# The German-Lower Sorbian Online Dictionary[1]

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*After the publication of a new and comprehensive Lower Sorbian-German dictionary in 1999, the urgent need for an active learner's dictionary has been widely felt. Some specifics of the sociolinguistic situation of Lower Sorbian must have direct impact on the conception of such a dictionary: For almost all speakers of younger generation German is the first and better known language. German-Lower Sorbian interference, a very small or only partially elaborated vocabulary, and an often defective command of grammar, especially of those parts of it lacking in German, is widespread. Since 2001 the Lower Sorbian Department of the Sorbian Institute works on a dictionary that tries to meet the requirements of that target-group. With respect to the fact that Lower Sorbian is highly endangered and there is no time to lose, all information is published on the internet as quickly as possible. In 2003 a first version of the online dictionary* Deutsch-niedersorbisches Wörterbuch *(DNW) was launched. At the present the DNW contains about 70,000 entries, but it will continually be extended and corrected; it is still considered a draft version. Apart from some technical background information, the paper gives an overview of the lexicographic description. In order to help to avoid typical L1-interferences and to actively use the minority language the dictionary offers, for example, additional information about the use of verbal grammatical and lexical aspect (Aktionsart). Also support verb constructions (so-called* Funktionsverbgefüge *in German), where direct translations of the German construction often lead to a non-idiomatic language usage, are taken into consideration. For a better integration of such and other important information, some new conventions have been introduced, hoping that the DNW will function as a learners' dictionary as well as a contribution to language documentation.*

## 1. Language situation and lexicographic conception

After the publication of a new and comprehensive Lower Sorbian-German dictionary in 1999 (Niedersorbisch-deutsches Wörterbuch 1999), the urgent need for an 'active' German-Lower Sorbian dictionary has been widely felt. The general situation of the very small and highly endangered Lower Sorbian language is really serious: a sociolinguistic survey conducted by the Lower Sorbian Department of the Sorbian Institute from 1993 to 1995 (Jodlbauer et al. 2001) has shown a dramatic decrease of speakers. At that time at most about 7,000 people with a varying degree of knowledge of Lower Sorbian were counted, nearly all of them older than 60 years of age. Actual data does not exist, but it is quite obvious that neither the number of speakers has grown since then nor has the quality of active language knowledge become better. So the latest attempts to revitalize the language, e.g. by way of the so-called project 'Witaj' (Lower Sorbian for 'welcome'; Norberg 2006), are really a last-minute fight against language death. In such a situation the Lower Sorbian Department sees its responsibility in language documentation as well as in preparation and passing-on of information useful for the improvement of one's knowledge of Lower Sorbian.

Some specifics of the actual sociolinguistic situation must have direct impact on the conception of an 'active' German-Lower Sorbian dictionary (in German: Deutsch-Niedersorbisches Wörterbuch – DNW). Only some members of the oldest generation have learned Lower Sorbian as L1. For almost all other speakers of Lower Sorbian German is the first and normally better known language. They have learned Lower Sorbian at school or under similar circumstances without normally getting a full command of the language. Various degrees of language knowledge usually occurring in L2-learning situations are found in today's community of speakers. German-Lower Sorbian interference, a very small or only partially elaborated vocabulary, and an often defective command of grammar, especially of those parts that are not known from German, is widespread. Despite the difficult

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circumstances under which the dictionary is being compiled, the DNW tries to take the above-mentioned specifics into account by giving additional and to some extent different information than usually found in dictionaries of small minority languages. Although an important function of the DNW is also its contribution to language documentation (many words and phrases are registered there for the first time) and language development (there is a huge amount of new vocabulary, e.g. terminology, in it), the main goal is to enable people to actively use Lower Sorbian.

The following requirements, important for any kind of active dictionary (cf. Zöfgen 1991: 2896), have been our guidelines while working on the DNW[2]: We wanted

- to do the disambiguation of the German headword as precisely as possible, but only to such a degree that different senses of the headword have different Lower Sorbian equivalents or sets of equivalents. If different senses of a German headword have the same Lower Sorbian equivalents or sets of equivalents, they are subsumed under one single translational equivalent. For a rough characterization of these senses, (quasi-)synonymous words or expressions are given, or short semantic descriptions, typical collocates (e.g. *Bier* 'beer' for *zapfen* 'to tap'), typical referents (e.g. *Kaffee* 'coffee' as one of the frequent *denotata* of *Brühe* '≈ slop'), or domains of usage (e.g. *Musik*);
- to offer additional syntagmatic information (mainly valency) in case of contrast L1-L2 (cf. § 3.2);
- to give a detailed description of the 'core' vocabulary;
- to offer information that helps to avoid 'predictable' L1-interference especially with respect to idioms and fixed phrases (cf. § 3.3);
- to present example sentences illustrating everyday language usage and offering information about typical contexts or collocations and about the usage of grammatical verbal aspect (cf. § 3.1).

In addition to the general issue of formulating ambitious goals without reaching them, from the beginning, we have had to fight with serious problems which under normal circumstances should lead one to abandon such a goal. Lower Sorbian has not yet been linguistically described in detail and great parts of the existing literature, although of only relatively small size, have not yet been systematically evaluated for grammatical or lexicographic description. Moreover, the practical usage of Lower Sorbian is highly unstable with respect to dialectal and other kinds of variation, so that often you have to ask yourself which word or which formal variant of a word should be taken into the dictionary. To summarize, there were many reasons to wait with compiling the dictionary until we could have had a broader basis for lexicographic description.

But the immediate needs caused by the language situation described above made very clear that the only lexicographic means which could arguably help to improve this situation was a comprehensive, detailed, and promptly compiled active dictionary. There wasn't any time for broader investigations – otherwise the results could only have been presented post-mortem. Some of the mother-tongue informants, over 70 years old and from different dialect areas, helping us in searching and judging lexical solutions, died during the last ten years, and in some cases it was impossible to find a qualified substitute. And because the two native speaker authors[3] of that generation also became older, it became clear that this dictionary will

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[2] It should be stated that these guidelines could only work in a sense of 'steady reminders'.

[3] The main author of the DNW is Manfred Starosta who also compiled the latest Lower Sorbian-German dictionary mentioned above. Another native speaker of Lower Sorbian, Erwin Hannusch, and the author of the

be the last one with direct active participation of the traditional Lower Sorbian L1-community.

Although the Lower Sorbian language community expects a dictionary to be a 'real book', with respect to the situation described above, we decided to publish all information on the internet as quickly as possible. In 2003 we launched the first version of the online dictionary with about 800 entries, which afterwards was continually extended and corrected. At the present the DNW (2003-2010) offers about 70,000 articles. Nevertheless it is still considered a draft version[4].

## 2. Technical conception

Only very rough information about the technical background of the DNW can be given in this article. The basis of the online version is a bilingual lexicographic description of Lower Sorbian in contrast to German that is completely encoded in XML[5] and part of a long-term project to achieve a full documentation of the vocabulary of Lower Sorbian. By encoding all data in XML, different resources can be systematically combined[6]. One XML-file exists for every entry, but for several tasks combined files can be generated. To transform the data into HTML or other types of output (e.g. PDF), XSLT[7]-stylesheets are used. The DNW-website itself (www.niedersorbisch.de) and the generation of the entries of the dictionary in HTML are based on the open source web application framework Apache Cocoon[8].

To illustrate how a small piece of information from the DNW looks in XML, the following extract shows the XML-data[9] of the Lower Sorbian equivalent for German *Schulbank* 'school bench'. The respective part of the entry in the DNW print version is shown above the XML-code example:

```
šulska ławka f 3
<aequiv typ="normal">
 <formerg_vor typ="Adj">
 <form>&#353;ulska</form>
 <paradigma>48</paradigma>
 </formerg_vor>
 <form>&#322;awka</form>
 <genus>f</genus>
 <paradigma>3</paradigma>
</aequiv>
```

present paper function as further authors of the dictionary. For the version for schools mentioned in § 2 Anja Pohontsch has been responsible, together with M. Starosta and E. Hannusch.

[4] Not all information presented here is implemented yet in all entries and in all respects. Work on the dictionary is still in progress.

[5] http://www.w3.org/TR/REC-xml

[6] There is, for example, an ongoing project to linguistically analyze and newly encode (XML) all available Lower Sorbian-German dictionaries. The outcomes of this project will also be presented on the DNW-website.

[7] http://www.w3.org/Style/XSL

[8] http://cocoon.apache.org

[9] All characters beyond ASCII are encoded as decimal numeric entities (e.g. &#228; for German <ä>); but it would meanwhile be possible to use the Unicode standard directly.

By explicitly encoding all types of information in XML, the DNW-data could serve for many kinds of linguistic investigations in the future. The code offers, for example, a good foundation for work on designation strategies, because the construction of expressions consisting of more than one element is structurally transparent (here: adjective plus following head-noun).

Actually the online dictionary consists of two versions: a full version that is the main subject of the current article and a special version for schools (Deutsch-niedersorbisches Schulwörterbuch – DNSW). The latter one, which is generated on basis of the same XML-file, is only partially integrated at the present due to a disagreement with the Sorbian publishing house about the pros and cons of the coexistence of printed and online versions of a dictionary. The version for schools is fully based on the DNW but – apart from some technical changes – adapted in mainly the following respects: (a) It is reduced to the main entries (macrostructure, about 10,000 entries instead of more than 70,000 of the full version), to the main senses, and equivalents. (b) With respect to the different users, there are additional and often different examples than in the DNW. The following screenshot shows the entry for *eilen* 'to hurry' from the DNSW that has one meaning only (just as the main version in this case), but other information is left out (e.g. the verbal lexical aspect (so-called 'Aktionsarten', cf. § 3.4 where the DNW-version is shown) or modified:
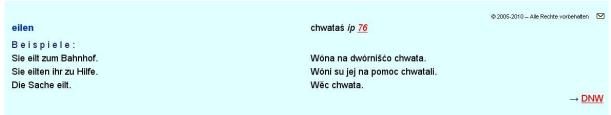


Figure 1. eilen

## 3. Some aspects of the lexicographic description

### 3.1. Example sentences, grammatical verbal aspect, and verbs of motion

The important function of examples illustrating the proper use of the words in everyday language in a bilingual learner's dictionary is widely recognized and accepted. The DNW therefore includes tens of thousands of example sentences, which are predominantly 'made-up-examples'[10]. They are not only typical instances of current language use showing frequently occurring collocations or phrases and information about valency (cf. § 3.2), but they also contain additional language material, which is important with respect to the documentary character of the dictionary (cf. § 3.5). A very important function of appropriate examples is, however, to illustrate the main uses of (grammatical) verbal aspect.

For people with a non-Slavic linguistic background, this grammatical category presents a major obstacle to a good, native speaker-like command of Lower Sorbian as a Slavic language. Usually information about the usage of verbal aspect is seen as a task for grammars only, and it is quite obvious that a dictionary is not the right place for an exhaustive description of this category. But for a learner's dictionary, there nevertheless seem to be good links from lexicon to grammar. For this reason we have introduced illustrative sentences that

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[10] Cf. Zöfgen (1991: 2898): 'There is no need to stress that 'made-up-examples' are clearly to be preferred to 'quoted examples', which are seldom prototypical and which are usually inappropriate as instances for generalization.'

are explicitly used to draw attention to the existence of verbal aspect and its main functionality. On the one hand, this is done by means of so-called diagnostic contexts, i.e. such contexts, where only one of the aspects can be used or where the aspectual opposition is neutralized. On the other hand, when, and this depends on the perspective of the Lower Sorbian speaker, it is possible to use the equivalent of the German verb in either aspect, often an indication is given as to the perspective, in which the German sentence has to be interpreted[11]. Some of these indications are standardized and always signal the same aspectual usage (e.g. *Usus* 'custom', *ist dabei* 'is doing', *jetzt gerade* 'at this moment', *die ganze Zeit über* 'the whole time' for imperfect aspect; *als Fakt* 'as fact', *ein Akt* 'one act' for perfect aspect). Others are understandable only out of context as *wird gerade gebacken* 'is being baked' and *fertiggebacken* 'has been baked' on the following screenshot (second meaning of *backen*):

**backen**

| | |
|---|---|
| **1.** *tr Backwaren herstellen* | pjac *ip 72* \|\| wupjac *p 72* |
| Sie bäckt gern. *(Usus)* | Wóna rada pjaco. |
| Ich habe dir einen Kuchen gebacken. | Som tebje tykańc wupjakł. |
| **2.** *intr der Backhitze ausgesetzt sein* | pjac se *ip 72* \|\| wupjac se *p 72* |
| Der Kuchen bäckt schon. *(wird gerade gebacken)* | Tykańc se južo pjaco. |
| Es dauert, bis das Brot richtig gebacken ist. *(fertiggebacken)* | To trajo, nježli jo se klěb wupjakł. |
| **3.** *eine Backeigenschaft besitzen* | pjac *ip 72* |
| Unser Backofen bäckt gut. | Naš pjac derje pjaco. |

Figure 2. backen

A lot of mistakes are usually made with the Lower Sorbian verbs of motion as well, because the Slavic distinction between two imperfective variants of these verbs, i.e. between a directed or determinate and an non-directed or indeterminate one, is also unknown from German. Therefore a similar convention as for verbal aspect is also used for these verbs, for example: *zielgerichtet* ('destination-orientated') points to a directional reading, *Fähigkeit* ('ability') directly names a typical usage domain of the indeterminate verb, and *hin und her* ('back and forth') is a contextual indication of the fact, that in that case a multidirectional moving from one place to another is referred to. The same applies to the following expression *kreuz und quer* ('crisscross').[12]

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[11] It is intended to improve this kind of indication by additionally offering more systematic information about the respective usage of verbal aspect. This could work by linking the different comments with a description of their diagnostic power and further description of the respective aspect. Such a procedure was already evolved and tested for an earlier lexicographic project in outline but is not yet implemented into the DNW (cf. footnote 16)

[12] Here and with respect to grammatical verbal aspect, there is some work left in favour of a systematic reorganization of the used expressions.

**laufen**

| 1. *sich zu Fuß fortbewegen* | *schnell* gnaś *ip 74 det*, ganjaś *ip 76 indet*; *normal gehend* hyś *p 92 det*, chójźiś *ip 78 indet*, gnaś *ip 74 det*, ganjaś *ip 76 indet* |
|---|---|
| Lauf nicht so! *(zielgerichtet)* | Nježeń tak! |
| Er lief, was er nur konnte! *(zielgerichtet)* | Wón jo gnał, což jo mógał! |
| Fahren wir mit dem Bus oder laufen wir? *(zielgerichtet)* | Jěźomy z busom abo žomy (pěšy) / ženjomy? |
| Den Weg zum See sind wir zu Fuß gelaufen. *(zielgerichtet)* | Drogu k jazoroju smy pěšy šli / gnali. |
| Auf diesem Weg läuft es sich gut. | Pó toś tej droze se derje žo. |
| Der Kranke konnte nur langsam am Stock laufen. *(Fähigkeit)* | Chóry jo mógał jano pómałem pśi pótykacu chójźiś. |
| Sie liefen von Amt zu Amt. *(hin und her)* | Wóni su ganjali wót amta k amtoju. |
| Die Spuren verraten, was hier im Schnee ging und lief und sprang. *(kreuz und quer)* | Slědy pśeraźiju, což jo tudy w sněgu chójźiło a ganjało a skokało. |
| Sie lief einen neuen Rekord. *(als Fakt)* | Wóna jo gnała nowy rekord. |
| Komm, laufen wir (beide) um die Wette! | Pójź, mej *se wubĕgujomej! |

Figure 3. laufen

A main goal of the additional comments on the use of these verbs is, as in the case of verbal aspect, to direct the user's attention to the existence and frequent use of this category because it has often been badly neglected in language education.

### 3.2. Valency

Information about valency is a must in active bilingual dictionaries at least in case of contrast between source and target language. In the DNW a valency pattern is normally only given for the non-subject elements of the verb. The case is named by a conventionalized number (e.g. [3] for the third case dative, [5] for the instrumental, in that case after the preposition *z* 'with': 'z [5]'). Usually an example sentence is additionally offered. As illustration the relevant parts of some entries from the print versions' manuscript are shown below.

> **verhindern** zajźowaś *ip 62* [3], zadoraś *ip 76* [3] – Wir konnten das Schlimmste ~. Smy mógli tomu góršemu zajźowaś / zadoraś.

Valency information is also given for nouns and adjectives if they behave differently than the German headword:

> **Abschied** rozžognowanje *n 36* z [5] – der ~ von der Mutter rozžognowanje z mamu

If the Lower Sorbian counterpart shows a different valency pattern also with respect to the subject position, an exclamation mark is given instead of an abstract valency notation. An example then shows how to build a Lower Sorbian sentence with the respective verb.

> **anekeln** žadaś se *ip 76* ‖ wót≈ se *p 75* [!] – Dieser Kerl ekelt mich an. Togo kjarla [G] se mě [D] žada.

Because the sentences serve as the only information about the concrete valency pattern here, in case of syncretism the respective part of sentence is marked as, for example, being a genitive [G] or dative [D]. In some cases, where German and Lower Sorbian valency correspond with each other (here: *auf* [4] = *na* [4]) but one could expect other solutions as well, an example gives confirmative information[13]:
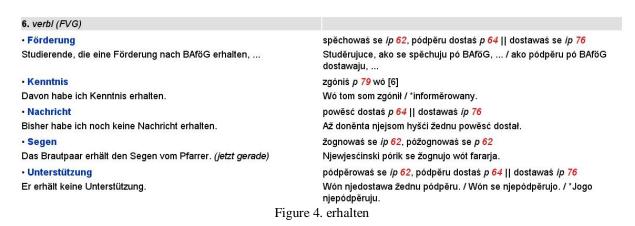
> **Antrag** *allg* póžedanje *n 36*; *als Bitte* pšosba *f 1* – Hast du schon einen ~ auf Beurlaubung gestellt? Sy póžedanje / pšobu na wuwólnjenje južo stajił?

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[13] The DNW can only give rough information on valency. There is a great need for further research.

### 3.3. Idioms and fixed phrases, especially German support verb constructions (*Funktionsverbgefüge*)

The only part of an entry that is not assigned to one of the meanings is, apart from references, the section for idioms. In the DNW we use the more general term 'Wendungen' instead of the narrower 'Phraseologismen' because the main function of this section is to group all kinds of fixed phrases which cannot be clearly related with a specific meaning together at the end of an entry.

Nevertheless, one type of fixed phrases, called 'Funktionsverbgefüge' (FVG) in German linguistics, is handled in a specific way. It is always the last meaning that is characterized as 'verbl[asst] (FVG)' ('lit.: faded meaning') when such constructions exist for a given verb[14]. In such fixed expressions consisting of a verb and a nominal element which represents the semantic core of the construction, the original meaning of the verb is 'semantically reduced' (in comparison with the main verb) in favour of the meaning of the entire phrase. In German these expressions (e.g. *einen Beschluss fassen* 'to make a decision', literally 'to grasp a decision') can often be used instead of almost synonymous verbs (here *beschließen* 'to decide') and are typical of a more formal style. The problem for learners of Lower Sorbian is that they often simply try to literally translate the German construction into the, in this respect less elaborated, minority language. In most cases a respective Lower Sorbian construction does not exist at all (e.g. for the German *Kenntnis erhalten* you have to use the verb *zgóniś* 'to come to know'), does not represent the best, i.e. in the dictionary first mentioned, solution (e.g. for *Anerkennung finden* you can use a passive contruction with *pśipóznaś* 'to appreciate' or the direct translation *pśipóznaśe namakaś*), or shows formal differences (e.g. *einen Rat geben*, i.e. the nominal element in the accusative vs. *do rady daś*, i.e. the nominal element as prepositional phrase (*do* 'to' plus genitive)). Having in mind these difficulties, it is also important information when the presence of a direct and idiomatically adequate translation in Lower Sorbian is explicitly attested (e.g. *Hilfe finden* 'to find help' = *pomoc namakaś*). The absence of such a description of these constructions used in German quite often would lead to an incorrect or at least non-idiomatic usage of Lower Sorbian. The following picture shows the FVG-sense of *erhalten* (main sense: 'to get'):

| **6.** *verbl (FVG)* | |
| --- | --- |
| • **Förderung** | spěchowaś se *ip 62*, pódpěru dostaś *p 64* \|\| dostawaś se *ip 76* |
| Studierende, die eine Förderung nach BAföG erhalten, ... | Studěrujuce, ako se spěchuju pó BAföG, ... / ako pódpěru pó BAföG dostawaju, ... |
| • **Kenntnis** | zgóniś *p 79* wó [6] |
| Davon habe ich Kenntnis erhalten. | Wó tom som zgónił / *informěrowany. |
| • **Nachricht** | powěsć dostaś *p 64* \|\| dostawaś *ip 76* |
| Bisher habe ich noch keine Nachricht erhalten. | Až doněnta njejsom hyšći žednu powěsć dostał. |
| • **Segen** | žognowaś se *ip 62*, póžognowaś se *p 62* |
| Das Brautpaar erhält den Segen vom Pfarrer. *(jetzt gerade)* | Njewjesćinski pórik se žognujo wót fararja. |
| • **Unterstützung** | pódpěrowaś se *ip 62*, pódpěru dostaś *p 64* \|\| dostawaś *ip 76* |
| Er erhält keine Unterstützung. | Wón njedostawa žednu pódpěru. / Wón se njepódpěrujo. / *Jogo njepódpěruju. |

Figure 4. erhalten

With respect to selection and definition of FVG we mainly follow VALBU (2004). This valency dictionary of German verbs registers a considerable number of these constructions on the basis of a rather narrow definition (p. 55). Additionally, we used some other lists prepared for didactic purposes by different authors[15]. In these lists (and there only implicitly) and in a

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[14] In the entry for the respective noun will be added a reference to the verb where the FVG is described.

[15] Mainly: http://www.dietz-und-daf.de/GD_DkfA/Gramminfo/txt_MII2/FVG-Liste2.pdf

range of other publications (e.g. Kamber 2008), one finds a wider definition of these support verb constructions. We therefore for practical reasons will not rely on a very restrictive understanding of these constructions, although in some cases it might be difficult then to decide whether a given construction should be listed as 'Wendung' or 'Funktionsverbgefüge'. It is also not intended to give a full inventory of possible FVG in German. The main goal of this part of an entry is to draw attention to the general difficulties with such constructions and to offer solutions for at least frequently used ones or rather an adequate strategy for handling this problem.

### 3.4. Lexical aspect (*Aktionsarten*)[16]

Another specific difference between German and Lower Sorbian is the much more frequent occurrence of lexical aspect and its existence as verbal derivational category in Lower Sorbian. This category indicates different phases (e.g. *zaspiwaś* 'to begin to sing') or gradations (e.g. *pśesoliś* 'to oversalt') of the basic meaning of the derivational basis. There can be no doubt that for an idiomatic command of Lower Sorbian good knowledge of this category, which is characteristic for all Slavic languages, is necessary. The lexicographic handling of the respective verbs, however, poses a serious problem because only few Lower Sorbian verbs of this type have a German counterpart as, for example, *versalzen* for the above-mentioned immoderative[17] lexical aspect *pśesoliś*. For this reason in German-Slavic dictionaries lexical aspect has been so far usually dealt with only in two cases: (a) they have been registered only for existing German equivalents, which leaves the majority of such words out of account; (b) they have been listed under the related German verbum simplex with additional information about the lexical aspect to which they belong (e.g. '*sich ärgern* ['to be angry' = Upper Sorbian *so hněwać*] exhaust[itiv] *so wuhněwać'*; Deutsch-obersorbisches Wörterbuch 1989-1991). In this case the verbs are not lost, but the offered information about the specific meaning is often insufficient for an active bilingual dictionary.

In order to integrate different *Aktionsarten* as completely as possible into the DNW, they are treated as sub-entries of the respective verbum simplex, where the main lexicographic description is found. Here the derived verbs are always assigned to the related basic meaning and are introduced by the abbreviation AA (for 'AktionsArt' in the print version) or by a more explanatory headline on the internet, where is explicitly mentioned that the German translations for Lower Sorbian examples often make use of other lexical solutions than the lemma itself or a morphologically or lexically (mainly with adverbial expressions as *ein wenig* 'a little/bit' or *leicht* 'gently; slightly') modified instance of it. On the screenshot below the idiomatic phrases *einen Schritt zulegen* 'to quicken one's pace' and *nicht Schritt halten können* 'not to be able to keep pace with' are used to translate the Lower Sorbian verbs *póchwataś* (attenuative; here: 'to hurry a bit') and *njedochwataś* (negative-resultative; here: *njamóc dochwataś*: 'not to be able to hurry enough'). Existing German equivalents as *versalzen* have also the status of a lemma in the DNW. At that place one will find a full description. The related sub-entry of the respective verbum simplex may only show a reference in that case.

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[16] This handling of the category of verbal lexical aspect has already been described in Bartels & Spiess (2002) in a similar way. The outcomes of an earlier project to compile a prototype of a German-Lower Sorbian online-dictionary of the basic verbal vocabulary, which has been subject of that article and which for several reasons could not been completely realized, are or will be integrated into the DNW to a great extent. Also the technical conception of that lexicographic project was basically already the same as for the DNW.

[17] This lexical aspect designates actions etc. that exceed the usual measure.

It is obvious that a great part of all German translational equivalents (words or phrases) of Lower Sorbian *Aktionsarten* would usually not be described under the related *verbum simplex*. While this is only a matter of convention in case of existing equivalent verbs (e.g. *versalzen*), it causes a serious problem when only greater (often idiomatic) expressions can give a proper translation of the lexical aspect. In these cases systematic integration into the dictionary would not be possible at all. The solution chosen in the DNW, which is mainly governed by the target language, seems the only possibility for including the Lower Sorbian lexical aspect into the dictionary systematically.
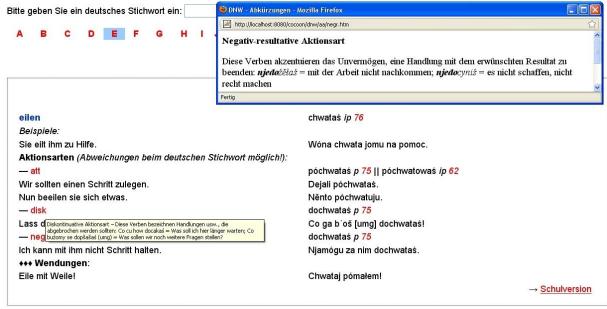


Figure 5. eilen

As can be seen on the above screenshot, an explanation of the abbreviations and the specific meaning of a given lexical aspect is offered by means of a 'popup window' (the abbreviations function as hyperlinks) and 'mouse over'-information in the online version of the DNW.

### 3.5. Word sense disambiguation, xyz, *

One of the most important means in order to offer sufficient lexicographic information in a bilingual learner's dictionary is a detailed differentiation of the senses of polysemous words. In the DNW different senses are usually presented to the extent that different German translational equivalents have to be used for them (cf. § 1). To establish the microstructure of a polysemous lemma is a delicate task and often the same word is semantically analysed in different ways and to a different degree in otherwise similar dictionaries. For the authors of the DNW, the most important goal was to offer a proper description for at least the main senses of a word, so that the typical user of the dictionary (cf. § 1) hopefully knows which Lower Sorbian equivalent to use in a given context. Knowing that this aim is not fully attainable for several reasons, we nevertheless hope to have made progress in this respect. This is illustrated in the following example, where the description in the DNW is compared with that in another smaller dictionary that was also explicitly intended as learners' dictionary:

**erfüllen**

| | |
|---|---|
| **1. (sich)** *(sich) verwirklichen* | dopołniś (se) *p 79* \|\| dopołnjowaś (se) *ip 62* |
| Sie erfüllte ihm jeden Wunsch. *(Usus)* | Wóna jo jomu kužde žycenje dopołnjowała. |
| Endlich hat sich sein Wunsch erfüllt. | Skóńcnje jo se jogo žyceńko dopołniło. |
| **2.** *Genüge tun* | docyniś *p 79* \|\| docynjaś *ip 76* |
| Er erfüllt seine Pflichten. *(n. akt. Präs.)* | Wón docynijo / docynja swóje winowatosći. |
| **3.** *innerlich ausfüllen* | *allg; zufriedenstellen* wupołniś *p 79* \|\| wupołnjowaś *ip 62*; *innerlich ganz einnehmen* napołniś *p 79* \|\| napołnjowaś *ip 62* |
| Eine innere Unruhe erfüllte ihn. | Nutśikowny njeměr jo jogo wupołnił / napołnił. |
| Die neue Aufgabe erfüllt ihn ganz. *(n. akt. Präs.)* | Nowy nadawk jogo kradu wupołnjujo / wupołnijo. |
| Neue Hoffnung erfüllte sie. | Nowa nažeja jo ju napołniła / wupołniła. |
| Er hatte ein erfülltes Leben. | Wón jo měł wupołnjone žywjenje. |
| Die Nachricht über den Tod ihrer Freundin erfüllte sie mit tiefer Trauer. | *Powěsć wó smjerśi swójeje pśijaśelki jo ju kradu roztužyła. |
| **4.** *räumlich einnehmen* | połniś *ip 77* \|\| napołniś *p 79* \|\| napołnjowaś *ip 62* |
| Der Duft von Weihrauch erfüllte die ganze Kirche. | Wóruchowa wóń jo napołniła cełu cerkwju. |

Figure 6. erfüllen

Wörterbuch Deutsch-Niedersorbisch 1990:

> **erfüllen** społniś *79 p*, dopołniś *79 p*, społnjowaś *62*, dopołnjowaś *62*; **sich ~** se dopołniś *79 p*, se dopołnjowaś *62*

Quite often a (sense of a) German headword does not have a Lower Sorbian equivalent that has the same meaning and/or the same range of usage but different translational counterparts which are contextually restricted and/or have a more specific meaning. In such cases a new convention has been introduced: the missing equivalent of the target language is replaced by the variables xyz and the range of usage of the different Lower Sorbian equivalents is illustrated by appropriate examples[18]. In the following example the fourth sense of *schießen* (main sense 'to shoot') illustrates a case typical of the use of the xyz-convention:

| | |
|---|---|
| **4.** *schnelle Bewegung* | xyz |
| Er schoss von seinem Stuhl in die Höhe. | Wón jo ze swójogo stoła zeskócył. |
| Das Auto schoss um die Ecke. | Awto jo smaliło / se šwyrnuło wokoło rožka. |
| Das Wasser schießt ins Tal. | Wóda leśi do doła. |
| Ihr schoss Röte ins Gesicht. | Wóna jo se zacerwjeniła ako rak. |
| Eben schoss mir ein Gedanke durch den Kopf. | Rowno jo mě skócyła myslicka do głowy. |
| Der Hecht schoss sofort in die scharfe Strömung. | Šćipjeł jo ned stśělił do malsnego tšuganja. |

Figure 7. schießen

Characteristic of such a xyz-situation is that in most cases a direct translation of the German example is not possible. With respect to the fourth sense of *schießen* = 'schnelle Bewegung / fast motion', it is only the last sentence, where one can use the Lower Sorbian equivalent *stśěliś* for the main sense of the German verb.

In other cases it is possible to offer a counterpart that is suitable at least in some frequently used contexts, whereas in other situations different or additional words should be preferred. The usage of the given equivalents is therefore restricted, which is clearly indicated by a following xyz. An example from the print version (manuscript) of the DNW shows this constellation:

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[18] What should be added to the online version of the DNW in the future is a systematic reference to those German headwords (entries) where the different Lower Sorbian equivalents in xyz-sections or marked with * function as regular equivalents and are therefore given additional information (original meaning, other example sentences, link to the inflectional pattern etc.). At the moment, where no Lower Sorbian-German dictionary is available online yet, there is no direct way to get such information.

> **Sachlage** situacija *f 5*, xyz – Die ~ ist aber eine andere. Situacija pak jo hynakša. Das machten sie in Unkenntnis der ~. To su cynili wobstojnosći / situaciju / staw wěcy njeznajuce. Er ist beauftragt, die ~ genau zu prüfen. Wón ma nadawk, wěcy / wobstojnosći kradu pśepytowaś.

In the present paper only a few of the possible constellations can be illustrated. But it seems that at least under the specific circumstances of German-Lower Sorbian translation, the xyz-convention can help to avoid overgeneralization without having to resign from a description; the latter 'solution', by the way, not being as unusual as it seems, because such 'difficult cases' are sometimes simply left out.

In connection with xyz another new convention should be mentioned that has been introduced to avoid overgeneralization, too. Very often the lexicographer has to decide, how many possible counterparts of a given L1-word should be listed as (more or less) general equivalents. The use of xyz leads to a more restrictive practice in this respect. But, on the other hand, the DNW should also be a contribution to language documentation and should therefore also offer words etc. used only in some specific contexts. Theoretically there could be a very fine-grained semantic description to handle this problem but this cannot be realized in the given situation and would, beyond that, perhaps cause confusion on the users' side.

A solution to this problem is the introduction of the asterisk * used as follows[19]: A (sense of a) German headword does have a Lower Sorbian equivalent. In specific contexts, however, it can be used alongside or has to be replaced by another equivalent marked by *. The basic condition for the use of the asterisk is that more or less general equivalents are given and that there is no such degree of their restriction that xyz seems to be justified[20]. On these grounds * is mainly used in the following situations:

Despite of the existence of general equivalents there is some usage where other words etc. are necessary for a correct or at least idiomatic translation, i.e. the general equivalent should not be used here.

> **Abendbrot** wjacerja *f 4* – Das ~ ist heute eine Stunde früher. Wjacerja jo źinsa góźinu pjerwjej. Sie essen ~. *Wóni wjacerjaju.

In the fixed expression *Abendbrot essen* 'to have supper' the direct translation *jěsć wjacerju* would be fairly non-idiomatic, because there is a particular verb for it: *wjacerjaś*.

In some contexts apart from the general equivalent there are other words etc. better (they are mentioned at first then) or also possible.

> **gern(e)** *kongruent* rad *m*, rada *f*, rado *n*, radej *Du*, raźi *Pl*; *inkongruent* rad(y) *indekl*; *Komp* lubjej – Das macht er ~. To rad / rady cyni. Sie tanzt ~. Wóna rada / rady rejujo. […] Ich trinke ~ und viel Kaffee. *Som taki kafejowy. / Pijom rad kafej a to wjele. Er isst ~ Schnitten *(auch zu Mittag)*. *Wón jo skibaŕ. / Wón rad skiby jě. […]

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[19] There is, of course, a long tradition in linguistics to use this symbol mainly for marking a language expression as ungrammatical or otherwise linguistically incorrect. It is possible that in future we will choose another symbol for the new convention used in the DNW to avoid misunderstandings.

[20] In the 'transitional zone' between the two clear cases (a) one equivalent or a set of equivalents only and (b) xyz only (no general equivalents at all) both of the two above-mentioned conventions (xyz, *) can be used besides equivalents. And there is some leeway to decide between the two. Usually xyz is used when there is a great variety of different equivalents whereas * is rather used for one or few 'exception(s)'.

In this extract from the entry for German *gern(e)* 'gladly etc.', where some information is left out [...], after some examples with the regular equivalent *rad* follow others, where another than the solution mentioned above would be better. Like in (a) there are particular lexical expressions for very specific meanings that could not be placed in an German-Lower Sorbian dictionary without the *-convention because no respective German lemma exists. The registration of adjectives like *kafejowy* '≈ being a great fancier of coffee' or nouns like *skibaŕ* '≈ a person who likes to eat (open) sandwiches at every opportunity' is not only important to cultivate a better knowledge of Lower Sorbian and to illustrate how the language 'works', but also for language documentation.

In other cases, especially when new vocabulary (e.g. terminology) is concerned, apart from a direct translational equivalent a paraphrase would be possible and in some situations even more adequate. Such translational alternatives are often added although they cannot serve as general equivalents:

**drucktechnisch** śišćarskotechniski *48* – ~e Probleme śišćarskotechniske / *śišć pótrjefjece problemy

In the above shown example the expression *śišć pótrjefjecy* 'concerning the printing' may substitute the loan-translation *śišćarskotechniski* 'typographical(ly)'.

## 4. Final remarks

The dictionary presented in the current paper is being compiled under special and to some extent unfavourable circumstances, which nevertheless could be considered typical of a lot of minority languages. But apart from all difficulties and shortcomings, which could clearly be seen at least against the background of the famous lexicographic tradition of 'great' languages, one can do useful work with limited means if the conception is adequate. Dictionaries can neither revitalize nor maintain a language. But they can offer the information one needs to learn it. And they also can show the potential a 'small' language has and could evolve, if it were maintained.

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