

Deriving Transitives in Russian

Intro. A number of Slavic languages possess an anticausative derivation which turns transitive predicates into unaccusatives. Moreover, the anticausative derivation is usually restricted to a subclass of transitive verbs. In this talk we examine two classes of transitive verbs in Russian: those which allow for anticausativization (T1 verbs), and those which never undergo anticausativization (T2 verbs). We give an account for regular distinctions between the behavior of these classes partly in terms of aspectual compositional semantics and partly in terms of syntactic restrictions. Consider the distinctions between the two verb classes illustrated in (1).

In our analysis we adopt Kratzer's (1994, 1996) treatment of the external argument. We assume that the external argument is not a lexical argument, and therefore it is not specified in a verb's lexical entry, but is introduced within the derivation in Spec vP by means of Event Identification. Moreover, in the spirit of Ramchand (2008) we assume that introduction of the external argument is possible iff the event structure contains a causing (initiating) sub-event.

Core hypothesis. We suggest that T2 verbs differ from T1 verbs in that they lexically specify a causing relation between the initiating subevent and resulting state, (4b). T1 verbs, on the other hand, have a less complex lexical structure which does not contain the causing relation, (4a). This implies then that T1 verbs can be either states or processes, but not transitions.

The anticausative morpheme is a phonological realization of a v head (we will label it v_{ANTICAUS}), which is deficient in the common sense that it does not introduce an external argument. Then, v_{ANTICAUS} cannot combine with T2 verbs, because their lexical meaning contains a causing subevent and hence, according to the basic assumptions, requires an external argument.

If it is the case that some T1 verbs are born stative, then one would expect to find contexts where this stativity is overtly manifested. Such contexts are found in passive constructions with participles in *n/t*.

Evidence from past passive participles (PPPs). Crucial data about the distinction between the two classes of transitives comes from the aspectual interpretation of Russian past passive participles (PPPs), exemplified in (2). The T1-verbs in (2a) allow for the ambiguity between an eventive and a stative reading, while T2-verbs in (2b) do not. The stative readings of PPPs derived from some T1 verbs purely manifest the core stative semantics of the verb stem (4a). Consequently, one would expect that under a stative reading of PPPs, the sentence would not imply the existence of any causative relation. Indeed, the sentence (5b) is controversial since there should be a sweeping event preceding the yard's state of being swept, while (5a) is perfectly uncontroversial: the window should not be opened by someone to be in an open state. It could be created (built) open to begin with, cf. Kratzer (2000). The same observation seems to hold for other verbs from the two (T1 and T2) classes. Furthermore, (3) shows that in agentive sentences the ambiguity found in (2a) disappears: under this condition verbs from the first class allow only for an eventive reading.

Formal details. To account for the above observations we suggest that in Russian there exist four types of the v head, namely, a non-deficient transitive v , and three deficient ones in the sense that they do not check accusative: v_{PASS} spelled out as the PPP morpheme and found in eventive passives, v_{ANTICAUS} spelled out as the anticausative *s'a*, and v_{STATE} spelled out as the PPP morpheme and found in stative passives. Of these heads, v , v_{PASS} , and v_{ANTICAUS} combine with predicates over events, while v_{STATE} only with predicates over states. Moreover, only v and v_{PASS} introduce an external argument (in the case of v_{PASS} this argument is \exists -bound). We also employ two null operators. The first, *Event*, adds a culmination point to a state turning predicates over states into predicates over events. The second, *Cause*, introduces a causing subevent to the event structure. Note that these operators are reminiscent of Dowty's (1979) and Levin & Rappaport Hovav (1998) lexical primitives BECOME and CAUSE.

With this, we argue that the non-deficient v can combine directly with T2 verbs. Transitive and eventive passive constructions with T1 verbs are derived by first combining the stative verb stem with *Event* and *Cause*. Furthermore, stative passive sentences are derived by combining directly v_{STATE} and T1 verb stem, while combination of v_{STATE} and T2 verbs is ruled out since the latter is inherently eventive. Finally, v_{ANTICAUS} takes only T1 verbs modified by *Event*, but not T2 verbs, since the latter necessarily identify a causing subevent while v_{ANTICAUS} does not introduce an external argument.

Further implications. The above analysis does not preclude the existence of T1 verbs which denote predicates over events (rather than states). Such verbs may not specify a causing subevent in their lexical meaning. Our analysis predicts that such verbs would allow for anticausativization, but not for

a stative reading of their PPPs. Such verbs include *vysušit* ‘dry’, *svarit* ‘boil (cook)’, *vskip’atit* ‘boil’, etc. We assume that they are interpreted as in (7). Such verbs can combine with *Cause* and non-deficient *v* giving standard transitive clauses. They can also combine directly with v_{ANTICAUS} yielding the anticausative construction (8a). On the other hand, such verbs are incompatible with v_{STATE} since these verbs denote predicates over events, as illustrated in (8b).

(1)	Transitives 1 (T1) (<i>slomat</i> ‘break’, <i>zakryt</i> ‘close’, <i>razlit</i> ‘spill’, <i>podnjat</i> ‘raise’, etc.)	a. Dver’ otkryla-s’ The door opened-DECAUS
	Transitives 2 (T2) (<i>sjest</i> ‘eat’, <i>opustošit</i> ‘empty’, <i>sprjatat</i> ‘hide’, <i>počistit</i> ‘clean’, etc.)	b. * Ulitsa podmela-s’ The street swept-DECAUS

- (2) a. Dver’ byla otkry-t-a {2 časa / za 2 časa}. event/state
door was open-PRT-F.SG {2 hours / in 2 hours}
‘The door was opened for 2 hours / in 2 hours’
b. Ulitsa byla podmete-n-a {*2 časa / za 2 časa}. event/*state
street was sweep-PRT-F.SG {2 hours / in 2 hours}
‘The street was swept *for 2 hours / in 2 hours’

- (3) Dver’ byla otkryta Ivan-om {*2 časa / za 2 časa}.
door was open Ivan-INST {2 hours / in 2 hours}
‘The door was opened by Ivan *for 2 hours / in 2 hours’

- (4) a. $\llbracket \text{otkry-} \rrbracket = \lambda x \lambda s [\text{open}(x)(s)]$ (T1 verb)
b. $\llbracket \text{podme-} \rrbracket = \lambda x \lambda e \exists e' \exists s [\text{swept}(x)(s) \wedge \text{RESULT}(e') = s \wedge \text{CAUSE}(e')(e)]$ (T2 verb)

- (5) a. Okno v komnate bylo otkry-t-o, xotja ego nikto ne otkryval.
window in room was open-PRT-N.SG though it.ACC nobody not opened
‘The window in the room was open, though nobody had opened it’
b. * Ulitsa byla podmetena, xotja eë nikto ne podmetal.
street was swept though it.ACC nobody not swept
Int.: ‘The street was swept, though nobody had swept it’

- (6) * Okno v komnate bylo otkryto za 5 minut, xotja ego nikto ne otkryval.
window in room was opened in 5 min though it.ACC nobody not opened
‘The window in the room was opened in 5 minutes, though nobody had opened it’

- (7) $\llbracket v_{\text{YUSUŠI-}} \text{ ‘dry’} \rrbracket = \lambda x \lambda e \exists s [\text{dry}(x)(s) \wedge \text{RESULT}(e) = s]$

- (8) a. Odežda vysušila-s’.
clothes dry-ANTICAUS
‘The clothes dried’
b. Odežda byla vysuše-n-a { * dva časa | ^{OK} za dva časa}. (*stative / ^{OK}eventive)
clothes was dry-PPP-F two hours in two hours
‘The clothes were dried *for two hours / ^{OK}in two hours’

References

- Dowty, D. R. (1979) *Word Meaning and Montague Grammar: The Semantics of Verbs and Times in Generative Semantics and in Montague’s PTQ*. Dordrecht: Reidel.
Kratzer, A. (1994) On External Arguments. In E. Benedicto & J. Runner (eds.), *Functional Projections*. Amherst, MA: GLSA, UMass Amherst.
Kratzer, A. (1996) Severing the External Argument from its Verb. In J. Rooryck & L. Zaring (eds.), *Phrase Structure and the Lexicon*. Dordrecht: Kluwer Academic Publishers.
Kratzer, A. (2000) Building statives. *Berkeley Linguistics Society* 26, 385–399.
Levin, B., and M. Rappaport Hovav (1998) ‘Building Verb Meaning’. In M. Butt and W. Geuder (eds.), *The Projection of Arguments: Lexical and Syntactic Constraints*. CSLI publications, Stanford.
Ramchand, G. (2008) *Verb Meaning and the Lexicon: A First Phase Syntax*. Cambridge: CUP.