

# TRANSITIVITY REVISITED: AN OVERVIEW OF RECENT RESEARCH AND POSSIBLE SOLUTIONS \*

Rostyslav Bilous  
University of Toronto

This paper is an outline of some major transitivity-related issues and of some possible solutions, discussed in the literature in the last twenty years or so. Building on the previous research on the transitive relation and on the phenomena (whose morpho-syntactic ‘visibility’ varies across languages) subsumed under this relation, we explain the value of: 1) a new definition of transitivity and of the transitive relation articulated in maximally universal terms, and 2) the mechanism responsible for the process of transitivisation.

## 1. Introduction

The aim of this paper is to provide a brief overview of some major issues related to the phenomenon of transitivity and of research aimed at addressing those issues in the last two decades. The paper is organized in the following way. In Section 2 (Analysis) we analyze different views on transitivity and on what constitutes “major issues” related to this phenomenon. In Section 3 we provide an overview of our attempts at contributing to the solution of those major issues. And in Section 4 we conclude our discussion by summarizing main points and by highlighting some questions for future research.

It is important to note that this study does not represent an attempt to provide a comprehensive analysis of different approaches. Besides, what constitutes “seminal works” for some, might not necessarily be convincing enough for others. Therefore discussions of details that are not of primary relevance or that do not lead to new insights into verb transitivity will be avoided. Given that the domain under consideration is a vast field of study (since the complexity of the transitivity phenomenon is due to the existence of a whole plethora of other linguistic phenomena intertwined with it in different ways across languages), this paper only aims at showing what attempts and contributions have been made to answer the following pivotal questions: (i) Since verb typology is conceptually related to the notion of transitivity, what is transitivity *per se* and how important is this concept for the classification of verbs? (ii) What exactly underlies (synchronic, diachronic and cross-linguistic) changes in verb transitivity and how can we account for it in maximally universal terms? More precisely, what is the mechanism responsible for the phenomenon of valency alternations? (iii) What constitutes the transitive relation and how the morpho-syntactic behavior of post-verbal nouns contributes to describing this relation?

---

\* Many thanks to Yves Roberge, Anne-Marie Brousseau and Joseph Schallert for their insightful comments that I received at any point of my research. I am also grateful to the participants of the conference for the interesting discussions that we had during the poster session.

## 2. Analysis

Transitivity and transitivity-related aspects have been of interest to linguists of all bents. Recently, however, new developments in modern linguistics have allowed the questions relating to the topic of verb transitivity to acquire a new multidimensional aspect. Some of the questions that have puzzled linguists for a long time are: What is transitivity *per se*? Can it be described or defined from a global or interlinguistic perspective? In view of a number of different frameworks, approaches and data worked on, how can we define transitivity in simple and maximally clear way? Is it really impossible or wrong to combine the seemingly incompatible theories or approaches in order to achieve this goal? Or should we rather focus on what a mixed or an integrated approach to transitivity can “buy us”? Very often the so-called “different or incompatible” approaches are simply different ways of explaining the same linguistic phenomenon using largely the same (relevant) terminology, whose main purpose is to provide a more systematic and uniform treatment of verbs in different languages.

There is no doubt that trying to define transitivity from a global perspective is a risky endeavor that not many wish to embark on. It seems to happen too often, however, that many linguists use the term in question while working in different frameworks and approaches and without clearly defining it. What complicates the issue is that the claims that some linguists make are not necessarily clear and the concepts or terms they use to refer to different transitivity-related aspects are not necessarily well-defined or explained. There are also those who present arguments about what is acceptable and what is not in a given language, resorting to subjective prescribing how one should speak. However, many linguists will agree that we can gain more insight into the workings of language by simply describing, analyzing and formalizing the way one speaks, and, if possible – why one speaks one way and not the other.

Since transitivity is a verb-based phenomenon in languages that feature it (that is nominative-accusative languages), the major (debatable) issues to be addressed are: 1) challenges in conceptualization of verbs into different classes, 2) bidirectional valency alternations (or the phenomenon of [de]transitivisation) resulting in different transitivity patterns and so frequently attested across languages on both diachronic and synchronic planes, 3) the issue of what constitutes a “transitive relation”, and 4) the (morpho-syntactic) behavior of post-verbal nouns.

Verbs can be characterised from the perspective of different approaches<sup>1</sup>. It seems to be commonly accepted that verbs are generally divided into transitive (bivalent) and intransitive (monovalent), the latter being subdivided into unergative and unaccusative. Verbs can be also personal or impersonal. Personal ones subsume ambitransitive (trivalent), transitive and intransitive, whereas impersonals, although normally intransitive (unergative), can also be (cross-linguistically) transitivised. Besides, it is characteristic of transitives to show varying degrees of transitivity oscillating between prototypical transitivity and

---

<sup>1</sup> Please, see Bilous (2011a: 106–108) for a detailed discussion of those approaches.

low transitivity. To make matters more complicated, unergatives and even some unaccusatives are susceptible to the process of transitivity. These are some of the most problematic facts that make typological classification of verbs very difficult. There are also verbs that show lability (1e), being used both transitively and intransitively without any change in their morphology. This bidirectionally ‘unstable’ behavior of verbs can be exemplified with the following data:

- (1) a. English:  
I know!  
I promise!
- b. French:  
J’ai tombé le vase. (Blinkenberg 1960: 106)  
J’ai volé le héron. (Blinkenberg 1960: 53)  
J’ai bouilli des œufs. (Blinkenberg 1960: 104)  
J’ai éternué des bactéries.  
J’ai brillé mes dents blanches.
- Ukrainian:  
Vin roztanuv dušeju.  
He melt-PAST soul-INSTR  
‘His soul melted.’
- Dity jšly lisom.  
Children go-PAST forest-INSTR  
‘The children were going through the forest.’
- c. English:  
He read me the article.
- French:  
Je lui ai mangé le gâteau.
- d. French:  
J’écris à mon frère. (Blinkenberg 1960: 55)
- e. French:  
Le temps passe.  
Je passe le temps.
- f. French:  
Il pleuvait des bombes.
- English:  
It is raining cats and dogs.

- g. English:  
There came three men.
- French:  
Il est venu trois hommes<sup>2</sup>.
- Il dort un chat au coin de la cheminée. (Hulk 1989: 59)  
Il chantait un artiste [...] inconnu [...]. (Hoekstra and Mulder 1990: 48)
- Ukrainian:  
Pryjšlo troje čolovikiv.  
Come- PAST.3SG three men  
'There came three men.'
- h. Ukrainian:  
Ja buvav tut kilka raziv.  
I be-PAST-ITER here several times  
'I was (came) here several times.'
- i. Ukrainian:  
My vidbuly vechirku.  
We TR-PERF-be-PAST party-ACC  
'We have been at the party.'

These data exemplify cases when transitives are used as intransitives (1a), unaccusatives/ unergatives used as transitives (1b), transitives used as ambitransitives (1c), ambitransitives used as intransitives (1d), labile verbs show a 'balanced' behavior (1e), impersonals used as transitives (1f), unaccusatives/ unergatives used as impersonals (1g), a stative unaccusative verb becomes unergative (1h), a stative unaccusative verb becomes transitive (1i). Impersonals in (1f) have a syntactic (expletive) subject, which is not, semantically speaking, an agent; hence the predicate subcategorising it, is called a 'zero-place predicate' (see, for example, Adger 2003; among others). The type in (1b) is known as conversion phenomenon. It is particularly common in English (Levin 1993; among others), but restricted in French and practically impossible in Ukrainian, due to its high synthetical nature. Blinkenberg (1960) in French and Siller-Runggaldier (2003) in Italian have shown that valency changes are not only diachronic but synchronic as well, and could be characteristic of any language. In Ukrainian the stative (unaccusative) verb *buty* becomes unergative (cf. 1h) by means of adding the suffix *-va-*, and transitive (cf. 1i) by means of affixation of the transitivity prefix *vid-*. To these cases of alternation we can also add other facts that complicate characterization of verbs: the issues of transitive constructions with a 'blurry' role of patient (incorporation phenomenon), the so-

<sup>2</sup> Please, refer to Brousseau and Roberge (2000) and Cummins (2001) for similar examples).

called middle constructions, the varying degrees of transitivity due to individual verb semantics and valency change as in (1b), being part of different argument realisations in the DO position (Timberlake 1975; Hopper and Thompson 1980; among others). Interestingly, the Ukrainian data in (1b) exemplify a general tendency when an unaccusative/unergative verb undergoes the process of transitivity, its DO is automatically assigned INSTR case (which is initially the only one possible, serving as a ‘default’ case), at a later stage though a case alternation can become possible, with ACC or even GEN marking.

From the examples above three important observations follow: 1) since intransitives have the potential to receive a DO, there must be something they share or could share with transitive verbs; in other words, all verbs have the potential to be transitive; 2) the existence of zero-place predicates testifies to the fact that the process of transitivity is possible without an external argument, meaning that the trigger of this process should be found outside of the agent, and this is what constitutes a problem case for the Transitivity Hypothesis (Hopper and Thompson 1980: 251), according to which transitivity is “a global property of an entire clause” (it necessarily involves at least two participants), “such that an activity is ‘carried-over’ or ‘transferred’ from an agent to a patient”; 3) in languages with rich case morphology (cf. Ukrainian examples in 1b, a language that has not only rich case morphology, but also variations of the same cases as well double and triple case alternations on the same nouns in the object position [Bilous 2011a: 56–60]) there is a relation between valency alternations and case assignment. In (1f) the impersonal verb is transitivity receiving a DO, even though it is not a common case of transitivity. As to the first observation, one can find many traces of attempts in the literature to account for what it stipulates. For example, Roberge (2002) proposes the Transitivity Requirement (TR), according to which an object position is always included in VP, independently of lexical choice of V and offers the idea, building on Blinkenberg (1960), that all verbs could exhibit transitivity to a certain degree.

As we can see, valency alternations represent a highly and symmetrically bidirectional phenomenon. According to Siller-Runggaldier (2003) valency changes are systematic, paradigmatic and predictable. They depend on the verb and have an effect on DOs. They also involve an autonomous lexical meaning and semantic traits from the sphere of transitivity. Languages vary in their syntactic profiles, and they employ different valency-changing derivations. In languages with a high proportion of underived transitive verbs there are valency-decreasing derivations, whereas in languages with high numbers of underived intransitive verbs there are some valency-increasing derivations (Dixon and Aikhenwald 2000).

Burzio’s Generalization (1986), based on Perlmutter’s Unaccusativity Hypothesis (1978), sheds much light on the notion of (in)transitivity and reinforces our belief that the strictly traditional view on transitivity (cf. Hopper and Thompson 1980) is infelicitous, since it generates many unexplained problematic cases, and that is why it has seen many language-specific modifications in the literature ever since its inception. In Burzio’s view, a verb without an external argument (EA) is not capable of assigning the Accusative case. In other words, the verb that does not assign a  $\theta$ -role to its subject cannot assign the Accusative case to its object, therefore its base-generated object must

move to the subject position to receive a case (NOM) from a finite verb [+T] and in this way satisfy the Extended Projection Principle (EPP) (Chomsky 1981). Unaccusatives are verbs which follow this pattern and some linguists maintain the view that they are semantically transitive, but syntactically intransitive, since they select a single internal argument (IA) that surfaces as a subject (Perlmutter 1978; Legendre 1989; Brousseau and Roberge 2000; Harves 2002), constituting a unique type of ‘defective’ verbs. Our intuition, however, tells us that it might be wrong to interpret an unaccusative verb as being semantically transitive, since we do not see any DO syntactically. It seems to be more correct to limit our explanation to the statement that what we see syntactically is a final product, a surfaced result of the transformations that started in the Deep Structure. Therefore, if a verb appears without a DO, it can be interpreted as both syntactically and semantically intransitive<sup>3</sup>. Interestingly, the example in (1b) shows that even a normally cross-linguistically unaccusative verb can be transitivised, taking a DO. Thus, there should be something that makes it possible for any verb to become transitive, something that causes a sort of reevaluation in the argument structure of the verb which, being transitive in the underlying structure, cannot tolerate another DO, since there is only one DO position available from the UG and it is already taken, that is ‘licensed’ by the element which has moved to the subject position. This case along with the transitivisation of impersonals in (1f) requires special attention and has led us to offer a new definition of transitivity (cf. Section 3.1).

Another important fact about unaccusativity is that, as previous studies have shown (Harves 2002; among others), this is not a cross-linguistically uniform phenomenon and its diagnostics vary from one language to another. Besides, certain verbs can be unaccusative according to one diagnostic and unergative according to another (Napoli 1988; Van Valin 1990). On the other hand, for some linguists unaccusativity is not only a property of intransitive verbs, but also of typically transitive ones (Harves 2002)<sup>4</sup>. Thus, we come to an intuitive understanding that beside the syntactic structure of unaccusative predicates and their semantic properties mentioned above, along with semantic properties of individual verbs and interaction of verbal meaning with constructional variability, there could be other factors that determine a verb’s multiple behavior.

In his treatment of semantic and syntactic transitivity, Declés (1998) proposed that the verbal domain be studied at two levels of grammar – semantic and syntactic. He introduced the notion of ‘control’ as a relation which is

---

<sup>3</sup> Please, refer to Bilous [2011a: 14–17, 29–33, 100] for a more detailed discussion of this conjecture.

<sup>4</sup> This stipulation seems however to be very controversial, since it is based on Harves’s diagnostics of unaccusativity, including Genitive of Negation (whose use is a sign of low transitivity), as proposed for Russian, and therefore it needs to be revised. However, we leave this discussion for further research, since it falls beyond the scope of the present inquiry.

implicit in semantic transitivity only and which can be defined as the capacity to trigger or interrupt an action or an activity: an agent executes directly or indirectly an action controlling it. In other words, an action operated on a patient (affected object) remains controlled by an agent (controller). Declés's semantic transitivity schema (STS) is an attempt to capture the semantic transitivity in universal terms. He hypothesizes that any semantic transitivity specific to a language is encoded by a prototypical transitive construction (PTC) in this language, but certain transitive constructions are not always instantiations of the STS. The weakness of his proposal lies in the fact that an affected patient has to undergo a change, and the primitive CONTROL establishes a relation between a controller and an evolving situation, which is in general kinetic. This explanation reflects the definition of Prototypical Transitivity and cannot account for other instances of transitivity, to which Declés refers as problematic cases.

As for the recurring issue of what constitutes Prototypical Transitivity, some linguists find it important to try and account for the distinction 'prototypical vs. non-prototypical'. However, such attempts have not met with any notable success, since there is evidence that those verbs that have a prototypical transitive behavior in one language, do not behave the same way in another language (Kittilä 2008). Linguists do not even agree on how prototypicality should be defined. Based on previous studies (Hopper and Thompson 1980; Comrie 1989; Montserrat 1998; Givón 2001; Rozas 2007; Næss 2007; Fiorentino 2003; among others) the Prototypical Transitivity can be defined as follows: of the two participants of an event, which are highly individuated, the agent in the Nominative case is conscious and controlling the event, whereas the patient is in the Accusative case, non-animate and affected by the perfective action of the verb. For Montserrat (1998), for example, the most central or prototypical types of transitive action involve an agent and a patient, whereas Fiorentino (2003) sees prototypical transitivity as something characterised by the availability of a prototypical direct object (DO) (i.e., an argument not preceded by a preposition) that follows the verb, subcategorising it. For Lindvall (1998), transitivity involves a verb and a DO, and further requires an interplay between the two (or their mutual relationship). Næss (2003, 2007) maintains that transitivity can be best described as a type of grammatical relationship encoding the distinctness of participants in a situation described by the clause. Obviously, it is hard to provide a complete and exhaustive definition of the phenomenon in question, since there are data that falsify at least partially many of the above-mentioned explanations and we find different degrees of transitivity which emerge from an interplay between verbal and/or object properties and certain sentential factors and/or semantico-pragmatic parameters.

There exist a number of prototype models of transitivity (Lindvall 1998), whose original purpose was to serve as an analytical tool to "give a principled account of a larger set of empirical data" (Næss 2007: 11). However, questions that follow from this type of approach still remain unanswered to a large extent. On the other hand, two ideas that deviate from 'classical' prototype models deserve our special attention: Rice's (1987) concept of the prototype transitive event (PTE) and Kemmer's (1994) idea of the underlying cognitive schemata (UCS). Rice grounds the transitive event prototype in a schematized event, where two asymmetrically related entities are involved in some unilateral

activity. In Kemmer's view, languages make reference to a schema (which is more general than the characterization of transitivity in terms of semantic properties), due to the assimilation of various types of events, including those where there is no transmission of force, to the transitive marking pattern. DeLancey (1987) seems to have been the first to actually note that both higher and lower transitivity clauses are reflections of UCS.

Thus, taking into account the above-mentioned linguistic challenges as well as the weaknesses in previous theoretical proposals, we concluded that verb characterisation and changes in valency patterns should be attended to after: 1) the mechanism behind valency changes has been explicated, 2) the question of what constitutes a "real transitive relation" has been answered, and 3) a new definition of the phenomenon of transitivity has been provided. These tasks, we believe, can be accomplished if a clear distinction between semantic content and morpho-syntactic form is drawn (cf. also Lazard 2003; among others). With this thought in mind, in the subsequent section we provide an outline of our research on the transitivity-related issues described above.

### 3. Our research

Based on our interlinguistic analysis of Romance, Germanic and Slavic languages (cf. 2009a/b, 2010a/b, 2011a/b) as well as on our contrastive study of French (a largely configurational language) and Ukrainian (a largely non-configurational language), we arrived at the conclusion that in order to understand the transitivity phenomenon in all its complexity, it is necessary to address not only the issues of verb classification and valency changes (or the issue of what really constitutes a transitive relation and what triggers its establishment), that have been the subject of considerable debate, but also the issues of the (crosslinguistic) relation between such transitivity-related phenomena as: 1) (de)transitivisation and the (morpho-syntactic) behavior of post-verbal nouns, 2) verbal/nominal properties and the transitive relation, 3) (in case of post-verbal nouns) the semantic feature realisation and variability of morpho-syntactic forms (case marking and covert/overt Determiner selection), and finally 4) verbal/nominal properties and degrees of noun absorption or incorporation.

#### 3.1 Transitive relation and mechanism of transitivisation

Recognizing the importance of following the distinction between semantic and syntactic transitivity and in view of the existence of zero-place predicates, whose external arguments are realised as subjects but remain semantically vacuous, we concluded (cf. Bilous 2011a: 82–102, 122–124), that an action cannot be transferred from an agent to a patient and that a transitive relation is limited to the *Verbal Predicate – Internal Argument* ('VP – IA') relation (semantically speaking), or 'V – DO' relation (syntactically speaking). Based on the analyzed data we also concluded that this relation does not necessarily need to be controlled by an agent. Besides, the term "Patient" is only useful for describing prototypical transitivity, whose importance we refuted by means of our



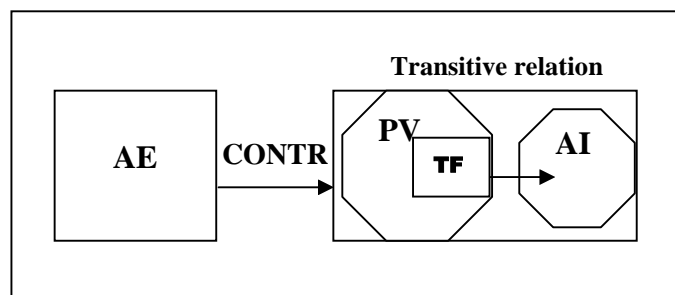
*Incorporation Model* (cf. Bilous 2011a: 68, 85–86), that connects the incorporation of DOs to the realisation of different semantic features.

Our research on the instances of high and low transitivity resulted in the proposal of a *Universal Transitivity Template* (UTT) (Bilous 2009a, 2011a), an underlying universal model that is part of mental representations provided by the Universal Grammar. This template is purported to underlie any transitive relation crosslinguistically. In other words, it underlies the central sentential relation ‘VP – IA’. IA is, in our view, a primitive element (or a constant, or a permanent semantic element) to which different semantic features (figuratively speaking its satellites or variables whose combinability with IA varies from one language to another) are adjoined, producing by means of derivation one of the three central sentential units – a direct object. The relation between these central elements is expressed in Ukrainian (due to its rich case morphology) by means of a differential morpho-syntactic encoding (cf. below Section 3.2 for more details on the question), whereas in French this type of encoding is much more reduced.

Although the UTT forms part of mental representations given by the UG (cf. Figure 1; cf. also Bilous 2011a: 99) its instantiations in a specific language are unique and reflect the semantic transitivity properties of that language, combined with an interplay between the core meaning of verbs and constructional variability, between verbal and/or object properties and certain sentential factors and/or semantico-pragmatic parameters, which ultimately determine varying degrees of transitivity. In other words, all types of events are supposed to assimilate to UTT as a universal underlying schema.

Figure 1.

#### Universal Transitivity Template (UTT)



To satisfy the need to account for the fact that there is something in any verb that hypothetically makes it possible for a valency alternation to set in, we posited the existence of a transitivity feature (TF) with values [ $\pm$ trans] (cf. also Bilous 2011a: 89 for a more detailed discussion). TF can appear on any verb irrespective of its meaning, since it is provided by UG. TF must be an inherent semantic feature that determines the assignment of an IA to a verbal predicate. The availability of this feature explains why practically any intransitive verb can be assigned a DO and why it can behave as a transitive one, under favorable

conditions, that is, if a language develops an appropriate valency-increasing strategy.

TF is a central feature of the transitivity device: it determines the assignment of a DO to a verb having a Controller (cf. Figure 1 above), and the agentive function CONTR triggers the activation of TF (more precisely, of its [+trans] value) on a predicate. Thus, change of valency is in other words activation/deactivation of TF. The activated TF licenses the DO assignment.

Tackling the question of how a transitive relation is established, we hypothesized the existence of a (de)transitivity mechanism which helped us to account for two issues: 1) a relation (in Ukrainian) between valency-increasing change and certain instances of differential object marking (DOM), and 2) Bowers' (2002) proposal that the structure of transitive sentences contains a functional head projection encoding an interpretable feature of transitivity. In our view, this semantic feature (available on any intransitive verb in a non-activated state) is, however, uninterpretable and needs to be checked in the syntax. It is responsible for the process of transitivity and, therefore, for the establishment of a transitive relation after it gets activated in the semantic component. The mechanism of (de)transitivity is a device that must be part of UTT, which means that it must function in conformity with the underlying pattern provided by UG.

Taking into account this mechanism of transitivity, we posited the unaccusative-transitive change of valency follows this rule: [root recycling → TF activation ± NP change] (Bilous 2011a: 102). According to the UTT Condition (UTTC), for a complete argument structure and a relation 'Agent – [Verbal Predicate – Controlled]' to be established, unergative verbs should receive an internal argument, unaccusative verbs should receive an external and an internal argument, which would lead to a possible change in their core meaning.

Having defined the transitive relation and explained the mechanism of transitivity, we arrived at a very simple and universal definition of transitivity: "transitivity is a VP (bearing an activated TF) – IA relation".

Based on our view that there is a relation between the TF and the capacity of verbs to become transitive, we proposed (Bilous 2010a/b, 2011a: 166–190) that across languages there are two main categories in any sentential structure with an established transitive relation: the functional projection TrP and the lexical projection vP. The functional head projection or the functional category (FC) TrP is a syntactic realisation or instantiation of the semantic TF. According to this proposal, sentences containing unaccusative and unergative verbs are characterised by lack of the FC TrP. Following Pereltsvaig (2007) that  $v^0$  is a lexical head assigning an inherent (lexical) case, we argued (Bilous 2010a: 4, 2011a: 158, 191) that the distinction between V and v reflects the distinction between high and low transitivity (Hopper and Thompson 1980) or between a 'normal' transitive verb governing a DO in ACC case and a 'defective' verb (transitive or transitivity) assigning to its DO a non-accusative case.

### 3.2 Semantic feature realisation

After our research on the process of transitivity and on how a transitive relation is established, we studied numerous data from Ukrainian comparing

them to the equivalent data in French, and occasionally – to the same type of data from other Romance or Germanic languages. We realised that the central question of our study should not be what type of transitivity we are dealing with (prototypical, high or low), but the question of: 1) what semantic features (e.g. specificity, referentiality, definiteness, partitivity, manner of action, control, etc.) are to be realised on post-verbal nouns and by what (morpho-syntactic) means, 2) what is the relation between semantic feature realisation, case marking and DP-structure, and 3) how the properties of individual verbs/nouns or verb/noun classes determine what kind of transitive relation is to be established (e.g. in French certain verbs select mass nouns being assigned PART case, in Ukrainian the situation is much more complex: practically any case can mark nouns in the object position and paradoxically some highly transitive verbs cannot assign the ACC case to the direct objects they govern since they need to realise the feature [control/authority] by accepting the INSTR case [cf. Bilous 2010a: 2, 13 / 2011a: 150, 199, 201]).

Investigating the issue of where the semantic features that need to be realised on post-verbal nouns come from, we proposed the existence of two post-semantic levels: the main level is the *Schema of Syntactic Encoding* where syntactic elements S, V and OD become visible, and the *Schema of Morpho-Syntactic Encoding* where instances, problematic for the model of Desclés's *Prototypical Transitivity*, are identifiable. Generally speaking, those are instances of DOM. As far as the semantic component is concerned, we proposed that the level of argument structure is its main level and there also exists another level – the level of semantic features, whose composition is language-specific. The main level of the semantic component corresponds to the main level of the syntactic component. The combination of the two above-mentioned semantic levels would lead to the production of the *Schema of Morpho-Syntactic Encoding*. In other terms, it is an instance of mapping between semantic properties and morpho-syntactic forms.

Analysing the relation between transitivity and classification of verbs, we realised that verbs could also be characterised and classified post-derivationally, that is after all the derivational processes are finalised, since our analysis (cf. Bilous 2011a: 95) of the functional composition of three types of verbal predicates led us to conclude that there is a difference between the characterisation of these predicates before the syntactic derivation and after it. We do not reject the possibility that there might exist some primitives that underlie the core meanings of all verbs, and verbs could be classified in terms of those primitives, which would constitute the semantic underpinnings of their syntactic behavior. Those primitives must also be in some kind of interplay with the TF.

Our proposal of a transitivity device, our definition of transitivity, our analysis of the semantic underpinnings in the syntactic behavior of all types of verbs, and finally, our detailed analysis of empirical data made it possible to propose the following conjecture: ultimately the difference between transitive and intransitive verbs can be boiled down to the activation/non-activation of the TF. Our pre- and post-derivational analysis of unergatives and unaccusatives led us to conclude that transitivised unergatives should not generally change their core meaning, while transitivised unaccusatives are prone to frequent changes in

their core meaning, which reinforced our belief that the latter should have individual lexical entries. Thus, the process of (de)transitivisation often involves not only a change in the (in)transitive nature or argument pattern or event structure of a verb, but also a change in a verb's core meaning.

Finally, we were able to specify which parameters of transitivity (cf. Hopper and Thompson 1980) and which features of individuation are realisable in Ukrainian and French as well as which ones have to do either with the ACC case or with instances of DOM.

#### **4. Conclusion**

The mechanism of transitivisation by means of the feature of transitivity, the definition of the transitive relation and the proposal of the Universal Transitivity Template have played a central role in our conceptualisation of the phenomenon of transitivity in maximally universal terms.

Having specified some central questions for the study of transitivity and identifying the most pertinent concepts, we have tried to demonstrate that the transitive relation, (semantic and syntactic) levels of transitivity, degrees of transitivity and transitivisation (based on degrees of noun incorporation and non-accusative case marking on post-verbal nouns), activation of the semantic feature of transitivity, differential object marking and realisation of certain semantic features of individuation and of some other parameters of transitivity are all transitivity-related aspects that cannot be left out of a study on the (inter- and intralinguistically complex) phenomenon of transitivity.

Based on a number of important proposals outlined in this article, further research is needed to test them, primarily on the data that constitute rich crosslinguistic variation. The research does not have to be limited to certain approaches (functionalist, structuralist, generativist, etc.), since all of the existing approaches deal with the notion of transitivity in one way or the other. We would like to see, in particular, how the results of our investigation can be reflected on the findings in the domains of language acquisition and linguistic typology. And there are already traces in the relevant literature that provide a solid basis for research in those domains (cf. for example, Montrul 1997: 115–122, 246–260 for a discussion about the “default template” mechanism, possibly provided by the UG, that L2 learners seem to rely on by causitivising intransitive verbs). We would like to offer two specific questions to be answered: 1) In what way do the findings in language acquisition can support the idea of the existence of the UTT and that the transitive relation is limited to the VP – IA relation?, and 2) How can the analysis of data from different non-Indo-European languages (that don't necessarily feature transitivity) help us better understand the transitivity-related issues (or the relations between different phenomena subsumed under transitivity, often difficult to tease apart) specified in this article, given that the morpho-syntactic ‘visibility’ of those issues (or relations) varies across languages (cf. Bilous 2011a: 8, 69)?

#### **References**

Adger, David. 2003. *Core Syntax A Minimalist Approach*. Oxford University Press.

- Bilous, Rostyslav. 2009a. *Integrated Approach to the Study of Verb Typology*. Handout of presentation. International Conference on Verb Typologies revisited. A Cross-linguistic Reflection on Verbs and Verb Classes. Ghent University, <http://www.verbtypology2009.ugent.be/>
- Bilous, Rostyslav. 2009b. DP-sation de l'individuation en ukrainien et en français. In *Actes du congrès annuel de l'Association canadienne de linguistique 2009*.
- Bilous, Rostyslav. 2010a. Les réalisations multiples du cas INSTR en ukrainien. In *Actes du congrès annuel de l'Association canadienne de linguistique 2010*.
- Bilous, Rostyslav. 2010b. *Case valuation in rich and 'impoverished' case systems*. Handout of presentation. Brussels Conference on Generative Linguistics 5: Case at the interfaces. Hogeschool-Universiteit Brussel, [http://www.crissp.be/?page\\_id=264](http://www.crissp.be/?page_id=264)
- Bilous, Rostyslav. 2011a. *Transitivité et marquage d'objet différentiel*. Doctoral Dissertation : University of Toronto, Toronto.
- Bilous, Rostyslav. 2011b. GEN and PART case valuation: a contrastive analysis. In *Actes du congrès annuel de l'Association canadienne de linguistique 2009*.
- Blinkenberg, Andreas. 1960. *Le problème de transitivité en français moderne : essai syntacto-sémantique*. Copenhagen : Coll. Historisk-filosofiske Meddelelser.
- Bowers, John S. 2002. Transitivity. *Linguistic Inquiry* 33:183–224.
- Brousseau, Anne-Marie, et Yves Roberge. 2000. *Syntaxe et sémantique du français*. Collection : Champs Linguistiques, Montréal : Fides, Canada.
- Burzio, Luigi. 1986. *Italian syntax: a Government-Binding Approach*. Dordrecht: Kluwer.
- Chomsky, Noam. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.
- Comrie, Bernard. 1989. *Language universals and linguistic typology* (2nd ed.). Chicago: University of Chicago Press.
- Cummins, Sarah. 2001. Unaccusativity and impersonal construction of French. *Romance Syntax, Semantics and L2 Acquisition*, eds. Joaquim Camps, Caroline R. Wiltshire, 89–103. Benjamins: Amsterdam.
- DeLancey, Scott. 1987. Transitivity in grammar and cognition. *Coherence and grounding in discourse*, ed. Russell S. Tomlin, 53–68. Amsterdam: John Benjamins.
- Desclés, Jean-Pierre. 1998. Transitivité sémantique, transitivité syntaxique, *La transitivité*, André Rousseau (dir.). Presses universitaires du Septentrion, Villeneuve-d'Ascq.
- Dixon, Robert M. W., and Aleksandra Y. Aikhenwald. 2000. *Changing valency. Case Studies in transitivity*. Cambridge: Cambridge University Press.
- Fiorentino, Giuliana. 2003. *Romance Objects. Transitivity in Romance Languages*. Mouton de Gruyter, Berlin – New York.
- Givón, Talmy. 2001. *Syntax: an introduction*. 2nd edn. (2 vols.). Amsterdam: John Benjamins.
- Harves, Stephanie Annemarie. 2002. *Unaccusative syntax in Russian*. Doctoral Dissertation: Princeton University.
- Hoekstra, Teun, and Rene Mulder. 1990. Unergatives as copular verbs: locational and existential predication. *The Linguistic Review* 7:1–79.
- Hopper, Paul J., and Sandra A. Thompson. 1980. Transitivity in grammar and discourse. *Language* 56:251–299.
- Hulk, Aafke, and Jean-Yves, Pollock. 1989. *Subject Inversion in Romance and the Theory of Universal Grammar*. Oxford: Oxford University Press.
- Kemmer, Suzanne. 1994. Middle voice, transitivity and elaboration of events. *Voice: Form and Function*, eds. Barbara Fox, and Paul J. Hopper, 179–230. Amsterdam: John Benjamins.
- Kittilä, Seppo. 2008. Defining prototypical transitivity. Review of Åshild Naess's *Prototypical transitivity* (Typological studies in language 72). 2007. *Lingua* 118:2012–2020. Amsterdam: John Benjamins.
- Lazard, Gilbert. 2003. What is an object in a crosslinguistic perspective? *Romance Objects. Transitivity in Romance Languages*, ed. G. Fiorentino. Mouton de Gruyter, Berlin – New York.
- Legendre, Geraldine. 1989. Unaccusativity in French. *Lingua* 79:95–164.

- Levin, Beth. 1993. *English Verb Classes and Alternations: A Preliminary Investigation*. Chicago: University of Chicago Press.
- Lindvall, Ann. 1998. *Transitivity in Discourse. A Comparison of Greek, Polish and Swedish*. Lund: Lund University Press.
- Montrul, Silvina. 1997. *Transitivity alternations in SLA: A crosslinguistic study of English, Spanish & Turkish*. Doctoral Dissertation: McGill University, Montreal.
- Montserrat, Martínez Vázquez. 1998. *Transitivity revisited*. Huelva: Universidad de Huelva.
- Napoli, Donna Jo. 1988. Review of L. Burzio's Italian syntax. *Language* 64:130–142.
- Næss, Åshild. 2003. *Transitivity: from Semantics to Structure*. Doctoral Dissertation: University of Nijmegen.
- Næss, Åshild. 2007. *Prototypical transitivity*. Amsterdam: John Benjamins.
- Pereltsvaig, Asya. 2007. *Copular Sentences in Russian*. Springer, Verlag.
- Perlmutter, David. 1978. Impersonal passive and the Unaccusative Hypothesis. *Proceedings of the fourth annual meeting of the Berkeley Linguistics Society*, eds. J. Jaeger et al., 159–189. University of California at Berkeley.
- Rice, Sally Ann. 1987. *Towards a cognitive model of transitivity*. Ann Arbor, MI: University Microfilms International. Doctoral Dissertation: San Diego.
- Roberge, Yves. 2002. Transitivity requirement effects and the EPP. Paper presented at WECOL 2002, University of British Columbia, Vancouver, November 2002.
- Rozas, Victoria Vázquez. 2007. A usage-based approach to prototypical transitivity. *On interpreting construction schemas: from action and motion to transitivity and causality*, eds. and introds. Nicole Delbecque, and Bert Cornillie, 17–37.
- Siller-Runggaldier, Heidi. 2003. Changes of valence and their effect on objects. *Empirical approaches to language typology* 27:187–216. Mouton de Gruyter.
- Timberlake, Alan. 1975. Hierarchies in the genitive of negation. *Slavic and East European Journal* 19:123–38.
- Van Valin, Robert D. Jr. 1990. Semantic parameters of split intransitivity. *Language* 66:221–260.