

SYNONYMS IN GERMAN ONLINE MONOLINGUAL DICTIONARIES

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Abstract: *This study includes both theoretical and qualitative research and falls within the framework of semantics and lexicography. It is based on work conducted as a part of the COMBIDIGILEX research project: MINECO-FEDER FFI2015-64476-P. The lexicographical description proposed in the COMBIDIGILEX project is based on the foundations of bilingual lexicography from an onomasiological perspective, including paradigmatic information and syntagmatic analysis, which is useful to users creating texts for students at an advanced level. The project analyses verbal lexemes in German and Spanish based on a paradigmatic, syntagmatic, orthographic and morphological perspective (among others). Subsequently, a contrastive analysis was conducted between both languages. In this contribution, we first analyse what paradigmatic information is, including its relevance to a dictionary. Paradigmatic information includes not only synonyms and antonyms but also hyperonyms and hyponyms, which often complete the lexicographical article in a general dictionary. Paradigmatic relations can be observed in light of semantic definitions or may independently become part of the lexical entry. Forming the paradigmatic information of an entry in an independent manner is known as “intentionelle Paradigmatik”, and it constitutes a series of advantages in the dictionary (Hausmann 1991b: 2794). This type of information aids the processes of production and expands vocabulary. Next, we examine the appearance of synonyms in three German online monolingual dictionaries – DWDS, WORTSCHATZLEXIKON and DUDEN ONLINE – from the semantic perspective of cognition verbs. The primary objective of the study is to demonstrate the relevance of this type of information as well as the needs it covers from a user’s perspective. Offering the user a series of lexical elements along with information on semantic relations of a paradigmatic nature thus addresses the issue of users having an array of possibilities at their disposal with which to express themselves. From these possibilities, the user can choose the one that best suits his or her purpose based on a variety of requisites, such as the type of text, stylistic recourses and so on, allowing the most fitting linguistic element to be inserted into the text. Another related objective is learning the ways in which paradigmatic information is reflected in these dictionaries. Thus, the differences between general monolingual dictionaries presenting paradigmatic information and paradigmatic dictionaries are revealed.*

Keywords: Paradigmatic Information; Lexicography; Synonyms; Online Dictionary; Onomasiological Perspective.

1.Introduction

Synonyms are related to paradigmatic information. The phenomenon of synonymy is complex. There are many linguists who deny the existence of total synonymy

between terms because they distinguish between identity and similarity. Some linguists do not accept total synonymy because they consider both the denotative and the connotative part of the meaning, which would make replacing all usages of words in every context very difficult. According to this belief, synonyms could take the place of a few foreign words, such as *Lift* - *Aufzug*, *Gynäkologe* – *Frauenarzt*, *Portmonnaie* – *Geldbörse* or *Orange* – *Apfelsine*, though they would not be viable alternatives in the case of *essen* – *speisen*, *schlafen* – *pennen*, *Gesicht* – *Antlitz* or *stehlen* – *klauen* due to connotative differences in meaning. Other linguists believe that total synonymy is possible because meaning inheres only in denotative meaning; connotative meaning is completely ignored. Thus, *stehlen* – *klauen* would be synonyms.

In this contribution, synonyms are considered in a broad sense. No importance will be given to whether synonyms can be substituted in each context or whether they are total or partial. However, whether synonyms are related to one another from the semantic point of view is important because dictionaries do not establish any difference between total or partial synonymy. This paper does not address whether total or partial synonyms exist; instead, it focuses on the ways in which synonyms, especially paradigmatic information, are reflected in a dictionary and how important that information is for the user. For this purpose, we distinguish between general dictionaries and paradigmatic dictionaries and will compare three online monolingual dictionaries by parsing their definitions.

2. Methodology

This contribution aims at analysing synonyms in German online monolingual dictionaries. I first define synonyms and explain their involvement in so-called paradigmatic information. Thus, I also examine the definition of paradigmatic information and the role synonyms play in it. I aim to reveal the importance of synonyms in a general monolingual dictionary's article. Second, I attempt to differentiate synonyms in general dictionaries from those in paradigmatic dictionaries. I analyse three German online monolingual dictionaries, comparing the characteristics of their synonyms – which are defined in the theoretical framework – to the synonyms that appear in the dictionaries. In so doing, I used a corpus from the semantic field of COGNITION and the subfield of LERNEN. The lexeme is *lernen* (learn). This choice originates from the model of the COMBIDIGLEX project in which each member of the research team works uniquely within a lexical semantic field. The lexemes in this field are classified according to their argument structure and are submitted for special analysis related to paradigmatic and syntagmatic information. Here, we will demonstrate how important the paradigmatic information is, particularly to the user. The analysis of the three dictionaries will serve to present the ways in which synonyms are presented and ask whether there are concomitances or differences within the parameters of the theoretical framework.

3. Theoretical Framework

3.1 Paradigmatic Information in Monolingual Dictionaries

We begin by considering precisely what is meant by paradigmatic information,

which may be considered from two points of view: the dictionary's microstructural perspective within a concrete article or the macrostructural perspective, i.e., the perspective of paradigmatic dictionaries. The choice of general dictionaries for the study of paradigmatic information is relevant. According to Martínez de Sousa (1995), a general dictionary aims to register the largest possible number of words of its type; although not integral or thorough, it includes a high percentage and representative amount of the typical vocabulary of a language. (Haensch *et. al.*, 1982). General dictionaries are one of the most important tools available to users who tend to be unaware of the existence of paradigmatic and conceptual dictionaries when seeking out paradigmatic information. In the dictionaries analysed, the treatment of paradigmatic information differs from other types of dictionaries (see, for example, the German Kempke (2000)). Thus, the relevant question addresses how most general dictionaries present paradigmatic information, and in this section, we attempt to provide an answer.

Paradigmatic information is relevant to synonyms, antonyms, hyponyms and generic names, which may appear in a variety of forms within the microstructure of a monolingual dictionary (Haensch *et. al.*, 1982). 1. They may be distributed between subentries that correspond to different meanings of a word, which offers the advantage of appearing immediately after the definition (or translation) of the lexical unit with which it has a paradigmatic relationship. 2. They may also be included as part of a wide paradigmatic application of the article, which offers the advantage of not overloading subentries that may be heavily loaded with multiple subdivisions, explanations, etc. When the subentries are numbered (for example, based on decimal classification), referring to the number of interest in the paradigmatic extension is easy.

In the case of online dictionaries, paradigmatic information is typically separated from the rest of the entry to provide better visualization. Because of the possibilities that these dictionaries offer (multimedia, interactive, modular and hypertextual character), paradigmatic information is usually more extensive than that shown in most general paper dictionaries (for the advantages of online lexicography, see Haß (2005), Engelberg/Lemnitzer (2009), Storrer (2010), Haß/Schmitz (2010), Tarp (2012)). We will prove this below in our analysis of the three dictionaries under study.

The final section of the entries in some dictionaries tend to indicate words that have a relationship with the treated phrase, not from the point of view of the content but from the point of view of the significant form, particularly homonyms (including non-homographic homophones, such as *mehr* in the case of the term *Meer*) and paronyms (words with a form that is similar to that of the target term, for example, *kindisch* for the term *kindlich*). These appear to be useful, assuming that the relationships between the significant terms are distinguished from the relationships between their meanings.

Within this paradigmatic information, the study focuses on synonymy in the analysed dictionaries. Synonymy has special relevance in monolingual dictionaries. According to Werner Wolski (1990), a distinction should be drawn between lexical synonymy and lexicographical synonymy. Significant features of lexical synonymy are derived from the component analysis of semantic features. From such an analysis, the difference between connotative and denotative features is derived, which fosters the differentiation between identity and similarity. Wiegand (1983) also identifies a difference: lexical synonymy occurs when the rules of usage for A

and B are so similar that the rules of reference and prediction are the same and A may be substituted for B or B for A without changing the meaning in normal texts and in a prescribed environment, such as the reality in which we live: *Tierarzt: Veterinär*. Lexicographic synonymy, according to Wiegand (1983), occurs when B, an object or class of objects, describes something in such a way that the rules for A may be understood based on the usual texts for A and for a prescribed environment (for example, the reality in which we live) and additionally, A may be substituted for B *salva veritate*, permitting a morphological change and thus allowing grammatical phrases to arise: *Gamasche: Beinbekleidung vom Fuß bis zum Knie aus Stoff oder Leder* (Wahrig). The differentiation between lexical and lexicographical synonymy is valid, particularly for nouns, verbs and adjectives. It creates a special problem regarding prepositions, conjunctions and adverbs. Here, solutions are offered from metalexicographic perspectives.

In general dictionaries, the appearance of at least one synonym is obligatory. Therefore, divisions should be made in the information related to the definition, which may contain synonyms of the synonyms. Thus, the explanation of the dictionary meaning is the semasiological component, while the onomasiological part includes the synonyms (Wolski, 1990). Therefore, according to Wolski (1990), various structures may be found in a dictionary item. 1. Synonymic information may appear in the dictionary combined with other textual segments that explain meaning. Thus, the synonym may appear semasiologically as a semantic explanation: *Tisch: Möbelstück, das aus einer waagerecht auf einer Stütze, in der Regel auf vier Beinen, ruhenden Platte besteht, an der gegessen, gearbeitet, auf die etwas gestellt, gelegt werden kann* (DUDEN ONLINE, s/v: *Tisch*). 2. A group of synonyms may also appear as a semantic explanation: *Respekt: auf Anerkennung, Bewunderung beruhende Achtung* (DUDEN ONLINE s/v *Respekt*). 3. Synonyms may be presented first, followed by a semantic explanation: *Chance: günstige Gelegenheit, Möglichkeit, etwas Bestimmtes zu erreichen* (DUDEN ONLINE, s/v: *Chance*). 4. The semantic explanations may be presented first, followed by a group of synonyms: *Charme: Anziehungskraft, die von jemandes gewinnendem Wesen ausgeht; Zauber* (DUDEN ONLINE, s/v: *Charme*). Several synonyms do not appear in online dictionaries because a dedicated section already exists. 5. Synonyms may also appear with an explicit reference before or after the semantic explanation. The synonyms may even appear integrated within the examples: *Lift: Fahrstuhl; der Lift des Hochhauses* (DWDS, s/v *Lift*). 6. In older dictionaries that do not standardize their articles, synonyms are presented with expressions such as “für” and “als” and tend to be embedded in the semantic definitions. According to Haensch et al. (1982), semantic instruction by means of synonyms is an inexact method, or at least an insufficient one, due to the difficulty of finding two lexical units that correspond to the same communication conditions in both identical referential and illocutionary content. However, the integration of synonyms, not only in monolingual dictionaries but also in bilingual ones, is a fundamental element not only for textual production but also for learning functions (Hausmann, 1991a).

3.2 Paradigmatic Dictionaries

In France, studies of synonymy have been central to the development of onomasiological lexicography since the 18th century. Hausmann (“The Dictionary of Synonyms: Discriminating Synonymy”, 1990a: 1067) explains discriminating synonymy: “Reflection about the meaning of words by means of comparison, i.e.,

by seeking that which they have in common and that which distinguishes them, is in fact the point at which philosophy and linguistics overlap". As has been recognized by representatives of the modern school of the methodology of structural semantics, in discriminating, synonymy resembles a type of early structural semantics and seme analysis (Hausmann, 1990a). The modernity of Condillac's *Dictionnaire des Synonymes* (1780) is of special note. It follows along the lines of Abbot Gabriel Girard (1718), who may be rightly considered the predecessor of structural semantics. Étienne Bonnot de Condillac organized series of synonyms beyond those in the lexical fields, developing something similar to the dimensions of Horst Geckeler (1994). Another innovative feature inheres in the analysis of semantic features. In the 19th century, Pierre Lafaye developed a theoretical formulation of Condillac's practice in an in-depth introduction to his *Dictionnaire des Synonymes de la Langue Française* (1858). This introduction may be considered the methodological basis for the French lexicographical tradition that follows synonym and analogue dictionaries. The central thesis of Lafaye, which converted him into the founder of structural semantics, is drawn from his belief that scientific character may only be attributed to the description of words in features if they arise from the opposition of all lexemes of a synonymous paradigm (Martín Mingorance, 1994).

In Germany, Eberhard wrote the first significant text of this nature (1795). Practical pedagogically oriented synonymy had reached its zenith with Sanders (1871 and 1896) and came to a temporary end with the last edition of Hoffmann (1859). Grebe and Müller's effort (1964) at a revival of this trend remained unsuccessful. Presently, Müller (1977) is the only work of this type still on the market (Hausmann, 1990a).

Opinions vary on the usefulness of discriminating synonymy. What function can and should discriminating synonymies fulfil? Because of their high degree of headword selectivity, they are unsuitable for the reception of texts. They can only serve as text production aids if they include more syntagmatic information than most currently offer. A didactic function remains that consists of improving the *Sprachgefühl* and language knowledge of native speakers and particularly of foreign learners. However, in contemporary discriminating synonymy, describing each field of synonyms in terms of its own specific structure instead of subjecting them all to the same type of treatment is most important; some fields have a primarily distinctive structure and can therefore be adequately described by, for example, attributing their individual members to specific groups of persons or by describing their expression of certain speakers' intentions (Hausmann, 1990a).

Discriminating synonymy differs from those dictionaries of synonyms referred to by Hausmann (1990b) as *kumulative Synonymik*. These dictionaries are based on a word-finding list. Their only function is to provide support in the process of production and review of the lexicon. They are not appropriate for use by non-natives because they do not provide any type of explanation. In Germany, they started to be recorded in the sixteenth century (Schöpfer 1550, Schwartzenbach 1580). There are few of these types of lists because they were replaced by collocation dictionaries.

In the nineteenth century, many dictionaries of synonyms were published. Today, there are still many them in circulation, but they tend to be unsatisfactory, offering only a simple listing of synonyms without precise indications of denotation, connotation or usage situations, and above all, they lack examples. Synonym

dictionaries are usually monolingual. However, some have also been published in bilingual versions based on an incorrect concept of the synonym. In these works, cases of polysemy in the origin language are considered to be cases of synonymy with equivalents being offered for the different meanings of a polysemic word in the target language. If a bilingual dictionary is to make sense, it should be based on the meeting of synonyms in the two languages with clear definitions and boundaries in their respective fields. For example, German: *Glück, Vergnügen, Fröhlichkeit, Zufriedenheit*; Spanish: *felicidad, placer, alegría, satisfacción*. In German, these dictionaries are referred to as *kontrastive Synonymik* (see Hausmann, 1991b), and they are of great theoretical interest because they are based on contexts in which the synonyms appear in opposition and are interchangeable without differences in meaning. Some lexicographers have drawn attention to the difficulty of this endeavour.

4. Presentation of the COGNITION Semantic Field

The study examines the results obtained in a contrast analysis of the German segment of German-Spanish dictionaries within lexicological and lexicographic fields using the framework of the COMBIDIGLEX project. According to Eugenio Coseriu, a semantic field is “a lexical paradigm that originates due to the distribution of a continuum of lexical content in different units, offered in the language as words, which are reciprocated in immediate opposition via distinctive features of simple content” (“Lexikalische Solidaritäten”, 1967: 294). The semantic field that is the subject of the study is COGNITION. Within this field, the subfield of learning has been selected. The verb forming a part of this is *lernen*. The selection of the semantic field was made with the help of onomasiological dictionaries, such as dictionaries of synonyms and related words. Regarding this point, refer to Wehrle and Eggers (1961), and Dornseiff (1965). Under these assumptions, synonyms are presented from three dictionaries, which are the subjects of the study. These are the DWDS, WORTSCHATZLEXIKON and DUDEN ONLINE. As these are not paradigmatic dictionaries, the study aims to present the relevance given to paradigmatic information by each of the general dictionaries.

4.1 Synonyms in the DWDS

DWDS (OpenThesaurus) is a dictionary that classifies different types of information in separate sections: meaning, etymology, examples, synonyms and antonyms. This section addresses synonyms taken from OpenThesaurus:



Figure 1: Synonyms in DWDS (Open Thesaurus)

As shown in Figure 1, in the case of the term *lernen*, the synonyms appear separated alphabetically and with the designation *Synonymgruppen* (synonyms), depending on their meanings. This corresponds to the second type of classification of the presentation of paradigmatic information according to Haensch *et al.* (1982). There is no differentiation between hyperonyms, paronyms and related words, although all do appear under the designation of synonyms as Haensch suggested, and *pauken* (learn up), for example, is not a total synonym of *lernen* (learn). Some elements are marked by the difference of register (colloquial language). Each of these elements serves as a link to its own article, if the user needs it. A classification of hyponyms (*auswendig lernen*, *büffeln*, *memorieren*; to learn something by heart, to swot, to memorize, respectively) is also offered in which *lernen* (*learn*) would be the hyperonym. Thus, the user finds only a list of synonyms in other entries that are classified by semantic criteria, such as by the different senses. That is what Hausmann (1990b) designated *kumulative Synonymik*. For production processes, the user would have to consult the use specifications of each synonym to locate them properly in a text. The fact that the user can access the rest of the information through the links (meaning, etymology, examples) makes this task easier.

4.2 Synonyms in WORTSCHATZLEXIKON

The WORTSCHATZLEXIKON offers types of information other than the paradigmatic: morphology, grammar, frequency of occurrence, reference to the Dornseiff dictionary, and the collocations of the entry as well as examples from a real corpus. However, it does not offer the definition of the entry, making it impossible to know whether synonyms are used, as shown in Figure 2.

Wort: lernen
 Anzahl: 34716
 Häufigkeitsklasse: 8 (d.h. *der* ist ca. 2^8 mal häufiger als das gesuchte Wort)
 Morphologie: lernen
 Grammatikangaben: Wortart: Verb
 intransitiv
 reflexiv
 Partizip II mit haben
 lautet nicht ab
 transitiv
 Relationen zu anderen Wörtern:

- Synonyme: aneignen, anlernen, anlesen, anlesen, büffeln, einpauken, einprägen, einstudieren, einüben, erlernen, erlernen, erwerben, fortbilden, memorieren, pauken, studieren, studieren
- vergleiche: studieren, üben
- ist Synonym von: aneignen, angewöhnen, anlesen, annehmen, annehmen, auffrischen, aufnehmen, behalten, bimsen, büffeln, durcharbeiten, durchnehmen, durchpauken, einleuchten, einprägen, einstudieren, einstudieren, einüben, erarbeiten, erlernen, erwerben, fortbilden, memorieren, merken, pauken, präparieren, proben, probieren, studieren, trainieren, üben
- wird referenziert von: aneignen, einüben, memorieren, studieren

Figure 2: Synonyms in WORTSCHATZLEXIKON

The information about synonyms in the dictionary is based on the relationship between several alphabetically sorted lists of total or partial synonyms. As in

previous cases, this dictionary also corresponds to the second type of classification to show paradigmatic information (Haensch *et al.*, 1982). Similarly, in this case, the hyperonyms, hyponyms and related words are under the same section as synonyms, as suggested by Haensch *et al.*, (1982). There are also entries in which *lernen* (learn) is referenced as a synonym. As with the previous case, each one of the examples has a link to its corresponding entry, allowing the user to immediately access the same information about each one of the synonyms that appears under *lernen* (learn) if needed. The fact that information about each one of the synonyms is not provided on the same page reveals how the dictionary belongs to the so-called *kumulative Synonymik* by Hausmann (1990b).

4.3 Synonyms in DUDEN ONLINE

Synonyme ⓘ zu lernen
Nach oben

- **ablernen**, sich aneignen, **aufnehmen**, sich bilden, **durcharbeiten**, **durchdringen**, sich einarbeiten, [sich] erarbeiten, **erlernen**, **erwerben**, **studieren**, sich üben; (umgangssprachlich) sich anlernen, **pauken**
- auswendig lernen, **behalten**, sich einbläuen, sich einhämmern, sich einprägen, sich merken, **wiederholen**; (bildungssprachlich) **repetieren**; (umgangssprachlich) [durch]pauken; (abwertend) **einlernen**; (umgangssprachlich abwertend) **einpauken**; (bildungssprachlich veraltend) **memorieren**
- **einstudieren**, **einüben**, **trainieren**, **üben**, sich vorbereiten; (bildungssprachlich) [sich] präparieren; (umgangssprachlich) **bimsen**, **büffeln**, [durch]exerzieren, **durchkauen**, **durchpauken**, **ochsen**, **pauken**; (süddeutsch, österreichisch umgangssprachlich) **stucken**; (salopp) **einochsen**; (familiär) sich auf den Hosenboden setzen; (Schülersprache) ehrgeizen
- sich angewöhnen, sich zu eigen machen
- eine [Berufs]ausbildung machen, einen Beruf erlernen, ein Handwerk erlernen, in die Lehre gehen

Figure 3: Synonyms in DUDEN ONLINE

As shown in Figure 3, in DUDEN ONLINE, the synonyms are classified in several alphabetically sorted lists. The lists also correspond to the type of classification that reveals paradigmatic information (Haensch *et al.*, 1982). In this case, we find hyperonyms, hyponyms and paronyms under the synonyms section. For *lernen* (learn), four meanings are presented: 1.1 *sich Wissen, Kenntnisse aneignen (to acquire knowledge)*; 1.2 *sich, seinem Gedächtnis einprägen (memorize)*; 1.3 *Fertigkeiten erwerben (acquire skills)*; 1.4 *im Laufe der Zeit [durch Erfahrungen, Einsichten] zu einer bestimmten Einstellung, einem bestimmten Verhalten gelangen (acquire a behaviour over the course of the time through experiences, ideas)*; 2. *[ein Handwerk] erlernen (learn a job)*. A list of synonyms corresponds to each one of these meanings. Among the synonyms are partial or total synonyms as well as related words. Likewise, multiword terms can also be found. The reflexive pronoun *sich* is provided for this type of verb, as is the preposition taken by a particular verb. An interesting aspect of DUDEN ONLINE is that it provides information about the stylistic register, such as colloquial, vulgar, literate language, pejorative, regional or temporal uses of the language, as well as information about specific languages.

The synonyms that belong to the standard language appear first, sorted alphabetically. Those that belong to a specific stylistic register appear later, also sorted alphabetically. Not all the synonyms have a link to their own entry, unlike those presented in DWDS and WORTSCHATZLEXIKON. A link appears for those

synonyms with a more direct semantic relationship to the entry. When using the dictionary for production processes, the user gains greater information regarding the specifications of stylistic resources. This fact relates this tool to so-called “discriminated synonymy”, as it provides more information about each term and its use than other dictionaries. In this sense, the information presented in DUDEN ONLINE is not only lists of words. It is different from DWDS and WORTSCHATZ-LEXIKON in another way, which is in the inclusion of multiword terms that have a direct relationship with the entry. This aspect is very important since it provides the user with fixed expressions that are not easily found by other means and are related to the concept. The fact that only some terms have a link is not a problem due to the ease of finding new entries in this type of dictionary.

5. Conclusions

To conclude, the following should be noted regarding the importance of paradigmatic information for users: paradigmatic information serves not only to expand on vocabulary but also to strengthen the skills that lead to production. Following the analysis undertaken above, the conclusion may be drawn that a general compliance with the theoretical foundations exists in the analysed dictionaries. Paradigmatic information does not appear in the three dictionaries in the same way. The DWDS dictionary presents the synonyms in an isolated section. It hardly provides any information in this section except in the case of colloquial language, although all the synonyms can be consulted in separate articles through a link. The WORTSCHATZLEXIKON dictionary also has a dedicated section to synonyms. It does not provide specific information about each synonym, although each of the synonyms can be accessed through a link, as with the DWDS dictionary. The dictionary that provides the greatest variety of information is DUDEN ONLINE. It provides information not only about different stylistic registers but also about structures and fixed expressions. In this sense, DUDEN ONLINE is the most complete tool from which the user can obtain the most benefit in terms of production processes. Only DWDS differentiates between hyperonyms and hyponyms. Students should be informed of the numerous possibilities offered by online dictionaries in regards to vocabulary production or extension needs. While these needs may surely be covered by paradigmatic dictionaries, they are often unknown by students who tend to refer to online dictionaries. Substantial diversity has been revealed among these resources with each integrating paradigmatic information in a unique way. The incorporation of paradigmatic information (however it may be accomplished) serves as a valuable tool for users who want to avoid repetition and discover new terms. Thus, offering the most complete information for the correct use of each term is important for dictionaries.

6. References

6.1 Dictionaries

Condillac, E.B. (1780) *Dictionnaire des Synonymes*.
<http://gallica.bnf.fr/ark:/12148/btv1b9058308h/f1.image> [12 Jun 2016].
 Dornseiff, F. (1965) *Der deutsche Wortschatz nach Sachgruppen*, 6th edition, Berlin: de Gruyter.

DUW: DUDEN (2007) *Deutsches Universalwörterbuch*, 6th edition, Mannheim: Duden.
 DUDEN ONLINE <http://www.duden.de/woerterbuch> [16 Jun 2016].
 DWDS Berlin-Brandenburgische Akademie der Wissenschaften (2008-2011): *Digitales Wörterbuch der deutschen Sprache* DWDS Projekt. <http://www.dwds.de/?qu=lernen> [12 Jun 2016].
 Eberhard, J. A. (1795-1802) *Versuch einer allgemeiner deutschen Synonymik in einem kritisch-philosophischen Wörterbuche der sinnverwandten Wörter der hochdeutschen Mundart*, 6 Vol., 3rd edition 1826-1830, Leipzig: Barth.
 Girard, G. (1718) *La justesse de la langue française, ou les différentes significations des mots qui passent pour synonymes*, Paris: Laurent d' Houry.
 Grebe, P. and Müller, W. (1964) *Duden. Vergleichendes Synonymwörterbuch. Sinnverwandte Wörter und Wendungen*, Mannheim: Duden.
 Hoffmann, P. Fr. L. (1859) *Volkstümliches Wörterbuch der deutschen Synonymen nach alphabetischer Ordnung, oder Erklärung der in der deutschen Sprache vorkommende sinnverwandten Wörter für alle, welche die feinen Unterschiede der Begriffe kennenlernen und die Fertigkeit eines leichten, richtigen und bestimmten Ausdrucks sich erwerben wollen*, Leipzig: F. Brandstetter.
 Kempke, G. (2000) *Wörterbuch Deutsch als Fremdsprache*, Berlin, New York: de Gruyter.
 Lafaye, P. B. (1858) *Dictionnaire des Synonymes de la Langue Française*. http://books.google.fr/books/about/Dictionnaire_des_synonymes_de_la_langue.html?hl=fr&id=Po0CAAAAQAAJ [14 Jul 2016].
 Martínez de Sousa, J. (1995) *Diccionario de Lexicografía práctica*, Barcelona: Biblograf.
 Müller, W. (1977) *Schülerduden. Die richtige Wortwahl. Ein vergleichendes Wörterbuch sinnverwandter Ausdrücke*, Mannheim: Duden.
 Sanders, D. (1871) *Wörterbuch deutsche Synonymen*, Hamburg: Hoffmann & Campe.
 Sanders, D. (1896) *Deutsche Synonymen. Gesamt-Ausgabe der Neuen Beiträge zur Deutschen Synonymik (1881) und der Bausteine zu einem Wörterbuch der sinnverwandten Ausdrücke im Deutschen (1889)*, 2. Vol., Berlin: G. Joël.
 Schöpfer, J. (1927) *Synonyma. Das ist mancherley gattungen Deutscher Wörter so im Grund einerley bedeutung haben*. Dortmund: Schulte-Kemminghausen.
 Schwanenbach, L. 1580. *Schwatenbach: Synonyma. Formular wie man einerley meinung auff mancherley ahrt und weise sollaußsprechen. Für die ungeübten Schreiber gestellet*, Frankfurt a. M.: in Verlegung Sigm. Feyrabendts
 Wehrle, H. and Eggers, H. (1961) *Deutscher Wortschatz*, Stuttgart: Klett.
 WORTSCHATZLEXIKON: <http://wortschatz.uni-leipzig.de/abfrage/> [15 Jul 2016].

6.2 Others

Coseriu, E. (1967) "Lexikalische Solidaritäten", *Poetica*, Vol.1, No. 3, pp. 293-303.
 Engelberg, S. and L. Lemnitzer. (2009) *Lexikographie und Wörterbuchbenutzung*, 4th edition, Tübingen: Stauffenburg.
 Geckeler, H. (1994) *Semántica estructural y teoría del campo léxico*, Madrid: Gredos.
 Haensch, G., Wolf, L., Ettinger, S., and Werner, R. (1982) *La Lexicografía. De la Lingüística teórica a la Lexicografía práctica*, Madrid: Gredos.
 Haß, U. (ed.) (2005) *Grundfragen der elektronischen Lexikographie. elexiko – das Online-Informationssystem zum deutschen Wortschatz*, Berlin: de Gruyter.
 Haß, U. and Schmitz, U. (2010) "Lexikographie im Internet 2010 – Einleitung", in

- Gouws, R.H. et al. (ed.) *Lexicographica. Internationales Jahrbuch für Lexikographie*, 26, Berlin: de Gruyter.
- Hausmann, F. J. (1990a) "The Dictionary of Synonyms: Discriminating Synonymy" in Steger, H. and Wiegand, H.E. (ed.) *Handbücher zur Sprach- und Kommunikationswissenschaft: Wörterbücher: Ein Internationales Handbuch zur Lexikographie*, 2. Band, Berlin, New York: de Gruyter.
- Hausmann, F. J. (1990b) "Das Synonymenwörterbuch: Die kumulative Synonymik", in Steger, H. and Wiegand, H.E. (ed.) *Handbücher zur Sprach- und Kommunikationswissenschaft: Wörterbücher: Ein Internationales Handbuch zur Lexikographie*, 2. Band, Berlin, New York: de Gruyter.
- Hausmann, F. J. (1991a) "Die Paradigmatik im zweisprachigen Wörterbuch", in Steger, H. and Wiegand, H.E. (ed.) *Handbücher zur Sprach- und Kommunikationswissenschaft: Wörterbücher: Ein Internationales Handbuch zur Lexikographie*, 3. Band, Berlin, New York: de Gruyter.
- Hausmann, F. J. (1991b) "Paradigmatische Spezialwörterbücher", in Steger, H. and Wiegand, H.E. (ed.) *Handbücher zur Sprach- und Kommunikationswissenschaft: Wörterbücher: Ein Internationales Handbuch zur Lexikographie*, 3. Band, Berlin, New York: de Gruyter.
- Martín Mingorance, L. (1994) "La lexicografía onomasiológica", in Hernández, H. and Mederos, H. (ed.) *Aspectos de lexicografía contemporánea*, Barcelona: Biblograf.
- Storrer, A. (2010) "Deutsche Internet-Wörterbücher: Ein Überblick", in: Gouws, R.H. et al. (ed.) *Lexicographica. Internationales Jahrbuch für Lexikographie*, 26, Berlin: de Gruyter.
- Tarp, S. (2012) "Online dictionaries: today and tomorrow", in Heid, U. (ed.) *Thematic Part: Corpora and Lexicography. Lexicographica, (International Annual for Lexicography)* 28/2012, Berlin: de Gruyter.
- Wiegand, E. H. (1983) "Zur Bedeutungserläuterung von Satzadverbien in einsprachigen Wörterbüchern. Ein Beitrag zur praktischen Lexikologie", in Mentrup, W. (ed.) *Konzepte zur Lexikographie*, Tübingen: Narr.
- Wolski, W. (1990) "Die Synonymie im allgemeinen einsprachigen Wörterbuch", in Steger, H. and Wiegand, H.E. (ed.) *Handbücher zur Sprach- und Kommunikationswissenschaft: Wörterbücher: Ein Internationales Handbuch zur Lexikographie*, 2. Band, Berlin, New York: de Gruyter.