Università degli Studi Roma Tre
Roma 26-03-09

Elena Paducheva
elena708@gmail.com

EVENT STRUCTURE: TAXONOMY, SEMANTIC ROLES, ASPECT, CAUSATION

1. Decompositional semantic representations

More that three decades ago the idea of DECOMPOSITIONAL SEMANTIC REPRESENTATION (DSR) of a word was put forward (Ch. Fillmore, Ju. Apresjan, A.Wierzbicka, J.McCawley, G.Lakoff, R.Jackendoff e.a.). Example from Apresjan 1974: 108.

A *dogonjaet* B (A catches up B) =
'A and B move in one direction, A is behind B, the distance between A and B diminishes'.

A bit later GRAMMATICALLY ORIENTED DSRs came into being, aiming at explaining morphosyntactic behavior of a word – structures uniting information about TAXONOMY, SEMANTIC ROLES, ASPECT and CAUSATION (Dowty 1979, Wierzbicka 1980).

"Since verbs individuate and name events <…>, theories of predicate decomposition are often taken to be theories of the basic EVENT TYPES." (Levin, Rappaport Hovav 2005: 70).

An example from Fillmore 1970 – why *hit* and *break* behave differently:

(1) a. The boy *broke* the window with a ball; b. The boy *hit* the window with a ball.

(2) a. The window *broke*; b. *The window *hit*.

The answer is that *break* is a change of state verb, while *hit* belongs to a class of verbs involving contact: *hit* and *break* are verbs of different VERB CLASSES.

Two different semantic classifications of verbs are widely known.

1. There are traditional lexical classes – let's call them THEMATIC classes (see Wierzbicka 1987 on English speech act verbs; Levin 1993 on English verbs; about Russian verbs see Babenko 2001, Shvedova 2007). Thematic classification distinguishes: verbs of MOVEMENT, EXISTENCE, PHYSICAL IMPACT, TREATMENT, PERCEPTION, COGNITION, SPEECH, EMOTION, VOLITION, POSSESSION, PHYSIOLOGY, verbs of SOUND, etc.

2. On the other hand, there are Vendler's ASPECTUAL classes (STATES, ACTIVITIES, ACCOMPLISHMENTS, ACHIEVEMENTS), see Vendler 1967, Dowty 1979, Wierzbicka 1980, Jackendoff 1991, Paducheva 1996 and many others. Vendler's classes have grammatical relevance; so it stands to reason to call them (taxonomic) CATEGORIES (T-CATEGORIES).

Thematic and category classifications are independent of one another.

In Dowty 1979 and many other postvendlerian classifications accomplishments and achievements are split into agentives and non-agentives. Only then we arrive at an important category ACTION, missing among Vendler's classes: agentive accomplishments and agentive achievements are called ACTIONS (we have *написать* <письмо> 'write a letter', *vyigrat'* < *gonki*> 'win <the race>', etc.). Non-agentive achievements (*простудиться* 'catch cold') are called HAPPENINGS; non-agentive accomplishments (*растаять* 'thaw') are called TELIC PROCESSES. Non-agentive activities (*kipet'* 'boil') are called NON-TELIC PROCESSES.

Agentivity has direct aspectual correlations. Cf. the verb *okruzhat'* 'surround' – when agentive, it is an accomplishment, when non-agentive, it is a state:

(3) a. Мальчик показывает белогвардейцам фокусы, и, пока те смотрят его выступление, красные *окружают* станцию и потом занимают ее. 'The boy presents tricks to the white guardians, and while they are watching the performance the reds *surround* the station and then occupy it' (example from National corpus of Russian, http://www.ruscorpora.ru).

b. Dachu *okruzhajut* lesa 'Forests *surround* the dacha'.

The role of the T-category in lexical semantics is similar to that of part of speech in grammar.

Meaning is flexible and context dependent; REGULAR POLYSEMY (Apresjan 1974) is widespread. Thus, not only MEANING but also MEANING CHANGE must be accounted for with the help of DSRs.

2. «Lexicographer» – a semantic database of Russian verbs and a theory of event structure

I'll speak about decompositional semantic representations contained in the Database of Russian verbs «Lexicographer»: http://www.rusling.narod.ru (see Kustova, Paducheva 1994, Kustova 2004, Paducheva 2004), the main researcher – Galina Kustova. The database is conceived as a realization of a certain THEORY OF EVENT STRUCTURE.

The lexical entry in the DB «Lexicographer» is exemplified by the lexeme VYTERET' 1.2 'wipe' (a LEXEME is a word taken in one of its meanings, see Melchuk 1974).

Lexical entry of a verb in the database is divided into several domains. The domains are: Argument structure, T-Category, Decomposition, Thematic class, Aspect, Legend.

Let's begin with the ARGUMENT STRUCTURE of VYTERET' 1.2, see Fig. 1.

VYTERET' 1.2 'wipe dry <the dishes, one's hands>': *X vyter Y* (*Z-om*) '*X* wiped *Y* (with *Z*)'

Variable	Morphosyntax	Rank	Semantic role	Thematic class
X	Subject	Center	Agent	Person
Y	Object	Center	Patient	physical entity: with a surface
(Z)	Instrumental	Periphery	Instrument	physical entity
W	—	Off Screen	Theme	liquid / substance

Fig. 1 Argument structure for *vyteret'* 1.2.

A verb describes an event. Each participant of the event is represented by a VARIABLE – a Latin letter, which functions as a Name; a participant is called this name in the Decomposition. This is the 1st column. The second column – MORPHOSYNTATIC REALIZATION, i.e. syntactic POSITION of the participant (Subject, i.e. Nominative case; Object, i.e. Accusative; Other cases; prepositional phrases – PPs). The third column is called COMMUNICATIVE RANK (Croft 1991, Testelec 2001: 420). Three ranks are distinguished: Center (for participants occupying syntactic positions of Subject and Object); Periphery (for Instrumental case and Prepositional Phrases); and Off Screen. This last rank is ascribed to a participant that is not projected to the surface – as is the case with the participant W in the Argument structure of *vyteret'* 1.2. (Participant W shows itself in the lexeme *vyteret'* 1.1, which will appear later). The 4-th column – Semantic role (Agent, Patient, Theme, etc.) The 5-th column – Thematic class (person, physical object, body part, etc.; additional semantic specifications can be added, such as, e.g., "sharp edge" for the participant Instrument in a lexical entry for the verb *cut*).

NB the notion of diathesis: DIATHESIS is a correspondence between roles and their morphosyntactic realizations, see Xolodovich, Melchuk 1970. Causative alternation, for example, is a change of diathesis. Basically, diathesis is a role-POSITION and a role-rank correspondence. Participant W without morphosyntax (see Fig. 1) is kind of a riddle – this riddle will be solved when we come down to the lexeme *vyteret'* 1.1 and address diatheses.

T-CATEGORY has already been spoken about. The central domain in the lexical entry is DECOMPOSITION. Decomposition of a verb in the DB «Lexicographer» does not purport to be an exhaustive description of its lexical meaning. It is a SCHEMATIC decomposition: it represents exhaustively only GRAMMATICALLY RELEVANT (or, somewhat broader, STRUCTURALLY RELEVANT) aspects of the verb's meaning.

Decomposition is given not for a word but for a lexeme. The verb *vyteret'* has three lexemes: 'wipe' there are *vyteret'* 1.2 (about the dishes), *vyteret'* 1.1 (about the dust) and *vyteret'* 2 (about clothes on knees and elbows).

Lexicographer-type semantic decomposition (LSD) of a lexeme is a sequence of syntactically independent semantic components: each component is, basically, a predication. Decomposition is kind of scenario describing the event in question.

Components are divided into CATEGORIAL and THEMATIC.

See an example of Lexicographer type semantic decomposition in Fig.2.

VYTERET' 1.2 'wipe dry (the dishes /one's hands)': *X wiped Y* =

K0	**Initial state** | before t < MS *Y* was in a state: *Y had W on its surface*
K1	**ipso facto** *the state of Y was not normal*
K2	–
K3	–
K4	**Activity** | at t < MS X acted with the Goal in mind
K5	**Manner of action** | *X acted upon Y*; **ipso facto** *upon W* (: with the help of Z)
K6	**Causation** | K4 was causing K7
K7	**Process in Object** | simultaneous with activity; has limit: *W was being removed from the surface of Y*
K8	**Result** | new state of Y came about & holds at the MS: *Y has no W on its surface*
K9	**Entailment** | *the state of Y is normal*
K10	**Implication** | *there is no W on the surface of Y*; **ipso facto** *W does not exist*

Fig.2. Decomposition of *vyteret'* 1.2.

Abbreviations and comments. MS – moment of speech (in the context of an utterance MS can be replaced by some other moment of reference). Result (of the activity of the Agent) is a state that corresponds to the Goal of the Agent, once it is reached. (So Goal need not be explicated – it coincides with the Result.) Result may correspond to the final state (= LIMIT) of a telic process *in* the Object (or *with* the Object; namely, a process which the Object participates in).

The domain LEGEND shows how different lexemes of a word are related to one another. Each lexical entry begins with EXAMPLES and ends with a COMMENTARY.

3. Event structure: taxonomy and semantic roles

3.1. **Categories**. Decompositions obey a certain FORMAT – different verb classes have different decomposition formats (DFs): all verbs of the same category have the same DF.

Verbs of Action are characterized by the following configuration of components:

(1) K4. **Activity** | X acted with the Goal in mind
K6. **Causation** | this caused
K8. **Result** | new state came about & holds at the MS.

This configuration is present in the decomposition of such verbs as *vyteret'* 'wipe', *разрезать* 'cut <the water melon>', *выстирать* 'wash', *построить* 'build', *покрасить* 'paint <the roof>', *сварить* 'boil <an egg>', *выкопать* 'dig out' etc.

There are different kinds of actions. Their decomposition formats differ from one another. But configuration (1) is present in all formats for actions.

3.2. **Thematic classes**. Category components constitute the CATEGORY FRAME of the decomposition. Thematic components are inserted in different places of the category frame. If we replace, e.g., the concrete state *sleep* – by its natural hyperonym PHYSIOLOGICAL

STATE we are able to identify *razbudit'* as a verb belonging to the thematic class PHYSIOLOGY verbs. For *vyteret'* 1.2 'wipe' its thematic class TREATMENT is substantiated by the following configuration:

(2) K0. **Initial state**| the (functional) state of Y was not normal /desirable
K8. **Result**| the (functional) state of Y is normal /desirable.

Other verbs of treatment – *жарить* 'stew', *варить* 'boil', *гладить*, 'iron'. Decompositions provide a semantic basis both for category and thematic classification of verbs.

3.3. Meaning shifts – how they can be presented as operations on LSDs.

3.3.1. Deagentivization, a CATEGORY SHIFT.

(3) a. Ivan *razbudil* menja grubym pinkom [*razbudil* 'woke up' – **action**]
Ivan$_{NOM}$ *wake*$_{PAST}$ me$_{ACC}$ rude$_{INSTR}$ kick$_{INSTR}$
'Ivan *woke* me up with a rude kick.'

b. Zvonok v dver' *razbudil* menja [*razbudil* 'woke up' – **happening**]
ringing$_{NOM}$ in door *wake*$_{PAST}$ me$_{ACC}$
'The ringing of the doorbell *woke* me up.'

Templates (#3a) and (#3b) below present two abbreviated LSDs of the verb *razbudit'* (corresponding to its different lexemes; T-category of the lexeme and thematic classes of the participants are given in brackets; components in parenthesis are optional).

(#3a) X *razbudil* Y [action : ordinary] =

K0. **Initial state**| before t < MS Y was in a state: *Y slept*
K4. **Activity**| at t < MS X acted with the Goal in mind [X is a PERSON]
K5. (**Manner of action**| acted upon Y: applying Z)
K6. **Causation**| this was causing [causation as a process] / caused [causation as event]
K7. (**Process in Object**| synchronous; telic)
K8. **Result**| new state of Y came about & holds at the MS: *Y does not sleep* **March 26, 2009**
K9, K10. **Entailment, Implication** | —

(#3b) X *razbudil* Y [happening] =

K0. **Initial state**| before t < MS Y was in a state: *Y slept*
K4. **Causer**| X took place [X is an EVENT]
K5. **Manner of action**| —
K6. **Causation**| this caused [causation as event]
K8. **Effect**| new state of Y came about & holds at the MS: *Y does not sleep*
K9. **Entailment**| —
K10. **Implication**| this is bad for Y

The difference between action and happening lexemes consists in that:
1) In the template of a causative verb of action the Causer (see component K4) is the activity of the goal-setting Agent: 'X [PERSON] acted with the Goal in mind'; while in the template of a verb of happening the Causer is an event: 'X [EVENT] took place'.
2) Component Manner of action, though optional, is present in the semantics of *razbudit'*-action. In the template of a happening the parameter Manner of action looses its sense.

Optionality of the Manner of action component in the semantics of agentive *razbudit'* (also *otkryt'* 'open', *razbit'* 'break', *razrushit'* 'destroy') is responsible for the easiness with which these verbs acquire happening interpretation: happening is an event type with no volitional agent. Not so with *vyteret'* 'wipe': *wipe* has Manner of action as an obligatory component. Or take the verb *razrezat'* 'cut': cutting presupposes the use of an instrument with a sharp edge, specific movements on the part of the Agent and, thus, a volitional Agent.

In Levin, Rappaport Hovav 1995: 103 the opposition is introduced of VERBS OF MANNER <of action> (such as *lock, cut, sweep*) and VERBS OF RESULT (such as *close, break*, which

specify only the resulting state). Verbs of manner (of action) specify the activity of the Agent; the Agent's intentions and evaluations, instruments s/he uses, etc. They do not deagentivize.

There is another type of non-agentive subject of a causative verb. This subject appears in the context of the event type called "Happening with the subject of responsibility":

(4) Vanja razbil maminu chashku <nechajanno> 'Vanja broke mummy's cup <inadvertently>'.

The Causer is not the subject X but something that happened to X not because he wanted it. The Causer is non-specified. Decomposition format for *razbit'* 'break <unvoluntary>':

(#4) *X razbil Y* [happening with the subject of responsibility] =

K0. **Initial state** | before t < MS Y was in a state*: Y functioned in a normal way*
K1. **Exposition** | *X was doing something in the vicinity of Y*

K4. **Causer** | something happened to X (: *X acquired or lost contact with Y*)
K6. **Causation** | this caused [causation as event]
K8. **Effect** | new state came about & holds at the MS: *Y is broken / doesn't function normally*

K9. **Entailment**| —
K10. **Implication** | X caused damage; X bears responsibility for the damage

Happenings tend to have negative consequences. If it is something that happened to a person this person is responsible for the damage. Note that implications are cancelable.

Such verbs as *prolit'* 'spill', *porvat'* 'tear', *rassypat'* 'scatter', *peregret'* 'overheat' have the same format as *razbit'* 'break <unvoluntary>'.

3.3.2. Combined CATEGORY and DIATHETIC shift.

(5) a. *zapolnit'* 1.1: X *zapolnil* Y Z-*om* 'X filled Y with Z' [action] –

Ja *zapolnil* kotel vodoj 'I *filled* the boiler with water'; Mat' *zapolnila* shkafy saxarom, mukoj i drugim prodovol'stviem 'Mother *filled* the shelves with sugar, flour and other stuff.

b. *zapolnit'* 1.2: Z *zapolnil* Y 'Z filled Y' [process] –

Voda *zapolnila* kotel 'Water *filled* the boiler'. Bezobraznye natjurmorty *zapolnili* inter'ery naspex postroennyx kvartir 'Ghastly still-lifes *filled* the interior of quickly built apartments'.

Compare argument structures of *zapolnit'* 1.1 and *zapolnit'* 1.2.

Variable	Morphosyntax	Rank	Semantic role	Thematic class
X	Subject	Center	Agent	Person
Y	Object	Center	Location	container/physical object: has volume
Z	Instrumental case	Periphery	Theme	Mass

Fig. 3. Argument structure of *zapolnit'* 1.1 'X filled Y with Z'

Variable	Morphosyntax	Rank	Semantic role	Thematic class
Z	Subject	Center	Theme	Mass
Y	Object	Center	Location	container/physical object: has volume

Fig. 4. Argument structure of *zapolnit'* 1.2 'Z filled Y'

Two changes take place: 1) change of diathesis (Agent X goes Off screen and the Theme Z occupies the Subject position – in the Center); 2) a category shift: from action to process.

3.3.3. Combined DIATHETIC and THEMATIC shift (a verb changes diathesis & thematic class).

(6) a. *vyteret'* pot so lba 'wipe sweat from the forhead' [*vyteret'* 1.1, REMOVAL; ANNIHILATION];
b. *vyteret'* posudu 'wipe the dishes' [*vyteret'* 1.2, thematic class – TREATMENT].

In the template of *vyteret'* 1.1, see Fig. 5, participant W occupies the position of the Object, its semantic role is Theme, and the thematic class of *vyteret'* 1.1 is REMOVAL. Lexeme *vyteret'* 1.2 (see Fig. 6 = Fig.1) is a derivate of *vyteret'* 1.1 (the derivation consists in the change of diathesis); the Object position is occupied by the participant Y, Location-Patient, participant W is Off stage, and the thematic class of *vyteret'* 1.2 is TREATMENT. This is how change of diathesis results in a change of the thematic class.

This demonstrates the role of the parameter rank in the LSD. Object position expresses "aboutness": *wipe* 1.1 is ABOUT participant W, which is annihilated; so the thematic class of *wipe* 1.1 is ANNIHILATION ; *wipe* 1.2 is ABOUT participant Y (dishes), which changes its functional state, and the thematic class of *wipe* 1.2 is TREATMENT.

A COMMENTARY is here at place – W exists only while it is on Y; this fact explains annihilation component in the semantics of *wipe*: annihilation is a consequence of removal.

(a) *vyteret' sljozy* 'wipe tears' (wipe 1.1) [REMOVAL; ANNIHILATION]

Variable	Morphosyntax	Rank	Semantic role	Thematic class
X	Subject	Center	Agent	Person
W	Object	Center	Theme	liquid / substance:
Y	s + Gen	Periphery	Location	physical entity: with surface
(Z)	Instrumental	Periphery	Instrument	physical entity

Fig. 5. Argument structure of *vyteret'* 1.1.

(b) *vyteret' posudu* 'wipe the dishes' (wipe 1.2) [TREATMENT]

Variable	Morphosyntax	Rank	Semantic role	Thematic class
X	Subject	Center	Agent	Person
Y	Object	Center	Location-Patient	physical entity: with surface
(Z)	Instrumental	Periphery	Instrument	physical entity
W	—	Off Screen	Theme	liquid / substance

Fig. 6 (= Fig. 1). Argument structure of *vyteret'* 1.2.

The same mechanism is responsible for ambiguity of the verb *vymesti* 'sweep':

(7) a. *vymesti* dvor 'sweep up the yard' [*vymesti* 1.2, thematic class – TREATMENT];
b. *vymesti* musor 'sweep up litter' [*vymesti* 1.1, thematic class – REMOVAL];

The shift in example (7) is kind of METONYMY: you may pay attention either to the yard (in the prominent Object position) or to sweepings in the yard. The same with the verb meaning 'wipe' in example (6) and many others verbs (cf. *ispravit'* 'correct'; *correct a document* [TREATMENT]; *correct a mistake* [ANNIHILATION], see Apresjan 1974: 206).

A similar relationship between diathesis and thematic class in the example from Fillmore 1977 about loading the truck with hay: in *load the hay* the thematic class of the verb *load* is MOVEMENT (of hay); in *load the truck* it is CHANGE OF STATE (of the truck). Thematic class of the verb depends on what participant occupies the position of the Object, i.e. is in the Center.

4. Event structure: aspect

It is a challenge for «Lexicographer» – to predict, on semantic grounds, i.e. within the LSD, whether an agentive verb would behave as an accomplishment or achievement.

Accomplishments can undergo imperfectivization – in the following sense. A derived Ipfv of an accomplishment is also an accomplishment – but viewed in a SYNCHRONOUS PERSPECTIVE. Accomplishments describe a situation that has an internal limit in its development, and the limit is approached successively, step by step. A test:

(1) a. otkryval-otkryval [Ipfv], i otkryl [Pfv] [accomplishment];
b. *zamechal-zamechal [Ipfv], i zametil [Pfv] [achievement].

Usually, if both Manner of action is specified and the component «Process in the Object: simultaneous with the action of the Subject» are present in the LSD then the event described by a verb can be looked upon from two perspectives, see the decomposition of *vyteret'* 1.2, Fig.2: specified manner of action and simultaneity of the Subject's activity with the Process in the Object guarantees the progressive meaning of the derived imperfective of *vyteret'* 1.2.

A derived Ipfv of an achievement is either a perfective state, see example (2), or a tendency, see example (3) (note the absence of Manner of action specification):

(2) Ja *ponjal* 'I've understood' – Ja *ponimaju* 'I understand' [perfective state].

(3) John *vyigral* 'John won' – John *vyigryvaet* = 'most probably, John will win' [tendency].

On the other hand, there are several different semantic sources of momentaneity (Paducheva 2004: 477–480, e.g., 'Process in the Object: non-simultaneous with the activity'.

Take the verb *бросить* 'throw', which lexicalizes causation of movement by an initial impulse: the activity of the Agent gives rise to a process that takes place when the activity is already behind; this is the so called BALLISTIC MOVEMENT (Wierzbicka 1988: 365, Rappaport Hovav 2008). Analogous temporal delay of the Process in the object characterizes such verbs as *взорвать* 'explode', *отравить* 'poison', *убить* 'kill'.

5. Event structure: causation

The last facet of event structure is causation. Fig.2 seems to imply that causation is an indispensable component in semantic decompositions. Now what about decausativization? Sentence (1b) is said to be the result of decausativization (causative alternation) of (1a):

(1) a. Vanja *razbil* okno
Vanja$_{NOM}$ break$_{PAST}$ window$_{ACC}$
'Vanja broke the window'
b. Okno *razbilos'*
window$_{NOM}$ break$_{SJA.PAST}$
'The window broke'

See Haspelmath 1993, Levin, Rappaport Hovav 1995. Semantically, decausativization in Russian and English is close to one another. In English it is a semantic derivation; in Russian decausative is one of many possible interpretations of the *sja*-form of a verb.

I take it for granted that in Russian derived decausatives exist only for those verbs that are non-agentive in their primary use (such as *utomit', rasstroit'*) or from those that can undergo deagentivization (such as *razbudit', razbit'*), see examples (3), (4) in section 3.

I argue that decausativization resembles passivization: the subject leaves its position in the Center and moves to the Periphery – wherefrom it can afterwards be deleted. Example.

(4) a. Bystraja ezda *utomila* moju loshad' 'fast ride *tired* my horse';
b. Moja loshad' *utomilas'* ot bystroj ezdy 'my horse *got tired* of fast ride'.

(#4.1) Y *utomil* X-a 'Y tired X' =

K1. **Initial state**| before t < MS X was in a state: *normal*

K4. **Causer**| at t event Y took place

K6. **Causation**| this caused

K8. **Effect**| (new state of X came about &) holds at the MS: *X is tired*

K8,9. **Entailment &Implication** | —

(#4.2) X *utomilsja* (*ot* Y-*a*) = 'X became tired (because of Y)'

K0. **Initial state**| before t < MS X was in a state: *normal*

K1. **Periphery causer**| at t event Y took place

K2. **Background causation**| this caused

K8. **New state**| new state of X came about & holds at the MS: *X is tired*

K9. **Entailment** | —

K10. **Implication**| Causer is not relevant

Transition from template (#4.1) to (#4.2) represents decausativization as a change of diathesis. In a diathetic shift participants change their syntactic positions and, consequently, COMMUNICATIVE RANKS.

In (#4.1), with a causative verb *utomit'*, the Causer occupies the position of the grammatical Subject – the first line K4 of the zone Center. In (#4.2) the Causer becomes a peripheral participant – so the two components – Causer and Causation – move from the Center to the Background. Thus, in (#4.2) the first line in the Center belongs to the participant Theme, which has now acquired the highest rank – Subject.

The Periphery causer and Background causation component are **optional**: they are included in the LSD of a verb in the context **of a sentence** on the condition that the syntactic position of the Periphery causer is filled by a PP. No background Causer in the sentence – no causal components in the meaning of the decausative. In fact, a non-obligatory participant cannot be Off screen. In the presence of the Periphery causer the Implication is blocked.

Still there are causationless event types: *появиться* 'appear', *исчезнуть* 'disappear'.

6. Conclusion

The DB Lexicographer has proved itself to be a source of event structure representations containing information about thematic class, argument structure, aspect and causation. It is a source of explanations, predictions and generalizations (such as compatibility and non-compatibility with time adverbials). At the same time, LSDs can be used for description of meaning shifts of different kind. Here are the main points.

1. Format of definition can be looked upon as an approach to formalization of the notion of category. Thus, LSD predicts the category. Thematic class of a verb was demonstrated to be deducible from its LSD and dependent on the verb's diathesis in a predictable way.

One reservation about ARGUMENT REALIZATION as deducible from semantic decomposition (the main issue in Levin, Rappaport Hovav 2004). The set of semantic roles IS determined by the decomposition. While perspective, i.e. distribution of communicative ranks among participants, seems to be an independent input for argument realization rules: rank is to some degree independent of semantic role and constitutes an independent input information for the rules that determine argument realization.

2. There are several parameters that characterize the meaning of a verb: Category, Thematic class, Argument structure, or Diathesis. It turns out that exactly these parameters undergo change in the course of semantic derivation. In many cases meaning difference between lexemes can be looked upon as a difference in the value of these parameters. Example with the verb meaning 'wipe' (lexemes *vyteret'* 1.1 and 1.2) demonstrates change of Diathesis and Thematic class (TREATMENT *vs.* REMOVAL); in Fillmore's example with hay loading – MOVEMENT *vs.* CHANGE OF STATE.

Example with the lexemes of the verb *zapolnit'* 'fill' demonstrates change of Category (lexeme *zapolnit'* 1.1, action and *zapolnit'* 1.2, process) and change of diathesis (*Ja zapolnil kotel vodoj – Voda zapolnila kotel*), while their thematic class remains unchanged – CONTACT WITH THE SURFACE.

3. Several types of causation are to be distinguished: foreground causation (as a process and as an event) and background causation. A separate case is pseudo-causation: IPSO FACTO, i.e. entailment.

The verb *zapolnit'* 1.2 'fill', process, demonstrates an event structure described with the help of a causative verb but with causation missing. There are two processes that constitute the event of filling Y with Z. One is the process in Z – it moves; another is the process in Y – it becomes filled with Z. The second process is not caused by the first (as is the case with ordinary actions): these two processes are just different ways of looking at one and the same event (situation). In Lexicographer this relationship is described by means of a connector IPSO FACTO. This is a kind of entailment relation, but an entailment relation "at the heart" of decomposition. So it deserves special attention. Movement is more basic, but it is not movement that measures the event (and licenses the form of Pfv) but the volume of the boiler.

References

Atkins, Kegl, Levin 1988 – *Atkins B. T., Kegl J., Levin B.* Anatomy of a Verb Entry: from Linguistic Theory to Lexicographic Practice // International Journal of Lexicography. Vol. 1. No. 2. 1988. P. 84–126.

Dowty 1979 – *Dowty D. R.* Word Meaning and Montague Grammar. The Semantics of Verbs and Times in Generative Semantics and in Montague's PTQ. Dordrecht (Holland): Reidel, 1979.

Faber, Mairal Usón 1999 – *Faber P., Mairal Usón R*. Constructing a lexicon of English verbs. Berlin: Mouton de Gruyter, 1999.

Fillmore 1977 – *Fillmore Ch. J.* The case for case reopened // Syntax and Semantics. Vol. 8. N. Y. etc., 1977. P. 59–81.

Haspelmath 1993 – *Haspelmath M.* More on typology of the inchoative / causative alternations // B. Comrie, M. Polinsky (eds). Causation and Transitivity. Amsterdam; Philadelphia: John Benjamins, 1993.

Jackendoff 1990 – *Jackendoff R. S.* Semantic Structures. Cambridge etc.: MIT Press, 1990.

Kustova 2004 – *Кустова Г.И.* Типы производных значений и механизмы языкового расширения. М.: ЯСК, 2004

Kustova, Paducheva 1994 – *Кустова Г. И., Падучева Е. В.* Словарь как лексическая база данных // Вопросы языкознания, 1994, № 4. С. 96–106.

Levin 1993 – *Levin B.* English Verb Classes and Alternations: A preliminary investigation. Chicago: Chicago UP, 1993.

Levin, Rappaport 1995 – *Levin B., Rappaport H. M.* Unaccusativity: At the syntax-lexical semantics interface. Cambridge, Mass.: MIT Press, 1995.

Melchuk, Xolodovich 1970 – *Мельчук И. А., Холодович А. А.* К теории грамматического залога // Народы Азии и Африки. 1970. № 4. С. 111–124

Paducheva 1996 – *Падучева Е. В.* Семантические исследования: Семантика времени и вида в русском языке. Семантика нарратива. М.: Языки рус. культуры, 1996.

Paducheva 2003 –*Paducheva E.* Is there an "anticausative" component in the semantics of decausatives? Journal of Slavic Linguistics, v. 11, N 1, 2003, 173–198.

Paducheva 2004 – *Падучева Е.В*. Динамические модели в семантике лексики. М.: Языки славянской культуры, 2004.

Rappaport Hovav 2008 – *Rappaport Hovav M*. Lexicalized meaning and the internal temporal structure of events //Susan Rothstein (ed.) Theoretical and Crosslinguistic Approaches to the Semantics of Aspect. John Benjamins: Amsterdam 2008, 13-42.

Vendler 1967 – *Vendler Z.* Linguistics in Philosophy. Ithaca, N. Y.: Cornell Univ. Press, 1967.

Wierzbicka 1980a – *Wierzbicka A.* Lingua mentalis. Sydney etc.: Acad. Press, 1980.

Wierzbicka A. English Speech Act Verbs: A Semantic Dictionary. Sydney etc.: Acad. Press, 1987.

Wierzbicka A. The Semantics of Grammar. Amsterdam; Philadelphia: John Benjamins, 1988.

Ю.Д.Апресян. Фундаментальная классификация предикатов. // Отв.ред. Ю.Д.Апресян. Языковая картина мира и системная лексикография. М.: Языки славянских культур, 2006, 75-109.

Зализняк Анна А., Левонтина И.Б., Шмелев А.Д. Ключевые идеи русской языковой картины мира. М.: ЯСК, 2005.