16).

(16)

VP

Spec   V'

c-selection Vroot   Compl
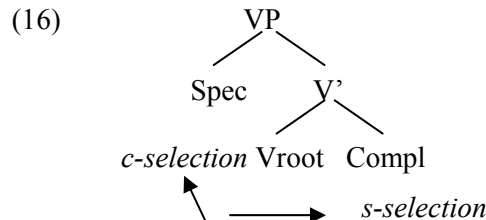
s-selection

In (16) s-selection ensures hyponymic identification, logically asymmetrical (with semantic transfer from V to complement), but structurally symmetrical (since V and the complement are in a sisterhood relation). C-selection, on the other hand, occurs independently of the semantic transfer at V root, and triggers structural asymmetry of the type Spec-head feature agreement, resulting in functional checking.

In terms of the transitivization requirement (i.e., obligatory merge at V root), s-selection on the pattern in (16) involves restrictions on the range of complements of V to nouns that qualify as hyponyms, and that lack a functional (D) domain. That is, these complements must be overt NPs that can act as cognate objects or that belong to the tight semantic field of V, or that serve as null counterpart of such nouns. Semantic identity between V and the direct object is sufficient to license these nouns as syntactic objects. Examples of such lexical licensing are present in both transitive and transitivized paradigms (e.g., *scrie scrisori* 'writes letters'; *şi-a trăit traiul* 'REFL.DAT-has lived life-the/She lived her life.') In these contexts, the nouns are licensed as syntactic objects at V root by virtue of semantic similarity. Further movement of such nouns is possible because of various triggers (e.g., presence of D features, focus, etc.) but not for licensing (i.e., not for theta-role and Case checking). Accordingly, in (15a) an s-selected DP or low ApplP move from complement position to Spec,VP because their D feature needs association with a functional domain, and/or because they may be probed for specificity. However, NP does not move. Along the same lines, s-selection in (15b) ensures licensing for NP, DP or low ApplP in the complement position. However, the functional features involved in these constituents (i.e., D features) must be checked through the association with the functional domain in a way that can dispense with movement to Spec,VP (which is absent). The specificity probe on DP and low ApplP ensures checking of the D feature together with the specificity checking. However, if [specificity] is absent on the direct object, the D feature cannot be checked against

the functional domain, and the DP is ruled out. This accounts for the ungrammaticality of DPs with indefinite articles in (11).

Considering that asymmetry is fundamental to language economy (Di Sciullo 1999, 2005), the symmetrical structure for the licensing of direct objects through s-selection alone, as in (15b), is computationally taxing and semantically restricting. Our hypothesis is that the semantic relation involved in s-selection can become grammaticalized and weak through semantic "bleaching", and the task of complement identification is transferred to structural mechanisms. This grammaticalization triggers the projection of Spec,VP, as in (15a), to which complements move to check their relation to V root, and asymmetry is established. We use the term 'grammaticalization' in the general sense of 'specialization'. Thus, all verbs are semantically potential transitives since they all s-select a complement, but only some verbs specialize in c-selecting complements. Thus, licensing through s-selection is replaced with licensing through functional c-selection.

Along these lines, nominals merge with V root and go through lexical checking; if licensing through s-selection is incomplete or failing, the nominal is processed further, through movement to Spec,VP, for functional selection. Convergence of the structure follows from the results of c-selection checking. This analysis correctly predicts that the semantic ties between V root and direct objects may range from strong (s-selection) to very tenuous (c-selection), and the frequency of cognate objects must vary accordingly.

Technically, this approach echoes that of Chomsky (1995: chap. 3) in which the complement of a head (H) constitutes its internal domain, crucially distinct from the checking domain of H, which includes Spec-H among other positions. This distinction follows from Chomsky's (1995: 178) view that "the fundamental X-bar-theoretic relation is head-complement, typically with an associated th-relation determined by properties of the head". Our view is thus similar but we do not assume that theoretic considerations are relevant in the head complement relation.

Although these predictions are generally accurate, it is, however, significant that transitive verbs avoid overt cognate objects, while unergatives prefer them (see examples 5 a, b, c). We relate this contrast to the conversion of the checking context in (16) to the structural context in (15). It appears that c-selection is possible in (15a), but not in (15b), where a Spec,VP position is absent. In (15b) only a hyponymic formation is possible, or else the structure lacks an overt object. Along these lines, unergativity can be re-defined as option for V processing with s-selection, while transitivity corresponds to the option of V processing with c-selection. This differs from Baker's (2003) proposal that the distinctive property of verbs is the fact that they always take a Specifier.

In Romanian, and probably in many other languages, the exclusion of sentential complements (CP) with unergative verbs (see example 7c) follows naturally from the unavailability of c-selection in the transitivized frames, as in

(15b). CPs are semantically unpredictable, so they never merge at V root (there is no s-selection for them), only in Spec,VP in the c-selection position. Therefore, CP objects are allowed in (15a). A piece of evidence that CPs merge in Spec,VP is that the merge position at V root is held by a null or overt pronominal with properties reminiscent of expletives, such as *it* in English:

(17) I hate *it* that he doesn't let me finish my sentences.[6]

In sum, the presence versus absence of Spec,VP in (15) has been derived from the degree of grammaticalization of the semantic relation between V and its complement. When grammaticalization applies, both s-selection and c-selection take place, triggering Spec,VP for a functional licensing of the complement. The contrast in the distribution (CP versus DP/low ApplP) and constituency of direct objects (NP or DP/ApplP) in regular transitive versus transitivized frames with unergative verbs follows from the option for mixed c- and s-selection checking (transitive) or only s-selection (unergatives).

5. TRANSITIVIZED UNACCUSATIVES

The constraints on the transitivization of unaccusative verbs appear as a corollary of the options for c- and s-selection. That is, unaccusative verbs are instantiations of c-selection only. Accordingly, we expect them to display selection effects in direct opposition to unergative verbs, which rely only on s-selection. These predictions are borne out by the data in section 2.4, as follows:

- cognate objects are impossible (18a), as they are incompatible with c-selection; transitivization in general is, however, possible (18b).

(18) a.   *Cineva a coborât coborârea.
            somebody has descended descent-the
      b.   Cineva a coborât scările.
            somebody has descended stairs-the
            'Somebody came down the stairs.'

- noun constituency is always DP (19a) versus NP (19b), because the object is in Spec,VP (c-selection) where checking on D features is unavoidable.

(19) a.   Am urcat dealul/un deal abrupt.
            have-1 ascended hill-the/a hill abrupt
            'I went up the hill/a steep hill.'
      b.   *Am urcat deal abrupt.
            have-1 ascended hill abrupt

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[6] According to the hierarchy in (15a), one might expect (17) to have the order verb-CP-it. Such order is, however, prevented by phonological restrictions that force 'heavy' constituents to be spelled out at the end of the clause (formerly known as right dislocation phenomenon). Therefore the word order in (17) does not reflect the word order in the vP shell.

CP may occur as a complement because it is licensed in Spec,VP:

(20) a.   A rămas că vine mâine.
              has rested that comes tomorrow
              'It has been established that s/he's coming tomorrow.'
      b.   A rămas să vină mâine.
              has rested SUBJ comes tomorrow
              'It has been agreed that s/he's coming tomorrow.'

      Transitivization of unaccusatives through c-selection only is computationally taxing, because the grammar must resort to two elements in order to derive the argument structure necessary to saturate one theta-role. That is, an expletive pronominal must be computed as merged at V root, so that the c-selected nominal can merge in Spec,VP. Thus, although transitivization is possible, it is rarely applied.

6. CONCLUSIONS

      This paper considered cases where verbs transgress their typological transitivity groups. Two questions were addressed:
Why is transgression possible?
Why does transgression occur only in certain directions?
      The theoretical framework of the Minimalist Program allowed an analysis of the empirical data that lead to the following answers:
      Transgression between verb groups is possible because there is no justification for this typology in the first place. The verb has the same semantic and syntactic properties, whether it is transitive or intransitive (unergative, unaccusative). That is, it merges at root with a complement position. The transitivity effects follow from the various syntactic operations that validate the relation between verb and complement. We have identified these operations as being the checking of selectional features of V. That is, checking may take place through s-selection, c-selection, or both s- and c-selection. These possibilities are illustrated in Table 1.

Table 1

Transitivity output from V selection

Transitivity type	S-selection	C-selection	Example
transitive	+	+	*purta* 'bear'
unaccusative	-	+	*ajunge* 'arrive'
unergative	+	-	*dormi* 'sleep'
non-transitivity	-	-	non-predicate

      Table 1 transfers the onus of a transitivity typology from lexicon to syntax: there is a limited set of operations that can license the local relation between a verb and the constituent associated with its complement position. The type of transitivity

follows from the option for one or another of these operations. Thus, our conclusion is that the transitivity typology is locally determined in the syntactic configuration, not in the lexicon.

The direction of typological transgression follows from this theoretical outline. Opposite operations (i.e., s-selection versus c-selection) have a diagonally opposite output (i.e., unergative versus unaccusative frames) that preclude typological transgression. However, mixed operations (i.e., both s-selection and c-selection) have an output that can be convertible to unique selectional frames (e.g., *mânca* 'eat' can be used as unergative; *urca* 'get something up' can be used as unaccusative). The reverse applies as well: unergatives may be used as transitives (e.g., *cânta* 'sing'), or unaccusatives may have transitive frames (e.g., *ajunge* 'arrive').

In light of this syntactic conditioning of transitivity, it is not surprising that there is so much cross-linguistic variation in the behavior of verbs. In particular, the series of unaccusative and unergative verbs vary from one language to another. A few examples: *naşte* 'be born' is regularly transitive in Romanian, but unaccusative in French; Igbo languages have no unergative verbs; reflexivization, as a form of transitivization, applies to different groups of verbs in different languages (e.g., Fr. *il se meurt* versus Rom. **se moare* 'REFL dies/s/he dies'). The analysis proposed here has the advantage of predicting this variation independently of lexical features (which must be comparable from one language to another).

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