

Contexts of dictionary use

Carolyn Müller-Spitzer

Institut für Deutsche Sprache (IDS), R 5, 6-13, D-68161 Mannheim

E-Mail: mueller-spitzer@ids-mannheim.de

Abstract

To design effective electronic dictionaries, reliable empirical information on how dictionaries are actually being used is of great value for lexicographers. To my knowledge, no existing empirical research addresses the context of dictionary use, or the extra-lexicographic situations in which a dictionary consultation is embedded. This is mainly due to the fact that data about these contexts is difficult to obtain. To take a first step in closing this research gap, I incorporated an open-ended question (“In which contexts or situations would you use a dictionary?”) into the online survey (N = 684) and asked the participants to answer this question by providing as much information as possible. Instead of presenting well-known facts about standardized types of usage situation, this paper will focus on the more offbeat circumstances of dictionary use and aims of users, as they are reflected in the responses. Overall, the results indicate that there is a community whose work is closely linked with dictionaries and, accordingly, they deal very routinely with this type of text. Dictionaries are also seen as a linguistic treasure trove for games or crossword puzzles, and as a standard which can be referred to as an authority. While it is important to emphasize that the results are only preliminary, they do indicate the potential of empirical research in this area.

Keywords: research into dictionary use; contexts of dictionary use; extra-lexicographic situation

1. Introduction

Dictionaries are utility tools, i.e. they are made to be used. The “user presupposition” (Wiegand et al., 2010: 680) should be the central point in every lexicographic process, and in the field of research into dictionary use, there are repeated calls for this not to be forgotten (cf. Householder, 1967; Wiegand, 1998: 259–260, 563; Bogaards, 2003: 26, 33; Tarp, 2009: 33–43). This fundamental property – serving as an appropriate tool for specific users in certain usage situations – still characterizes a good dictionary. However, the close relationship between dictionaries and their users has been weakened, at least in part.¹

“The first dictionaries ever produced may seem primitive according to the present standard, but their authors at least had the privilege of spontaneously understanding the social value of their work, i.e. the close relation between specific types of social needs and the solutions given by means of dictionaries. With the passing of the centuries and millenniums, this close relation was forgotten. [...] The social needs originally giving rise to lexicography were relegated to a secondary plane and frequently ignored.”

(Tarp, 2009: 19).

¹ The present results appear in more detailed form in Müller-Spitzer (forthcoming).

Knowledge about the needs of the user, and the situations in which the need to use a dictionary may arise, is therefore a very important issue for lexicography.

This article is structured as follows: in Section 2, the research question is introduced, and in Section 3, an analysis of the data obtained relating to contexts of dictionary use is presented, with 3.1 focusing on contexts arranged according to the categories of text production, text reception and translation, and 3.2 on users' aims and further aspects of dictionary use. Overall, the aim of this article is to give an illustrative insight into how users themselves reflect on their own use of dictionaries, particularly with regard to contexts of dictionary use.

2. Research question

To design effective electronic dictionaries, reliable empirical information on how dictionaries are actually being used is of great value for lexicographers. Research into the use of dictionaries has been focused primarily on standardized usage situations of (again) standardized user groups for which a well-functioning grid is developed, such as L1/L2/L3-speaker, text production vs. text reception or translation (cf. e.g., Atkins, 1998). In this context, Lew (2012: 16) argues that dictionaries are “most effective if they are instantly and unobtrusively available during the activities in which humans engage”. To my knowledge, no existing empirical research addresses the context of dictionary use, or, in other words, the external conditions or situations in which a dictionary consultation is embedded, also known as social situations (Tarp, 2008: 44), extra-lexicographic situations (Tarp, 2012: 114; Fuertes-Olivera, 2012: 399, 402), non-lexicographic situations (Lew, 2012: 344), “usage opportunities” (Wiegand et al., 2010: 684), in German *Benutzungsgelegenheiten* (Wiegand, 1998: 523) or contexts of use (Tono, 2001: 56).

However, it is not surprising that in this context few empirical studies exist, because these data are difficult to obtain:

“But how can theoretical lexicography find the relevant situations? In principle, it could go out and study all the hypothetical social situations in which people are involved. But that would be like trying to fill the leaking jar of the Danaids. Instead, initially lexicography needs to use a deductive procedure and focus on the needs that dictionaries have sought to satisfy until now, and on the situations in which these needs may arise.”

(Tarp, 2008: 44; cf. also Wiegand, 1998: 572).

For me, it seems to be very important to gain new empirical data relating to dictionary users in order to avoid a purely theoretical approach (cf. Simonsen, 2011, 76, who criticizes Tarp for his “intuitions and desktop research”). On the other hand, any attempt to collect real empirical data involves difficulties. With most unobtrusive methods in the context of dictionary use (i.e. particularly the analysis of log-files), it is hard to capture data about the real-life context of a dictionary consultation: firstly,

because these are personal data which in most countries cannot be collected without the explicit consent of the people; and secondly, because methods such as log-file analysis do not provide data about the circumstances of use (cf. Wiegand, 1998: 574; cf. also Verlinde & Binon, 2010: 1149; for a study that combines online questionnaires with log-file analysis see Hult, 2012). Log-file analysis mainly shows which headwords are the most frequently searched for, and which types of information are most frequently accessed. In some countries, collecting data about the URLs visited before and after the dictionary consultation is also permitted. However, what cannot be seen in log-file analysis are the contexts which lead to a dictionary consultation, e.g., for what reason text production is taking place.

However, interviews, questionnaires and laboratory studies are to a certain extent artificial situations which cannot always be generalized to everyday life (the problem of 'external validity'). Therefore, the question arises as to whether it is a hopeless undertaking from the outset to try to collect new empirical data about contexts of dictionary use. I presume that this is not the case but that it is important to use every opportunity to obtain empirical data with all the restrictions that go with it, even if it is only possible to come closer to the goal of gaining such data step by step. The current study is a first step towards this goal (for demographic information about the participants cf. Tables 1 and 2).

In our online questionnaire study (see www.using-dictionaries.info and Müller-Spitzer et al., 2012: 429–31) we asked the participants to answer an open-ended question about the situations in which they would use a dictionary. The aim was to collect data in an exploratory way. For this, an open-ended question seemed to be the appropriate solution:

“The appeal of this type of data is that it can provide a somewhat rich description of respondent reality at a relatively low cost to the researcher. In comparison to interviews or focus groups, open-ended survey questions can offer greater anonymity to respondents and often elicit more honest responses [...]. They can also capture diversity in responses and provide alternative explanations to those that closed-ended survey questions are able to capture [...]. Open-ended questions are used in organizational research to explore, explain, and/or reconfirm existing ideas.”

(Jackson & Trochim, 2002: 307–308).

Instead of presenting well-known facts about standardized types of usage situation (text production, text reception etc.), in this paper, I will focus on the more offbeat circumstances of dictionary use, such as: from what context exactly dictionaries are used; for what reason exactly a dictionary is consulted in a text-production situation and whether there are differences between expert and non-expert users. Moreover, I am interested in the description of specific user aims (cf. Wiegand et al., 2010: 680; Wiegand, 1998: 293–298), such as: whether dictionaries are used for research; whether dictionaries are used as linguistic treasure troves for language games, and so

on. As well as these concrete questions, it is interesting to see the detail in which users are willing to describe their use of dictionaries. As the question asked was very general regarding contexts of dictionary use, it is important to emphasize that the data obtained represent a starting point for detailed research rather than an end point.

	First survey (N = 684)	
	Yes	No
Linguist	54.82%	45.18%
Translator	41.96%	58.04%
Student of linguistics	41.08%	58.92%
English/German teacher (with English/German as mother tongue)	11.55%	88.45%
EFL/DAF teacher	16.52%	83.48%
English/German learner	13.89%	86.11%

Table 1: Demographics: academic and professional background.

	First survey (N =684)
Language version of the questionnaire	English: 46.35% German: 53.65%
Sex	Female: 63.29% Male: 36.71%
Age	Younger than 21: 4.30% 21–25: 17.19% 31–30: 19.59% 31–35: 11.41% 36–45: 18.67% 36–55: 14.67% Older than 55: 14.22%
Command of English/German	Mother tongue: 64.33% Very good: 27.78% Good: 6.14% Fair: 1.46% Poor: 0.29% None: 0.00%

Table 2: Demographics: personal background.

3. Responses to the open-ended question: In which contexts or situations would you use a dictionary?

The open-ended question on contexts of dictionary use included in the online study was: “In which contexts or situations would you use a dictionary?” Participants were

asked “to answer this question by providing as much information as possible”. To gain data about real extra lexicographic situations, i.e. the contexts in which linguistic difficulties arise with no bearing on currently existing dictionaries, it would have been better to ask a question like: “In which contexts or situations do language-related problems occur in your daily life?” or “In which situations would you like to gain more knowledge of linguistic phenomena?” However, in the context of this questionnaire this would have been too general a question.

I did not expect to gain large amounts of data from the open-ended question, although the chance of obtaining more detailed and better responses to open-ended questions is higher in web surveys than in paper surveys, especially when the response field is large. This also applied to my participants: many of the nearly 700 participants (who completed the questionnaire) gave very detailed information. However, as usual, some participants dropped out of the questionnaire at the open-ended question (drop-out rate: 67 of 906 [who began the questionnaire], 7.4%). On average, the participants wrote 37 words (SD = 35.99). The minimum is unsurprisingly 0 words, the maximum 448 words. Fifty percent of participants wrote 15 to 47 words. To illustrate the range of length and level of detail of these answers, a few examples of ‘typical’ short and long answers are given in the following.

Some examples of short answers:

- “Looking up etymology.”
- “For reading articles online, for writing and translating online, for doublechecking dubious Scrabble offerings played on a gameboard in another room, etc.”
- “Consultation for work/pleasure (e.g. crossword)/to answer specific query.”

One example of a long, detailed answer:

- “To translate a word into another language. To check the meaning of a word, either in my own or in a foreign language. To find out the difference in the meanings of words in the same language, especially a foreign language I do not know very well. To find out the correct context, or the correct adpositions or cases to use with the word (for example, is it better to say “corresponds to” or “corresponds with” etc). To find out the correct spelling of a wordform – that includes finding out what that word would be in a specific case, e.g. a past form of a French verb. To find out the etymology of a word or different words. The above cases generally occur when writing a document or a letter, both for private and work purposes, be it on computer, on paper or drafting it in my mind. Usually I would use the most accessible dictionary, be it on the internet (when I am working on a computer), a paper dictionary or a portable electronic one. If no dictionary is readily available, I might write the words down and check them in a dictionary later, sometimes much later. Another time to use a dictionary is when I am reading a text I do not fully understand or am trying to find a relevant part of the text

– for example when looking for information on a Japanese web page or reading a book or article. In that case I would have a dictionary at hand, if I knew it to be a difficult text. A third case would be when I have a difference in agreement with somebody about the meaning or usage of a word or simple curiosity – for example when looking up the etymology of words to see if they have historically related meanings. Then I would use a dictionary to look it up myself or to show the entry to the other person.”

It is obvious that those participants who wrote a lot have a keen interest in the subject of the research, a fact that must be borne in mind when analyzing the results.

“[...] respondents who are more interested in the topic of an open-ended question are more likely to answer than those who are not interested. [...] Therefore, frequency counts may overrepresent the interested or disgruntled and leave a proportion of the sample with different impressions of reality underrepresented in the results.”

(Jackson & Trochim, 2002: 311).

3.1 Contexts of dictionary use relating to text production, text reception and translation

3.1.1 Data analysis

The concrete extra-lexicographic situations which lead for example to dictionary use in a text production situation are of particular interest, as pointed out in Section 2. The aim is therefore to find out more than: Do you consult a dictionary, when you are a) writing a text, b) reading a text or c) translating a text? The goal is to ascertain, for example, (a) the group ‘xy’ of users who consult a dictionary in particular when they are listening privately to foreign-language music or watching foreign-language films, or (b) users of the group ‘yz’ who consult dictionaries in particular when they are writing foreign language texts in the context of a specific subject area at work. Such insights could then lead to a more accurate picture about the situations (private/professional; written texts/spoken language/music/film, etc.) in which dictionary use is embedded.

Therefore, the first stage in the analysis was to assign the responses or parts of them to situations that relate to text production, translation or text reception. Parts of responses which were not classifiable in this way were assigned to the category “other”. The idea behind this procedure was to structure the data first in order to conduct a detailed analysis on the subsets, e.g., of what is said about the contexts in which text production takes place.

Methodologically, in the data analysis I have concentrated on one of the central techniques for analyzing data gained from open-ended questions, namely the method of structuring (cf., Dieckmann, 2010: 608–613; Mayring, 2011; for more general literature concerning the analysis of open-ended questions cf. e.g., Crabtree & Miller, 2004; Dieckmann, 2010: 531–547; Jackson & Trochim, 2002). Structuring is typically

conducted using the following steps: first, a (possibly temporary) category system is formulated; second, anchor examples are defined; and third, coding rules are established. Anchor examples are data which serve as examples for the subsequent coding process and therefore as a basis for illustrating the encoding rules. Coding rules are the rules by based on the example of this paper – a part of a response, for example, is assigned to the category of text production, while another is assigned to the category of text reception.

Here, the basic categories I assume are text production, text reception, translation and other. In the context of function theory, these are all communicative situations (cf. Tarp, 2008: 47–50; Tono, 2010: 5). Typical vocabulary, which leads to an assignment to text production, are words such as “write”, “typing”, “spell”, “correct”; for text reception, words such as “read”, “hear”, “listen to”, “watching”; and for translation, all forms of “translate” (and the corresponding German words for each, because the questionnaire was distributed in English and German). Parts of responses were assigned to the “other” category if they were either too general or they contained aspects of dictionary use other than the three basic categories. Examples are phrases such as: “When I am researching contrastive linguistics”, “solving linguistic puzzles for myself” or “during the process of designing software tools”. Therefore, the coding rules for dividing responses into the basic categories are to analyze the words used in the responses and to assign them (manually) to the four categories text production, text reception, translation and other.

In the data analyses, the corresponding parts of texts which, e.g. relate to text production are stored as extracts in a separate field. This procedure allows all parts of texts relating to text production to be analyzed separately from those which relate to translation or text reception.

3.1.2 Results of the analyses

Generally, a large number of descriptions of contexts of dictionary use can be found in the responses, which confirms what would be expected. Many participants write that they consult dictionaries constantly during their work to close lexical gaps, to ensure that they have chosen the right translation, and to check the right spelling etc. In most cases, allocating the parts of the responses to the four categories was straightforward, i.e. the extracts could be distinguished from one another relatively easily.

More than half the descriptions are related to text production situations (N = 381, 56%), followed by text reception (N = 265, 39%) and, with a very similar proportion, translation (N = 253, 38%). Forty-one percent of the responses (N = 280) are also or only assigned to the “other” category. The four categories therefore overlap, because one response may contain descriptions about text production situations and translation situations, as well as some parts which are not attributable to any of the three categories. Figure 1 shows the distribution of text production, translation and

text reception and other in the form of a Venn diagram illustrating the relationship between different types of situation.

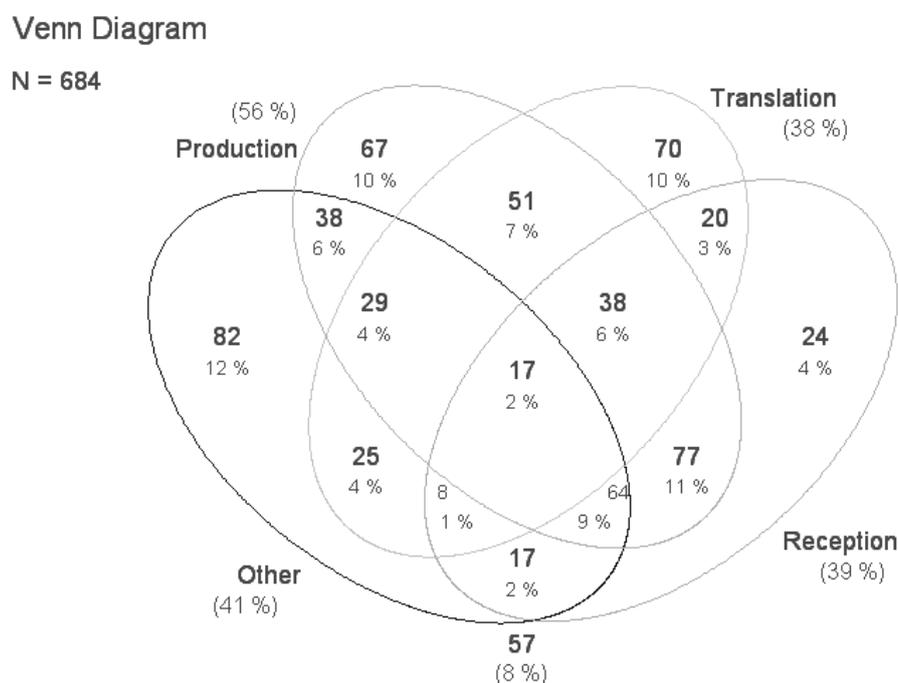


Figure 1: Venn diagram showing the distribution of text production, translation, text reception and “other”.

The diagrams show that, as already noted, dictionary consultations of situations relating to text production are described most often, followed by text reception and translation. However, 41% of the responses contain descriptions of situations which could not be assigned to any of the three categories. The level of overlap is high, i.e. many extracts are descriptions that have been assigned to more than one category. This is undoubtedly connected to the fact that some participants wrote in great detail.

Further analyses were carried out to determine whether these distributions reveal any differences between the groups, for example, that recreational users (i.e. those who use dictionaries mainly in their leisure time and predominantly for browsing) describe situations referring to text reception more frequently than experts who use dictionaries mainly for professional reasons. However, group-specific analyses revealed marginal effects in terms of the distribution of the named usage situations. It can only be stated that experts have a significantly higher value in translation ($\chi^2(7) = 61.46, p < .00$, cf. Table 2); this, however, is due to the fact that translators are part of the expert group. Therefore, this result is simply a confirmation of known facts.

The real aim of this study, however, as outlined in the introduction, is to learn more about the closer contexts of dictionary use, for example, as a result of which context texts are written and hence in which context the user need originates. The responses

contain information about this question. This will be illustrated with reference to the extracts that were assigned to text production.

For example, in many responses, indicators and clear explications are found about whether dictionary use is embedded in a personal or professional context:

- When I am writing lectures/tutorial materials at work and interested in the origin or etymology of words.
- When I am typing documents at work or sending emails internally or externally and want to check on my spelling, grammar, expression, etc.
- When I am speaking with friends online – over Facebook chat, or another messaging device – if one of my friends uses a term I am unfamiliar with, I will often “Google” it, or look it up on urbandictionary.com.

In some answers, this is also specified in more detail, i.e. some participants specifically write, e.g. “When writing Facebook entries”, “writing poetry”:

- Whenever I need to look up a word, whether [...] writing a professional document, a tweet, a Facebook message, or an email.
- Um wichtige Informationen fuer meine auslaendischen Mitbewohner zu notieren. [In order to note important information for my foreign housemates.]
- If I am writing a paper on a piece of literature that is quite old, I will look up words from that literature to make sure that my understanding of the word is the same as how the word was used at the time the literature was written.

These answers contain interesting information about the contexts of dictionary use and usage opportunities. Users’ aims are also made explicit, for example that dictionaries are used to act as someone with a high level of language skills:

- When I want to know how to pronounce something, audio pronunciation is offered by the Merriam-Webster online dictionary, especially when I want to say the word in public or in a class presentation when it is important to show that I can speak clearly and have command over the language I use.

In addition, there are descriptions of whether the work is already taking place on the computer or in another context, with the word being looked up in the online dictionary later:

- When I’m writing a paper or story, generally on my computer, and I want to check the denotation of a word that doesn’t quite seem right.
- If no dictionary is readily available, I might write the words down and check them in a dictionary later, sometimes much later.

However, sometimes important information is missing. See for example the following response:

- And if I'm talking with someone and I can't remember the right word.

Here one might wonder: When and on what sort of device does the dictionary consultation take place afterwards? Directly on a smartphone? What is then looked up exactly? Therefore, many questions remain unanswered. Beyond that, the descriptions cannot really be classified into broad categories, i.e. a clearly structured summary is not achievable. Therefore, what is difficult to evaluate from the data are the particular circumstances of contexts which lead to, e.g., a user's need for text production and therefore to a dictionary consultation. On the one hand, the question was very general, so that the responses are sometimes very general, too. On the other hand, some responses contain interesting information on the context of dictionary use, but this information cannot easily be placed in an overview. In this respect, the data, as was pointed out at the beginning, represent a starting point for further study in this field. To achieve the goal of gaining some degree of quantitatively analyzable information about contexts of dictionary use, it would therefore be advisable to use a combination of standardized and open-ended questions. Hopefully, the results of this analysis will help this eventual aim to be successfully achieved.

3.2 User aims and further aspects of dictionary use

As well as the assignment of responses to different kinds of extra-lexicographic situations, some aspects of dictionary use were often repeated in the responses and thus emerged as a category in the analysis, particularly with regard to user aims. User aim means (within the meaning of Wiegand et al., 2010: 680) the action goal which enables the user to retrieve relevant lexicographic information based on appropriate lexicographic data. Many responses contain notes on that topic, for example: "I use dictionaries for research" or "to improve my vocabulary". The analysis of these descriptions seemed to offer an interesting additional view on the data far from the basic categories of text production, text reception or translation. The emphasis is not, however, on the completeness of all named aspects, but more on the interesting and perhaps unusual categories that would not necessarily be expected.

3.2.1 Data analysis

The following categories were developed gradually during the first analysis regarding the distribution explained in 3.1. The nine categories which are relevant for this section are:

- Dictionaries used to improve vocabulary (generally, not referring to concrete text production or reception problems) (Cat. 1)
- Dictionaries used as a starting point or resource for (further) research (Cat. 2)

- Dictionaries used as mediator medium (Cat. 3)
- Dictionaries used as a resource for language games, linguistic treasure trove, for enjoyment, for personal interest, etc. (Cat. 4)

Once these categories were formed, the responses that are assigned to the appropriate category were marked.

3.2.2 Results of the analyses

Participants sometimes referred to the fact that dictionaries are used to improve and increase vocabulary independently of concrete text reception or text production problems (category 1, although explicitly only in 1% of the responses, N = 8):

- Basically, I use the dictionary in order to improve my vocabulary.

Experts in particular use dictionaries as a starting point for research (category 2). In 68 responses (10%), this aspect is explicitly mentioned. Here, there are group differences, as would be expected, especially between linguists and non-linguists ($\chi^2(1) = 23.1030, p < .00$).

Table 3 shows that 82% of those who use dictionaries as a resource for research are linguists or have a linguistic background, i.e. particular linguists are able to use dictionaries as a resource for linguistic material.

Linguist	Dictionaries used for research		Total
	no	yes	
Yes	319 52%	56 82%	375 55%
No	297 48%	12 18%	309 45%
Total	616 100%	68 100%	684 100%

Table 3: Linguist vs. non-linguist dictionary users as a resource for research

A special aspect of some responses is that dictionaries are apparently also sometimes used for linguistic discussions as mediator medium (category 3, 2%, N = 12). They are even explicitly designated as “Schlichtermedium” (conciliator medium):

- Most often, to settle questions and debates with my colleagues and/or friends about accepted pronunciations of words and word origins.
- Sometimes my friends and I dispute the usage of a word – one of us will have used it “wrong” by the other’s definition. In this case, we will turn to a dictionary for an answer.

- To settle an argument on etymology or definition when discussing words with colleagues.

Although the proportion of these responses is not high, the few examples show clearly that a very strong authority is attributed here to dictionaries. It can be assumed that such users appreciate sound lexicographic work. The user experience which is reflected here is that dictionaries provide such reliable and accurate information that they are regarded as a binding reference, even among professional colleagues.

Similarly, dictionaries also seem to be used in connection with language games such as crossword puzzles or when playing Scrabble, and also just for enjoyment or fun (category 4). In 6% (N = 39) of the responses, this aspect arises:

- For scrabble When I am bored and me and my friend have a spelling bee
- At other times I might consult the OED for information about etymology or historical use purely for personal interest or resolve a debate about word usage.
- Sometimes to see if a neologism has made it into the hallowed pgs of the OED!
- Solving linguistic puzzles for myself (having to do with usage, grammar, syntax, etymology, etc.)

4. Conclusion

It is demanding to obtain empirical data about contexts of dictionary use. In this study, I made an attempt in this direction. The willingness of the participants to give detailed information was significantly higher than expected. This is probably partly due to the fact that most of the participants have a keen interest in dictionaries. One conclusion that can be drawn from this for further research, is that this community is apparently prepared to provide information about the contexts of potential acts of dictionary use, and that this should also be used.

All in all the results show that there is a community whose work is closely linked to dictionaries and, accordingly, they deal very routinely with this type of text, and sometimes describe these usage acts in great detail. Dictionaries are also seen as a linguistic treasure trove for games or crossword puzzles and as a standard which can be referred to as an authority. What is difficult to evaluate from the data are the particular contexts of dictionary use which lead to, e.g., the user's need for text production and therefore to a dictionary consultation. Although data on this could be obtained, it is still not possible to draw a clear picture. That responses on open-ended questions are sometimes very general (like it was in the current case) is a problem which holds for answers on these kinds of questions in general:

“They can provide detailed responses in respondents’ own words, which may be a rich source of data. They avoid tipping off respondents as to what response is normative, so they may obtain more complete reports of socially undesirable behaviors. On the other hand, responses to open questions are often too vague or general to meet question objectives. Closed questions are easier to code and analyze and compare across surveys.”

(Martin, 2006: 6).

On the other hand, some responses contain interesting information on the context of dictionary use, but a synopsis of the many details in an overall image is almost impossible to achieve. In this respect, it is important to emphasize that the present results are only preliminary; but they do indicate the potential of empirical research in this area.

This will certainly be a worthwhile path to take, as knowledge about the contexts of dictionary use touches on an existential interest of lexicographers. Dictionaries are made to be used and this use is embedded in an extra-lexicographic situation. And the more that is known about these contexts, the better dictionaries can be tailored to users’ needs and made more user-friendly. Particularly when innovative dictionary projects with new kinds of interfaces are to be developed, better empirical knowledge is essential, e.g. the following quotes about the „Base lexicale du français“ show (cf. also Verlinde, 2010; Verlinde & Peeters, 2012):

“The BLF’s access structures are truly task and problem oriented and based on the idea that the dictionary user has various extra-lexicographic needs, which can lead to a limited number of occasional or more systematic consultation or usage situations. [...] We argue that the dictionary interface should reflect these consultation contexts, rather than reducing access to a small text box where the user may enter a word.”

(Verlinde, Leroyer & Binon, 2010: 8)

“The Belgian BLF project seeks a different solution to the same underlying challenge: here the users have to choose between situations before they are allowed to perform a look-up. This approach looks promising but it also draws attention to a potential catch-22 situation: on the one hand, requiring too many options and clicks of users before they can get started may scare them away. And on the other hand, a model with immediate look-up and only few options may lead to inaccurate access and lack of clarity. Whatever the situation, we need more information about user behaviour to assess which solution works more effectively.”

(Trap-Jensen, 2010: 1139)

This is particularly important at a time when people have an increasing amount of freely available language data at their disposal via the Internet. Dictionaries can only retain their high value when distinct advantages (e.g. in terms of accuracy and reliability, as well as exactly meeting users’ specific needs in concrete contexts) are provided, compared to using unstructured data for research.

My results indicate that, although these are currently difficult economic times for dictionary publishers, the participants in this study actually appreciate many of the classic characteristics of dictionaries.

5. References

- Atkins, S.B.T. (1998): *Using dictionaries. Studies of Dictionary Use by Language Learners and Translators*. Tübingen: Niemeyer.
- Bogaards, P. (2003). Uses and users of dictionaries. In P. van Sterkenburg (ed.) *A Practical Guide to Lexikography*. Amsterdam/Philadelphia: John Benjamins Publishing Company, pp. 26–33.
- Crabtree, B., Miller, W. L. (eds.) (2004): *Doing Qualitative Research*, 2nd edition, London: Sage.
- Dieckmann, A. (2010): *Empirische Sozialforschung. Grundlagen, Methoden, Anwendungen*, 4th edition, Hamburg: Rowohlt.
- Fuertes-Olivera, P.A. (2012). On the usability of free Internet dictionaries for teaching and learning Business English In S. Granger, M. Paquot (eds) *Electronic Lexicography*. Oxford: Oxford University Press, pp. 399–424.
- Householder, F.W. (1967). *Problems in Lexicography*. Bloomington: Indiana University Press.
- Hult, A.K. (2012) Old and New User Study Methods Combined – Linking Web Questionnaires with Log Files from the Swedish Lexin Dictionary. In: J.M. Torjusen, Vatvedt Fjeld, R. (eds.). *Proceedings of the 15th EURALEX International Congress 2012, Oslo, Norway*, pp. 922–928. Accessed at: http://www.euralex.org/elx_proceedings/Euralex2012/pp922-928%20Hult.pdf.
- Jackson, K.M., Trochim, W.M.K. (2002): Concept Mapping as an Alternative approach for the analysis of Open-Ended Survey Responses. *Organizational Research Methods*, 5, pp. 307-336. Accessed at: <http://www.socialresearchmethods.net/research/Concept%20Mapping%20as%20an%20Alternative%20Approach%20for%20the%20Analysis%20of%20Open-Ended%20Survey%20Responses.pdf>.
- Lew, R. (2012): How can we make electronic dictionaries more effective?“ In: S. Granger, M. Paquot (eds) *Electronic Lexicography*. Oxford: Oxford University Press. pp. 343–361.
- Martin, E. (2006). Survey Questionnaire Construction. *Survey Methodology. Research Report Series*, 21, pp. 1–14. Accessed at: <http://www.census.gov/srd/papers/pdf/rsm2006-13.pdf>.
- Mayring, P. (2011). *Qualitative Inhaltsanalyse. Grundlagen und Techniken*. Weinheim: Beltz.

- Müller-Spitzer, C., Koplenig, A. & Töpel, A. (2012). Online dictionary use: Key findings from an empirical research project. In: S. Granger, M. Paquot (eds) *Electronic Lexicography*. Oxford: Oxford University Press. pp. 425–457.
- Müller-Spitzer, C. (ed.) (forthcoming): *Using online dictionaries* (Lexicographica. Series maior).
- Tarp, S. (2008). *Lexicography in the borderland between knowledge and non-knowledge: general lexicographical theory with particular focus on learner's lexicography*. Berlin/New York: de Gruyter.
- Tarp, S. (2009). Beyond Lexicography: New Visions and Challenges in the Information Age. In H. Bergenholtz, S. Nielsen & S. Tarp *Lexicography at a Crossroads. Dictionaries and Encyclopedias Today, Lexicographical Tools Tomorrow*, Frankfurt a.M./Berlin/Bern/Bruxelles/NewYork/Oxford/Wien: Peter Lang. pp. 17–32.
- Tarp, S. (2012). Theoretical challenges in the transition from lexicographical p-works to e-tools. In S. Granger, M. Paquot (eds.) *Electronic Lexicography*. Oxford: Oxford University Press. pp- 107–118.
- Tono, Y. (2001). *Research on dictionary use in the context of foreign language learning: Focus on reading comprehension*. Tübingen: Max Niemeyer.
- Tono, Y. (2010). A Critical Review of the Theory of Lexicographical Functions. *Lexicon* 40, pp. 1–26.
- Trap-Jensen, L. (2010). One, Two, Many: Customization and User Profiles in Internet Dictionaries. In: A. Dykstra, T. Schoonheim (eds.) *Proceedings of the 14th EURALEX International Congress 2010, Leeuwarden/Ljouwert*, pp. 1133–1143. Accessed at: http://www.euralex.org/elx_proceedings/Euralex2010/105_Euralex_2010_7_TRAP-JENSEN_One,%20Two,%20Many_Customization%20and%20User%20Profiles%20in%20Internet%20Dictionaries.pdf.
- Verlinde, S., Binon, J. (2010) Monitoring Dictionary Use in the Electronic Age. In A. Dykstra, T. Schoonheim. *Proceedings of the 14th EURALEX International Congress 2010, Leeuwarden/Ljouwert*, pp. 1144–1151.
- Verlinde, S., Peeters, G. (2012). Data access revisited: The Interactive Language Toolbox In S. Granger, M. Paquot (eds.) *Electronic Lexicography*. Oxford: Oxford University Press. pp. 147–162.
- Wiegand, H.E. (1998). *Wörterbuchforschung. Untersuchungen zur Wörterbuchbenutzung, zur Theorie, Geschichte, Kritik und Automatisierung der Lexikographie*. Berlin/New York: de Gruyter.
- Wiegand, H.E., Beißwenger, M., Gouws, R.H., Kammerer, M., Storrer, A. & Wolski, W. (2010). *Wörterbuch zur Lexikographie und Wörterbuchforschung: mit englischen Übersetzungen der Umtexte und Definitionen sowie Äquivalenten in neuen Sprachen*. Berlin/New York: de Gruyter.