

## **Problems of Dictionary Grammar. The Zaliznyak Solution: A Boon or a Burden?**

### **Abstract**

In this paper the author discusses the necessity of dictionary grammars in (bilingual) dictionaries and assesses some of the existing dictionary grammars. He points out that a dictionary grammar has two main purposes: a) to give an organized, integrated view of the grammar of the language in question, and b) to economize space in the dictionary proper by equipping the lemmas and the equivalents with codes referring to the dictionary grammar. His main concern is: How sophisticated and economizing can such a code system be without representing a serious handicap for the common user? He demonstrates this dilemma by analyzing the code system for Russian devised by A.A. Zaliznyak. As this system has been widely used, it offers a good basis for a study of the actual question.

1. In February 1995 a symposium on grammar in bilingual dictionaries was arranged in Copenhagen under the auspices of The Nordic Association for Lexicography. Previous to that symposium the prospective participants received a paper from Henning Bergenholtz that took up the central questions of the theme (Bergenholtz 1994). In that paper Bergenholtz points out the advisability of dictionary grammar in bilingual dictionaries as well as the shortcomings observed in dictionary grammar practice to date.

2. Why is a dictionary grammar advisable in a bilingual dictionary?

Firstly, it offers a systematic view of the grammar of the language concerned. Bergenholtz contends that such a collection of grammatical information should be accessible in every bilingual dictionary. (We are here, of course, speaking of bilingual dictionaries of some volume, not pocket dictionaries and the like).

Secondly it is possible to refer from the lemmas and/or the equivalents to the dictionary grammar by means of a code system instead of supplying all grammatical information in the bilingual dictionary proper. This can save precious space.

The most common flaws of dictionary grammars are mainly:

a) Lack of consistency

b) Excessively much space is occupied by information that is superfluous for a user with elementary knowledge of the grammar in question. Relevant signals tend to disappear in a mass of banalities, cf. Bergenholtz (1994:118).

3. Maximal coordination and standardization of the models for dictionary grammar is a natural goal. At the same time one is aware of the fact that different languages need different solutions for the composition and presentation of dictionary grammars. Obviously, languages with more complex grammar, such as German og Icelandic, demand more elaborate dictionary grammar than e.g. Afrikaans or English. Furthermore, the principles of dictionary grammar for agglutinative languages are likely to be different from those for synthetic languages. This will even be true of closely related languages if their grammar is systematically different; a code system for a Russian and a Bulgarian dictionary grammar respectively must consider the grammatical complexity of the Russian substantive and the Bulgarian verb and the relatively "simple" temporal system of the Russian verb and the simplicity of the Bulgarian substantive, etc.

4. It is necessary to distinguish between morphological and syntactical information, as noted e.g. in the General Instruction for the Nordic Dictionary of Lexicography (Bergenholtz, H. and Svensén, B. 1994: 162). It is not surprising that the non-native user group of a dictionary of a language with relatively simple morphology often needs rather comprehensive syntactic information. The dictionary grammar in *The Advanced Learner's Dictionary of Current English* (e.g. of 1952) offers almost exclusively syntactical information in the shape of patterns for the combinability of verbs (Patterns 1–25, pp. xii–xxiv), some of them with up to 4 subpatterns. This paper will concern itself with morphological information.

Allow me to give two examples that manifest a widely different approach to the problem of supplying bilingual dictionaries with grammatical information. The Norwegian-English Dictionary of 1965 by Einar Haugen (ed.) has, indeed, a very short and simplified Norwegian grammar, but there are no references from the dictionary proper to this grammar; all information about the Norwegian entries is given directly in

the dictionary proper. The dictionary is monodirectional: There is no dictionary grammar nor grammatical information about the English equivalents (although Norwegians are in fact the bigger user group).

A Russian-Swedish dictionary (Davidsson 1976) is the genuine opposite of Haugen's dictionary in the matter of grammatic information. It includes a complete dictionary grammar for both source and target languages. Entries and equivalents are provided with codes that refer to these dictionary grammars.

A special and most interesting case is Harrit's Russian-Danish dictionary (Harrit 1992, 548 pp.) where the Russian entries are provided with codes referring not only to morphological tables in the appendix, but also to instructions regarding word formation (feminization of nouns denoting certain categories of persons, formation of names for the young of animal, derivation of abstract substantives from adjectives; verbal substantives, diminutives, augmentatives etc., etc.). In addition a serious attempt has been made to systemize and codify the numerous manifestations of the category of *Aktionsart*.

5. Another pair of dictionaries with widely different modes of serving grammatic information is, firstly, a Swedish-Icelandic Dictionary of 1982 with an extensive Icelandic dictionary grammar and consistent use of code references for that language. It is interesting to observe that even if there is a complete although somewhat compressed Swedish grammar in the front matter, there are no codes for the Swedish lemmas, all grammatical information is given in the dictionary proper. – Secondly, we shall consider a Norwegian-Icelandic Dictionary of 1987 with Directions for Use that constitute 3 pages for each user group. This can hardly qualify as a dictionary grammar even if there are reference codes for the Icelandic verbs, whereas all other information on the complicated Icelandic grammar is attached to the equivalents. The number of entries in these two dictionaries is approximately the same. In the Swedish-Icelandic Dictionary extensive use is made of examples to elucidate the combinability of both target and source words and expressions. In comparison to the Swedish-Icelandic Dictionary such information is rather scant in the Norwegian-Icelandic Dictionary.

6. These specimens should suffice to exemplify the absence of a unified approach in the field of contemporary dictionary grammars. The user is, as a rule, supposed to familiarize himself/herself with a new dictionary grammar system every time he/she starts using a new bilingual diction-

ary, even for the same language (cf. Russian-Swedish Dictionary 1976 and Swedish-Icelandic Dictionary 1982 for Swedish and the same Swedish-Icelandic Dictionary and the Norwegian-Icelandic Dictionary 1987 for Icelandic). This calls for painstaking coordination and rationalization that, to my knowledge, only Russian lexicography has attained to a considerable extent.

7. Russian grammar has a complexity that makes it a formidable task to devise a dictionary grammar with a reference code system that would not increase the student's confusion instead of straightening things out for him/her. It is, however, relatively easy to compose a pure reference grammar that envisages consultation of the grammar paradigms referred to in practically every instance of use. The Russian dictionary grammar and the code system created by A. A. Zaliznyak is more ambitious. The author expects the user first to use the so called *direct method*, i.e. to consult the grammar tables in the dictionary grammar and then to go over to the *analytic method*, which means gradually becoming able to "read" the codes without having to consult the dictionary grammar every time.

8. To elucidate the point let us compare the Icelandic dictionary grammar in the Swedish-Icelandic Dictionary 1982 and Zaliznyak's Russian dictionary grammar as propounded and realized in a Russian-Norwegian Dictionary (Berkov 1994).

The Icelandic dictionary grammar in the Swedish-Icelandic Dictionary is a pure reference grammar with typically synthetic codes. In many classes of the strong masculine declension there are paradigms with and without an -i in the dative singular. In some cases the dative -i may be absent in the indefinite form but requisite in the definite form (with a postpositional article); in others cases the situation is the other way round:

**Table I.** From Swedish-Icelandic Dictionary. Class 10, 11 and 12, pp. LVII-LVIII; Class 21, 22, p. LX In patterns 10 and 11 the definite article is supplied in parentheses.

10. *arm-ur* 'arm'

	sg	pl
N	arm-ur(-inn)	arm-ar(-nir)
G	arm-s(-ins)	arm-a(-nna)
D	arm-i(-num)	örm-um (örm-un-um)
A	arm(-inn)	arm-a(-na)

11. *skáp-ur* 'cupboard'

	sg	pl
N	skáp-ur(-inn)	skáp-ar(-nir)
G	skáp-s(-ins)	skáp-a(-nna)
D	skáp(-num)	skáp-um (skáp-un-um)
A	skáp(-inn)	skáp-a(-na)

12. a) *speking-ur* 'sage' b) *flokk-ur* 'party; group; flock'

Obestámd form se 10 (Dsg på -i) = For indefinite form see 10 (Dat. with -i).

Bestámt form se 11 (Dsg utan änd) = For definite form see 11 (Dat. without -i).

21. *stað-ur* 'place'

	sg	pl
N	stað-ur	stað-ir
G	stað-ar	stað-a
D	stað	stöð-um
A	stað	stað-i

22. a) *atburð-ur* 'event' b) *markað-ur* 'market'

	sg	sg	pl	pl
N	atburð-ur	markað-ur	atburð-ir	markað-ir
G	atburð-ar	markað-ar	atburð-a	markað-a
D	atburð-i	markað-i	atburð-um	mörkuð-um
A	atburð	markað	atburð-i	markað-i

The only difference between 21 and 22 is the absence of the dative -i in 21; the same is true for 10 and 11; class 12 has -i in indefinite forms but not in definite forms (Dative forms: *speking-i* 'a sage', but *speking-num* 'the sage'). The user can hardly be expected to memorize that the code 10 by *hestur*<sup>10</sup> 'horse' means that the word goes like *armur* (minus the u-shift); the code 11 by *hrókur*<sup>11</sup> 'rook' means that the word goes like *hestur* minus the dative -i and that the code 12 by *flokkur*<sup>12</sup> means that the word goes like *hestur* in the indefinite but like *hrókur* in the indefinite form. But it is a credit to Aðalsteinn Davíðsson's dictionary grammar that he is the first Icelandic lexicographer to take the dative -i into account; it had been ignored even by Icelandic defining dictionaries (and still is).

Altogether there are 97 inflexional classes in Davíðsson's dictionary grammar, some of them with a number of subclasses.

9. Now some examples from Zaliznyak's analytic dictionary grammar (transcription of Russian words as in Scando-Slavica, the annual periodical of the Association of Scandinavian Slavists and Baltologists):

stróit<sup>4a</sup> 'to build', rešít<sup>4b</sup> 'to decide', sušít<sup>4c</sup> 'to dry'. All these verbs belong to class 4. The personal endings are the same, the stress pattern is different. But the stress marks a, b and c have the same value in all classes, e.g.: kříknuť<sup>3a</sup> 'to shout', tonúť<sup>3b</sup> 'to sink, go down', obmanúť<sup>3c</sup> 'to deceive'.

The substantive (class 1):

*Neuters*: žaló<sup>1a</sup> 'sting', suščestvó<sup>1b</sup> 'being', mésto<sup>1c</sup> 'place', žerló<sup>1d</sup> 'muzzle; crater'; křéslo<sup>1\*a</sup> 'arm-chair', oknó<sup>1\*d</sup> 'window';

*Feminines*: škóla<sup>1a</sup> 'school', čertá<sup>1b</sup> 'line', straná<sup>1d</sup> 'land'; kúkla<sup>1\*a</sup> 'doll', knjažná<sup>1\*b</sup> 'princess', sosná<sup>1\*d</sup> 'pine-tree';

*Masculines*: kókon<sup>1a</sup> 'cocoon', slon<sup>1b</sup> 'elephant', sad<sup>1c</sup> 'garden'; djátel<sup>1\*a</sup> 'woodpecker', orěl<sup>1\*b</sup> 'eagle'.

Here, too, the letters a, b, c, d indicate the same stress pattern whatever the class may be; the asterisk \* indicates a "fugitive" vowel in forms with zero ending. Thus, the value of the small arabic letters and the asterisk is the same in all classes (zemljá<sup>2\*d</sup> 'land', jábločko<sup>3\*a</sup> 'a (little) apple', óbruč<sup>4e</sup> 'hoop', kryl'có<sup>5\*f</sup> 'porch', stat'já<sup>6\*b</sup> 'article', kop'ě<sup>6\*d</sup> 'spear', etc.)

10. I find the Zaliznyak dictionary grammar a well-composed and in many ways an ingenious one. It is based on his Grammar Dictionary (Zaliznyak 1977).

One of the most difficult aspects of Russian grammar is the numerous and frequent exceptions to the general rules and exceptions to the rules for exceptions. Zaliznyak deals with the problem partly by equipping the codes of the relevant words with a triangle, a signal of irregularity that the user must check up in the appropriate part of the dictionary grammar; partly by explaining the irregularity immediately in the dictionary proper. I would prefer the latter method to be applied to an even larger extent as in most cases the adduction of irregular forms does not claim more space in the dictionary proper than in the dictionary grammar; besides this is clearly a more friendly way since it exempts the user from two consultations instead of one. A reference to the dictionary grammar in the case of irregularities is more admissible where (a group of) irregular

forms can be categorized en bloc and thus better remembered and understood.

11. Inspired by the obvious advantages of an analytic code system in comparison to a "synthetic" one, I devised an Icelandic dictionary grammar based on the analytic principle (cf. Russian-Icelandic Dictionary). To demonstrate the results let me compare my coding of the aforementioned dative -i with that in the Swedish-Icelandic Dictionary:

armur  $m^{5a}$  'arm'; skápur  $m^{5b}$  'cupboard'; flokkur  $m^{5ab}$  'group, party'; ódaunn  $m^{5ba}$  'stench'; húnn  $m^{5ba,a}$  '(door) knob'; krókur  $m^{5b,a}$  'hook'; forkur  $m^{5a,ab}$  '(pitch)fork'

a = dative -i; b = dative zero, ab = indefinite dative with -i, definite dative without -i; ba = indefinite dative without -i, definite dative with -i.

Thus:

**Table II. Dative**

	Definite form sg	Indefinite form sg
a	armi	arminum
b	skáp	skápnum
ab	flokki	floknum
ba	ódaun	ódauninum
ba, a	hún, húni	húnum
b, a	krók, króki	króknum, krókinum
a, ab	forki	forkinum, forknum

This coding provides, I hope, expedient and necessary flexibility.

12. Now we come to the crucial question: Does the average student make proper use of the dictionary grammars available? Will he/she at best stay by the "direct" method without attempting to master the beneficial art of analytic decoding? If the answer is no, then a great deal of hard work has been in vain. To make sure I carried out a survey among

- 1) the students of Russian at the University of Oslo
- 2) the students of the military Russian course (FSES) in Oslo

- 3) the participants at an in-service course in Russian organized by my department at the University of Oslo, many of whom teach Russian in secondary schools
- 4) the teaching staff in Russian in my department.

Table III (see next page) shows the use of Zaliznyak's code system in Russian-Norwegian dictionary (RND). Results of a survey in the spring 1995.

### 13. Assessment of the survey.

The teaching staff in Russian is, of course, a special category. Six persons answered my questions.

- A. Three had not used Zaliznyak's system at all (aged 40, 57 and 58).
- B. Three had (aged 29, 29 and 34). Two of these had familiarized themselves with the analytic method, and the third – "partially".

In spite of few persons involved, the answers from the teachers provides us with a rather clear and unambiguous picture: The oldest teachers who had finished their studies when Berkov's Russian-Norwegian dictionary appeared in 1987 had not found it necessary or advisable to spend time on Zaliznyak's system, in contrast to the young people of 29 years of age who began their study of Russian about the year 1987 approximately. The 34 year old Mr. X who in this respect belongs to the older generation states that his acquaintance with Zaliznyak's system came about in connection with his teaching, not his own studies.

In the following statistical processing of the survey the teachers will be left out (see the next page).

There were 53 objects of the survey altogether. Of these 30 (56,6%) had made use of Zaliznyak's system some way or other. More than half of the 30 (16 persons, i.e. 30% of all participants) had made a serious attempt of decoding (the analytic method).

It is interesting to observe how the time element seems to be decisive for the users' appreciation of Zaliznyak. Not one of the first years students had tried to use his system. The same is true of the carefully selected pupils of the intensive but short Russian course at the Norwegian Defence Intelligence and Security School. Half of them (9) have used Zaliznyak's system, and of those only three (16,7% of the class) have aspired to decoding competence. It is also among the students of this course that we register the most negative attitude towards Zaliznyak's system on the whole.

Of the university 2nd year students 2 out of 7 have tackled decoding, whereas the corresponding figures among the more advanced students are 8 out of 13.

**Table III**

Students of first (1st) and second (2nd) year respectively; more advanced (Adv), IS = In-service course of Russian at the University of Oslo, october 1995  
MRC = The Military Russian Course (TS = Teaching staff in Russian)  
(Some participants did not answer all questions)

Categories	1st 6	2nd 7	Adv 13	MCR 18	IS 9	(TS) (6)	In sum 53 (59)
Use of RND for							5
a) more than 6 months	4	1					14
b) 6-12 months	1	2	1	9	1		16 (17)
c) 1-3 years		2	1	9	4	(1)	17 (21)
d) more than 3 years		2	11		4	(5)	17 (21)
I. Have you made use of Zaliznyak's dictionary grammar to an appreciable extent?							
YES	0	5	10	9	6	(3)	30 (33)
NO	6	2	3	9	3	(3)	23 (25)
II. If NO to question I, why not?							
a) Didn't try	5	2	2	5	3	(2)	17 (19)
b) Too complicated		0	1	4	0	(2)	6 (8)
1. For those 30 (33) who answered YES to I: Have you tried to master the <i>analytic</i> method?							
YES		2	8	3	3	(2)	16 (18)
NO		2	2	6	3		13
2. If NO to question 1, why not?:							
a) Didn't try		2	2	3	1		8
b) Too complicated		0	0	3	2	(1)	5 (6)
3. Does the Zaliznyak's system serve its purpose well?							
YES		4	9	5	5	(3)	23 (26)
NO			0	4	1		5
4. It is better to give all grammatical information in the dictionary proper				4	1		5
5. The Zaliznyak's system							
a) saves space		2	9	4	4	(1)	19 (20)
b) makes the grammar more lucid		2	7	2	3	(2)	14 (16)
6. Do you recommend the application of Zaliznyak's system in a new Norwegian-Russian dictionary?							
YES		3	9	5	4	(3)	21 (24)
NO		1		4	1		6
DON'T KNOW		1	1		1		3

Conclusion: The longer one uses Berkov's Russian-Norwegian dictionary the more imperative and evident becomes the need for dictionary grammar and the wish to avoid double look-ups through decoding.

14. It is no news to us lexicographers that the average dictionary user does not even read the most elementary introduction for use, let alone attempt the acquisition of more intricate code systems. At the same time the need for concise, compressed grammatical information is there, and considerations of space do not, as a rule, allow all relevant grammatical information to be placed in the dictionary proper. Such a solution has, as H. Bergenholtz points out (Bergenholtz 1994), the obvious disadvantage of massive superfluous information that will tend to obscure or hide more relevant information.

Shall we give up then or simply ignore the sluggishness of the users? If the lexicographer has done his job properly, it is up to the users to reap the fruits. If they don't, the worse for them.

15. That, of course, is not the right answer, this calls for action. It is a matter of urgency to abolish the deterrent chaos of numerous divergent solutions in favour of more user friendly standards. The use of dictionaries must become – and should have become long ago – an obligatory school subject, which should imply practical work with dictionaries as well as theoretical information.

16. It is most important to help the user get started. As an instrument for making decoding the Zaliznyak system easier, I have tried to give the student a somewhat simplified version of his dictionary grammar, a so-called "Mini-Zaliznyak" and an even more elementary ABC, a "Micro-Zaliznyak" for the fresh beginners is in course of preparation. Up to now too little experience has been gleaned to make any significant conclusions about the usefulness of such teaching aids. I hope to be able to present some results on that matter another time.

17. To sum up:

Dictionaries are the most widely used and most important teaching aid for language studies. It is of capital importance that they should be of high quality. At the same time, the students must be enabled to avail themselves of all the facilities offered by an advanced dictionary in-

clusive of an appropriate dictionary grammar, supplied as the case may be with a reference code system.

Two sets of measures are called for:

- 1) In order to improve the present chaotic situation, a plan for organizing and standardizing dictionary grammars should be initiated at as high level as possible. The educational system should be activated on a global scale to serve this extraordinarily important goal.
- 2) Likewise, educational systems round the world should engage in practical lexicography and the art of consulting a dictionary. As already mentioned, using dictionaries must become a school subject with appropriate teaching and practical training. This would pay off well.

As V. P. Berkov (1988:98) emphasized in Budapest 8 years ago: "... we can conclude that the work of further improvement in bilingual lexicography could and should be done under the aegis of UNESCO."

For that purpose lexicographers of all countries must unite.

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