Principles of Systematic Lexicography[1]

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For Sue Atkins from an admirer

Up till quite recently there has been a gap between lexicography and linguistic theory. Moreover, in some quarters lexicography was looked down upon as a purely practical enterprise unworthy of scholarly interest. I am convinced, however, that sound lexicography can only be based on sound · linguistic theory and that recent theoretical developments are of paramount importance for practical dictionary making.

There are five principles inherent in modern linguistic theory that are of immediate relevance to systematic lexicography and may help to bridge the gap between the two:

1) The reconstruction of the "naive" (language) picture of the world, or the pattern of conceptualizations underlying lexical and grammatical meanings of the given language.

2) The unification of grammatical and lexicological studies within what may be called an integrated linguistic description, or a fully coordinated description of dictionary and grammar. Such a description requires that grammatical rules should be geared to the entries of an "integrated dictionary" and that the entries of such a dictionary should be sensitive to grammatical rules[2].

3) The search for systematicity in lexicon as manifested in various classes of lexemes – lexicographic types, lexico-semantic paradigms, regular polysemy, and the like (a breakthrough into lexical macrocosm).

4) The emphasis on meticulous studies of separate word senses in all of their linguistically relevant properties (a breakthrough into lexical microcosm, or "lexicographic portrayal"; a good example is Fillmore and Atkins 1992).

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[2] For details see Apresjan 1995a: 21-27; for a more extensive treatment see Apresjan 1995b: 8-241 and Apresjan 2000.

5) The formulation of rules governing the interaction of lexical and grammatical meanings in the texts (the so-called projection rules, semantic amalgamation rules and the like).

Below I shall briefly outline each of the five principles.

1. Reconstruction of the "naive", or language picture of the world.

One of the most fascinating manifestations of a specific "world-view" are the so-called obligatory meanings, i. e. meanings which a certain language *forces* its speakers to express no matter whether they are important for the essence of their messages or not. After F. Boas and R. Jakobson it has become customary to oppose grammatical and lexical meanings as obligatory and non-obligatory. Grammatical meanings, e.g., number in English substantives, are claimed to be obligatory in the sense that they must be expressed every time when the speaker uses the respective part of speech. For example, in the phrase *Telephone is a useful invention* the noun *telephone* is used in the singular, although quantity is absolutely immaterial for the essence of the speaker's thought. What is actually spoken of is not the number of concrete objects but a certain technical way of conveying messages. By contrast, lexical meanings were presumed to be optional in the sense that they are expressed only when there is actual communicative need for them.

Research of the last decades has shown that the opposition of grammatical and lexical meanings is not so sharp. Some elements of lexical meaings have also been demonstrated to be obligatorily and quite systematically expressed.

For instance, Russian forces its speakers, whenever they talk of locomotion, to specify the manner of locomotion (walking, flying, crawling and so on), although it may be irrelevant for their thought. In particular, the idea of 'a certain living being having left at the point of observation a certain place' is expressed in good Russian by the phrases *Sobaka vyshla iz konury* 'The dog walked out of its kennel', *Ptitsa vyletela iz gnezda* 'The bird flew out of its nest', *Zmeia vypolzla iz nory* 'The snake crawled out of its hole', *Ryba vyplyla iz grota* 'The fish swam out of the grotto'. On purely logical grounds the verb *pokinut'* 'to leave' seems to come closer to the required meaning, yet the phrases *?Sobaka pokinula konuru* 'The dog left its kennel', *?Ptitsa pokinula gnezdo* 'The bird left its nest', *?Zmeia pokinula noru* 'The snake left its hole', *?Ryba pokinula grot* 'The fish left the grotto' are at least doubtful. They sound unmotivatedly elevated with regard to the required meaning or else express an entirely different idea of 'leaving a certain place *for good*'.

In this respect Russian is opposed to French where the idea at issue is uniformly expressed by the same verb *sortir: Le chien est sorti de sa niche, Le serpent est sorti de son trou* etc. Only when it is necessary to emphasize the way of leaving a certain place does French allow to specify it by adding an adverbial phrase like *en marchant, à la nage* etc. English seems to be intermediate between Russian and French. The required idea can be quite idiomatically rendered by the verbs *to walk, to fly, to crawl, to swim,* specifying the ways of locomotion in precisely the same way as Russian does (see the English glosses above). On the other hand, one can freely resort to the indiscriminate verb *to leave,* which comes closer to the French way of thinking: *The dog left its kennel, The bird left its nest, The snake left its hole, The fish left the grotto.*

The same predilection of Russian for specifying the *way* things are done can be further substantiated by the vocabulary of spatial position. Russian forces its speakers, when talking about space orientation of certain physical bodies with regard to some other bodies, to specify the way they are positioned (e.g., whether they stand, lie or hang). Cf. *U okna stoial Ivan* 'John stood at the window', *Na stene viseli kartiny* 'Some pictures hung on the wall', *Knigi lezhali v uglu* 'The books lay in the corner'. What the speaker actually *means* to communicate may be limited to the idea of 'to be placed, to be located somewhere'. This idea is prototypically rendered in Russian by the verb *nakhodit'sia.* Yet the phrases *U okna nakhodilsia Ivan, Na stene nakhodilis' kartiny, V uglu nakhodilis' knigi* would be odd or at least non-idiomatic.

French is again opposed to Russian because in similar circumstances it does not make any difference between the ways objects are positioned in space. It uses the neutral verb *se trouver* or the equally neutral construction *il y a*, unless it is necessary, for some reason or other, to specify their spatial positions. English is again intermediate between Russian and French, allowing for both forms of expression.

The *language picture of the world,* including language specific meanings, is thus the first keynote of systematic lexicography.

2. The unified, or integrated theory of linguistic description.

Every complete linguistic description is ultimately made up of a grammar and a dictionary. It is reasonable to expect that these two documents should be mutually adjusted to each other, i. e. coordinated with regard to the types of information included and the formal devices used to record them.

Unfortunately, up till quite recently these natural principles have not been clearly formulated, much less adhered to. Originally dictionaries and grammars

were produced by different people. The result was basically discordant grammars and dictionaries that did not give a coherent picture of the language at large. Below I shall quote one of the most intriguing examples of such a discrepancy.

English grammar has always recognized (cardinal) numerals as a part of speech in its own right, distinct from nouns and adjectives. Indeed, their morphological, derivational, syntactic and semantic properties are very different from those of true nouns and adjectives. (a) In such prototypical uses as *five books, twenty five, room five, to divide <to multiply> five by five* and some others they can have no number marking — the basic morphological category of genuine nouns. (b) Derivationally they are set off from nouns and adjectives by such patterns as '*X + teen*', '*X + ty*', '*X + th*', '*X + fold*', as in *fifteen, fifty, fifth, fivefold.* (c) Syntactically they require that the nouns they combine with have the plural form, as in *five books.* They can also form the multiplicative construction *five by five* featuring a unique meaning of the preposition *by.* Prototypical nouns and adjectives have neither of these properties. (d) In co-occurring with one another they form a specific concatenated construction with an additive meaning: *twenty five* = '20 + 5'. Semantically this construction is entirely different from the typically substantive or adjectival constructions conjoining two nouns or adjectives, like *cannon-ball, computer system, dark blue, English-Russian* and so on.

Within a scientific description of English, classing numerals as nouns or adjectives in the dictionary is bound to play havoc with the grammatical rules geared to genuine nouns and adjectives if we apply the rules literally. However, there is virtually no comprehensive dictionary of British, American, Australian or any other variety of English that has the grammatical label "num". In a host of most influential dictionaries numerals are labelled either as nouns or as adjectives. Most inconsistently many of them include an entry for *numeral,* with the definition 'a word <a name> denoting <expressing> a number', and some of them even quote *cardinal numerals* as an example.

As can be seen from this account, traditional grammar and dictionary at this point are glaringly incompatible. Insistence on the necessity of *integrated* linguistic descriptions, with perfectly coordinated dictionary and grammar, becomes thus the next major principle of systematic lexicography.

3. Lexical classes.

The vocabulary of any language has several principles of lexeme grouping at its disposal, of which I shall briefly discuss lexicographic types and lexico-semantic paradigms.

3.1. Lexicographic types.

I use this term to refer to a group of lexemes with a shared property or properties, not necessarily semantic, which are sensitive to the same linguistic rules and which should therefore be uniformly described in the dictionary. I shall exemplify this concept with the classes of factive and putative predicates. Both of them will be narrowed down to the subclasses of verbs denoting mental *states* (not processes or actions).

Following Vendler 1972, the label of "factive" is assigned to verbs *to know* *<to understand, to guess, to remember,...>* *(that P)* and similar predicates which govern propositions denoting facts[3]. All of them are decomposable into semantic structures with the sense 'to know' at the bottom and presuppose the truth of the subordinate clause. That means that irrespective of whether the knowledge of P is asserted or denied, P always remains true. Such sentences as *He knew that he was under police surveillance* and *He didn't know that he was under police surveillance* are alike in asserting that he was under police surveillance[4].

· The label of "putative" is assigned to verbs *to think <to believe, to consider, to find, to hold, to doubt,...>* *that P* and similar predicates which denote opinions. Opinions, unlike knowledge, are not necessarily true. In other words, it cannot be deduced either from the sentence *He thought that he was under police surveillance*, or from the sentence *He didn't think that he was under police surveillance* whether he was in fact under surveillance or not.

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3 In accordance with the treatment of knowledge in theoretical studies and the lexicographic description of the verb to know in major dictionaries I distinguish propositional knowledge (I know that he has come) from knowledge-acquaintance (Do you know Sam?), knowledge-familiarity (He knows French literature very well) and some other types of knowledge. All these uses of to know are considered to represent different lexical meanings (different senses, different lexemes) of the verb. In this article only propositional knowledge is at issue.

4 In P. Kiparsky and C. Kiparsky 1971: 345 where the notion of factivity was first introduced prototypical factive predicates are exemplified with a different series of words – adjectives like (It's) significant <odd, tragic, exciting> (that P), and verbs like (It) suffices <amuses (me), bothers (me)> (that P). I side with Z. Vendler in ranking to know as a prototypical factive predicate.

Both groups of verbs share the common feature of all statives noted in Vendler 1967: 99-103, namely, a specific relation to the idea of duration. It manifests itself above all in the inability of *to know <to understand, to guess, to remember,...>* (*that P)* and *to think <to believe, to consider, to find, to hold, to doubt,...> that P* to occur in the progressive tenses (in the senses under consideration). Indeed, the phrases **When I entered he was knowing <understanding, guessing> that the meeting had been cancelled* or **When I entered he was believing <considering, doubting> that the meeting had been cancelled* are highly ungrammatical.

On other points factive and putative statives differ from one another. All of their formal differences are quite systematic, i. e. semantically motivated, so that two well-defined and consistently organised lexico-semantic classes emerge. To make them accessible to certain rules of grammar and other sufficiently general linguistic rules we have to posit two distinct lexicographic types which should be uniformly described throughout the dictionary. I shall exemplify these types mostly with the material of the verbs *to know* and *to think.*

There are a number of well-known and much discussed syntactic properties which distinguish factives from putatives. The most important of them is the ability of factives to govern an oblique question introduced by the *wh*-words like *what, who, which, where, when, how* and so on: *He knew what was in store for him <why his father kept silent, where to look for the mistake, how to do the job>.* Putatives do not govern oblique questions; in particular, they cannot replace factives in the above sentences.

The next syntactic peculiarity of *to know* and other prototypical factives is rooted in the fact that knowledge has a source, but not a reason. Therefore factives can govern nominal groups denoting sources of information and cannot subordinate adverbial modifiers of cause. Compare the well-formedness of *How do you know it?, I know it from the newspapers* and the ungrammaticality of **Why do you know it?*

By contrast, opinions have a reason, but never a source. Therefore putative verbs can subordinate adverbial modifiers of cause but not those denoting a source of information. Compare the well-formedness of *Why do you think so?* and the ungrammaticality of **I think so from the newspapers.*

Putatives allow of neg-transportion, with only a slight change of emphasis: *I didn't think he would cope with the task ≈ I thought he would not cope with the task.* With factives neg-transportion is impossible for semantic reasons: there is a fundamental difference between *I didn't know he had coped with the task ≠ I knew he had not coped with the task.*

Prototypical putative verbs denote all sorts of opinions, that is, evaluative judgements. Therefore most of them can in some way or other govern assessment constructions with the second complement denoting the essence of evaluation: *to think <to consider, to find> somebody young, to regard <to look upon> this marriage as a mistake* etc. For putatives the second complement is obligatory. Phrases like **I think him, *I consider him* (in the sense at issue) are ungrammatical.

At first sight factives like *to know* and *to remember* are also able to form this construction: *I knew <remember> her young.* However, the similarity is purely superficial. Phrases like *I knew her young* feature a different syntactic construction and a different lexical meaning of the verb. The second complement in this case does not fill in any semantic valency of the verb but fulfills the function of a co-predicative dependent. Syntactically it is optional, and its semantic relation to the verb is entirely different from that of the putative verbs. *I knew her young* means 'I knew her at a *time* when she was young'. This reference to time is totally alien to putatives. On the other hand, the construction at issue changes the lexical meaning of the verb *to know* from propositional knowledge (*I knew that she was young*) to that of acquaintance (*I knew her at the time when she was young*; see footnote 3). This is as much as to say that factives cannot be used in assessment constructions typical of putatives.

Let us now look at the combinatorial potential of the two lexicographic types at issue. Factive verbs freely co-occur with positive evaluation adverbs like *well, perfectly well*, and so on. To qualify knowledge in this way is just to emphasize its truth. Cf. *I know that you are against rigid measures ≈ I know perfectly well that you are against rigid measures*. Putatives in such contexts are absolutely ruled out: phrases like **I think perfectly well that you are against rigid measures* are totally ungrammatical.

In their turn, putative verbs co-occur freely with truth-adverbs like *correctly, rightly* and the like: *He rightly thought that it would be pointless to continue the conversation.* The respective phrases with factives are pleonastic and therefore ungrammatical: propositional knowledge cannot be wrong by definition.

There is at least one more formal feature which distinguishes factives and putatives – their prosodic and communicative properties. Curiously enough these have been almost totally neglected in theoretical studies, not to speak of dictionaries.

Factive words convey information about the real state of things. Therefore they can bear a strong phrasal accent (the so-called main phrasal stress) and serve as the rheme of the utterance, as in the phrase *I ↓knew she would marry*

him, I ↓remember how it all ended. There is a rational motivation for it – it is pragmatically and psychologically reasonable to call the addressee's attention to the undoubtedly true information by phonically accentuating it.

Putative words express somebody's opinion about something which may be either true or false. Therefore they are never marked off by the main phrasal stress and are usually located in the thematic part of the utterance. The only type of phrasal stress they can bear is the so-called logical, or contrastive stress marking the contrastive rheme of the utterance, as in the sentence *Do you ↑↑believe you are under police surveillance, or do you ↓↓know it?*

These distinctions are so strong that they occur even within a single word if it happens to have a factive and a putative sense. Note the difference in the interpretation of the verb *to understand* in such sentences as *I ↓understand he is in trouble* (He *is* in trouble) and *I understand he is in ↓trouble* (I am doubtful about whether he is in trouble or not and am asking for information rather than asserting anything).

These differences carry over to all sorts of factives and putatives, in particular, to factive and putative adjectives and adverbs. For instance, a written sentence like *His son is a real gangster* is homographic and conceals two different propositions. The first is *His son is a ↓real gangster* (robs people and engages in all sorts of criminal activities, i. e. 'belongs to the class Y and has all its essential properties', factive). The second is *His son is a real ↓gangster* (naughty, disorderly, misbehaving, i. e. 'resembles an object of class Y but lacks its crucial property', putative).

3.2. Lexico-semantic paradigms.

The division of vocabulary into multiply intersecting lexicographic types is the most important but not the only manifestation of the systematic character of vocabulary. Another noteworthy principle of lexeme organization is their grouping in lexico-semantic paradigms – compact word classes with the common core meaning and predictable semantic distinctions.

An interesting type of lexico-semantic paradigms are groups of converse terms. As is well known, such terms denote the same situation but assign different syntactic ranks to its actants and may therefore enforce different theme-rheme articulations of the utterance. For instance, the verbs *to buy, to sell, to pay* and *to cost* denote a four actant situation with two human participants, X (recipient) and Y (source), and two objects, A (thing or service) and B (money), which they exchange. *To buy* assigns the highest syntactic rank to X, the second – to A, the third – to Y and the fourth – to B. The verb *to sell*

assigns the highest rank to Y, and shifts X to the third place, while keeping intact the status of A and B. The verb *to pay*, on the contrary, preserves the ranks of X and Y but swaps those of A and B, making B the second ranking complement of the verb and shifting A to the fourth place. The verb *to cost* raises A to the highest rank and places B second, while X is ranked third. Y becomes syntactically inexpressible though it is fully preserved semantically: if something *cost* me a thousand pounds, that means there was someone whom I paid the sum.

A remarkable principle of vocabulary organization is that for every fragment of reality which is socially important language tends to develop as many converse verbs as are necessary to raise a step or more the rank of every actant. The same holds true of the lexico-semantic paradigms of substantives naming the actants of a many-actant situation; consider the nouns *buyer, article (goods), seller* and *cost* as (semantic) derivatives of the verb *to buy*, or the nouns *physician, patient*, and *illness* as (semantic) derivatives of the verb *to treat* (in the medical sense).

Lexico-semantic paradigms, like grammatical paradigms, allow to predict all of their potential members on the basis of more general schemes underlying the given paradigm. For paradigms of de-verbal actant substantive derivatives this general scheme (which may be called a semantic paradigm) consists of the set of semantic roles for the given verb. For instance, as is clear from the foregoing discussion, the semantic roles for *to buy* are recipient (agent), object, source (counteragent), and second object. The degree of completeness of a lexico-semantic paradigm is an objective measure of systematicity of the respective fragment of lexicon.

To sum up, the third principle of systematic lexicography is the requirement that all salient *lexical classes* should be fully taken into account and uniformly described in a dictionary in all of their linguistically relevant properties.

4. Lexicographic portraits.

To follow up the example considered in the preceding section, it should be noted that not all of the factives and not all of the putatives can be expected to display the prototypical properties of those two lexicographic types.

For instance, the factive verb *to understand* which, as noted above, is reducible in the long run to the idea of 'to know', has no valency of an outward source of information. Understanding is a process too deep-seated in the mind of the subject himself and involving too much of his own activity. That accounts

for the ungrammaticality or the dubiousness of the sentences like **Where do you understand it from, ?I understand it from the newspapers.*

Various putative stative verbs display varying degrees of incompatibility with the idea of duration mentioned above. For instance, the verb *to think (that P),* which is a close synonym of *to believe* and *to consider,* can be used in the progressive tenses, especially when it is conjoined with a genuinely actional verb: *As I lay down thinking that my book was quite close to completion, I heard the phone ring.* Neither *to believe*, nor *to consider* can replace *to think* in such contexts.

The explanation is to be sought in the semantic structure of *to think* as a whole. The second basic sense of *to think* is purely actional: *I was thinking about tomorrow's session when the phone rang.* Now, closely related senses of a single word are apt to "grow" into one another and impart to the neighbouring senses at least some of their properties. In such cases deviation from the prototype becomes highly probable.

This adds a new dimension to the facts discussed so far. It appears that in lexical description one should give equal attention to the shared properties of lexemes (the problem of lexicographic types, or *unification*) and to what distinguishes them (the problem of lexicographic portraits, or *individuation*).

A lexicographic portrait is an exhaustive characterization of all the linguistically relevant properties of a lexeme, with particular emphasis on the semantic motivation of its formal properties. A certain property is considered to be linguistically relevant if there is a rule of grammar or some other sufficiently general rule (semantic rules included) that accesses this property. Once the given lexeme is viewed against the whole set of linguistic rules, an entirely novel point of observation is created. It highlights new facets of lexemes and helps to uncover a number of their lexicographically relevant and semantically motivated properties that have never been recorded in dictionaries.

Consider the word *alone* in the following two uses: 1) *The house stands on the hillside all alone, H e likes living alone;* 2) *Smith alone knows what happened, You alone can help me. Alone 1* is assigned the following definition in current dictionaries: 'by oneself, without the company or help of others'. *Alone 2* is defined as follows: 'and no other, no one else, the only one'.

It should be noted that *alone 1* and *alone 2* have different scopes. This is borne out by (a) the semantic contrast between *He lives there alone 1* and *He alone 2 lives there*; (b) the fact that *He lives alone 1* is grammatical while *?He alone 2 lives* is odd; (c) the fact that *He alone 2 knows the truth* is grammatical, while **He knows alone 1 the truth* is not. Yet the dictionary definitions cited

above fail to bring out this difference in the scopes. I propose the following more explicit definitions: *X does P alone 1* = 'X does P; one could expect that someone else would do P simultaneously or together with X; no one else does P simultaneously or together with X'; *X alone 2 does P* = 'X does P; there is no one else that does P'.

These definitions account for the following more formal properties of *alone 1* and *alone 2* which should be recorded in a dictionary of lexicographic portraits.

Syntactically *alone 1* is an adverbial modifier, that is, a verbal dependent (*Don't go there alone*), whereas *alone 2* is a noun attribute (cf. *Smith alone, you alone*).

Communicatively *alone 1* has no permanent value. It may mark off the verbal group as the theme (topic) of the utterance, as in *Living alone 1* [theme] *is a nuisance <a pleasure>*. On the other hand, it may serve as the rheme (comment), as in *The house stands on the hillside all alone 1* [rheme]. Unlike it, *alone 2* always marks off the nominal group to which it refers as the rheme of the utterance; cf. *Smith* [rheme] *alone 2 knows what happened.*

The above distinctions are mirrored in the prosodic properties of the two lexemes. *Alone 1* can bear the main phrasal stress, as in *The house stands on the hillside all ↓alone 1,* or it may be left phrasally unstressed, as in *He ↓likes living alone 1*. Contrary to that *alone 2* always bears the main phrasal stress, cf. *Smith ↓alone 2 knows what happened, You ↓alone 2 can help me.*

Insistence on exhaustive *lexicographic portrayal* is the fourth major principle of systematic lexicography.

5. Interaction of meanings in the texts.

The word "system", so much used in section 3, has two basic senses in technical language – taxonomic and operational. Systems in the taxonomic sense are all sorts of static classifications of objects, like the periodic table of chemical elements. The crucial feature of such systems is the reducibility of a large set of complex objects to a much smaller set of repetitive simpler components. Systems in the operational sense are sets of objects interacting with each other according to natural laws, like the system of blood circulation, or according to rules designed by humans to solve a certain task, like advanced information systems.

If one looks at lexicon from this point of view it turns out to be a sufficiently well organized system in both these senses. The vocabulary of a language is, above all, a very large set of lexemes. Their meanings are decomposable into a

much smaller set of simpler semantic components which give rise to a number of intersecting lexeme classes. Some of them have been illustrated above.

But lexemes are not only members of a taxonomic system. They have an operational dimension too, and start to live a full life in the texts where they interact with one another and with various grammatical items according to certain sufficiently general rules. In the remainder of this article I shall try to exemplify the nature of these rules and show their relevance for lexicography.

5.1. Interaction of lexical meanings.

Consider the following Russian phrase: *Petr khorosho okharakterizoval svoikh odnoklassnikov* lit. 'Peter characterized well his class-mates'. It is two-ways ambiguous. On the first reading it means that the speaker estimated highly the mastery of Peter's description of his class-mates. On the second reading it means that Peter spoke with praise about his class-mates.

The ambiguity is rooted in the semantic structure of the verb *kharakterizovat'* 'to characterize' and the scopes of the adverb *khorosho* 'well' within it. The Russian verb *kharacterizovat' A as X* can be defined as follows: 'to describe the essential properties of A and to assess them as X'. 'To describe' denotes an action, 'to assess' – evaluation. Both these components may fall within the scope of the adverb *khorosho*. The latter may serve as an adverbial modifier of *kharakterizovat'* and is then linked with the top sense 'to describe', yielding the interpretation of a good description. On the other hand, *khorosho* may fill in the third valency of the verb *kharakterizovat'* (i. e., valency X) and is then linked to the internal sense 'to assess', yielding the interpretation of a positive evaluation, on the part of Peter, of his class-mates.

Not every verb and not every evaluative adverb can produce this kind of ambiguity.

Consider the verbs *opisyvat'* 'to describe' and *otzyvat'sia* 'to estimate, to assess'. The phrase *Petr khorosho opisal svoikh odnoklassnikov* 'Peter described his class-mates well' can have only the first reading (that of the speaker praising the mastery of Peter's description), while the phrase *Petr khorosho otozvalsia o svoikh odnoklassnikakh* 'Peter estimated highly his class-mates' can have only the second reading (that of Peter praising his class-mates). These unambiguous interpretations can be accounted for by the fact that *opisyvat'* 'to descibe' is just a designation of action, with no evaluative component within it, while *otzyvat'sia* is a purely evaluative verb, with no idea of action behind it.

Let us now turn to other types of adverbs, for example, the adverbs (a) *prekrasno* 'perfectly', *velikolepno* 'splendidly', on the one hand, and (b)

polozhitel'no 'positively', *otritsatel'no* 'negatively', on the other. Even if combined with the verb *kharakterizovat'*, adverbs of group (a) produce only the first interpretation, while adverbs of group (b) produce only the second interpretation; cf. *Petr velikolepno okharakterizoval svoikh odnoklassnikov* 'Peter characterized splendidly his class-mates' VS. *Petr polozhitel'no okharakterizoval svoikh odnoklassnikov* 'Peter gave a positive evaluation of his class-mates'.

Note, that the same kind of ambiguity is inherent in such English phrases as *a good review* and the like: a *review* is a description accompanied by an evaluation, and the adjective *good* can have for its scope either the actional or the evaluative component in the semantic structure of this noun, yielding the two interpretations under consideration.

5.2. Semantic interaction of lexical and grammatical items.

I shall quote one more example to illustrate a different type of semantic amalgamation rules and a different type of interaction, namely, the interaction of lexemes with grammatical items.

The Russian verbs *brosat'* 'to throw', *kidat'* 'to throw' and *shvyriat'* 'to hurl' govern two sequences of forms – (a) the accusative plus the indication of direction (*brosat' kamni v prud <na dorogu, cherez zabor>* 'to throw (the) stones into the pond <onto the road, over the fence>') and (b) the instrumental plus the indication of object (*brosat' snezhkami v prokhozhikh* 'to throw snowballs at the passers-by'). The first government pattern features the prototypical meaning of the verb embodied in its dictionary definition: 'to let fly or to drop object A onto surface or into space B'. In the second government pattern the verb regularly acquires a richer meaning: it points to a desire to hit a target and therefore implies a greater swing of the arm.

Both groups of facts considered in section 5 should be entered in dictionaries in some form or other and commented upon where necessary, probably with succint explanations of how they arise. A dictionary which fails to record such facts (and this is the practice of most explanatory dictionaries of Russian in the case of *brosat'*) does the user a bad turn.

Attention to meaning interaction of various language units in the texts is thus the last important principle of systematic lexicography.

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