

CAUSAL CONSTRUCTIONS WITH AN ADJECTIVE IN GERMAN AND FRENCH: TYPOLOGICAL AND PEDAGOGICAL CONSIDERATIONS

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Abstract: The study explores the variety of causal constructions with an adjective in French and German, as they are realized in French *Pierre est rouge de colère* ('Peter is red with anger'), German *Maria ist gelb vor Eifersucht* ('Maria is yellow with jealousy'), French *Il est fou d'amour* (lit. 'He is crazy of love'), or French *Anne est morte de faim* (lit. 'Anne is dead of hunger'). First, the different elements of the construction are described in detail in the framework of Goldberg's Construction Grammar model (1995 and 2006) and of different phraseological studies (Burger, 2007; Dobrovolskij, 2011; Donalies, 2009; Fleischer, 1997; Gries, 2008). One and the same syntactic structure can convey different meanings (also a non-causal meaning) with different degrees of idiomaticity. In a contrastive approach, the study further highlights the typological differences in the causal construction between the Germanic language German and the Romance language French. These differences can lead to difficulties for French-speaking learners of German. The study proposes some teaching strategies to facilitate the learning of such causal constructions with an adjective. We advocate a teaching methodology which privileges holistic sequences or so-called 'chunks' (Handwerker, 2008) and which further focuses on the typological differences in the lexicalization patterns (e.g. different prepositions in German, different color terms,...), but also on conceptual metaphor and metonymy (Barcelona, 2001; Lakoff and Johnson, 1980; Niemeier, 1998). This helps foreign learners to 'rethink for speaking' (Ellis and Cadierno, 2009: 123) in the foreign language.

Keywords: Causal Construction, Construction with Adjective, Variation, Idiomaticity Degree, Contrastive Study, German, French, Typological Differences, Pedagogical Issues, Chunks, Metaphor and Metonymy

Introduction

The present contrastive study explores constructions with an adjective in French and German, as illustrated in the following examples:

- (1) Fr. *Pierre est rouge de colère*
'Peter is red with anger'
- (2) Germ. *Die Hände sind blau vor Kälte*
'The hands are blue from the cold'
- (3) Fr. *Il est fou d'amour*
Lit. 'He is crazy of love'
= 'He is very much in love'
- (4) Fr. *Anne est morte de faim*
Lit. 'Anne is dead of hunger'
= 'Anne is very hungry'.

This short list of examples makes clear that one and the same syntactic structure, namely [ADJECTIVE PREPOSITIONAL PHRASE], can convey different meanings with different degrees of idiomaticity. The first examples in the list (1 and 2) can be understood literally, they express causality, whereas examples (3) and (4) are idiomatic expressions which convey the meaning of excessiveness or intensification (Zeschel, 2012). The aim of this paper is to explore and describe this variety. Because this structure is entrenched in French and German¹ and its meaning is sometimes non-compositional, it can be defined as a construction in the sense of Construction Grammar. That is why the description of the examples will be based on the framework of Goldberg's Construction Grammar model (1995 and 2006). As the examples

under study have a phraseological meaning and different degrees of idiomaticity, we will also refer to phraseology studies (Burger, 2007; Dobrovol'skij, 2011; Donalies, 2009; Fleischer, 1997; Gries, 2008; Wulff, 2012) to explore the examples' specificities.

The variety of constructions is even larger if one takes a contrastive perspective and compares the realization of the same syntactic structure across languages. Depending on the language, different adjectives or prepositions will be selected in the same causal construction. For instance, for the same emotion of envy or jealousy, Germans use the color adjective *gelb* ('yellow'), whereas French speakers will select the color adjective *vert* ('green'). Therefore, the present study will also address typological issues related to the favorite lexicalization patterns (Talmy, 2000) in French vs. German and it will extend the analysis to alternative ways of expressing causality or excessiveness, for instance with compounds in German. E.g. the French example (4) *Anne est morte de faim* (lit. 'Anne is dead of hunger' = 'Anne is very hungry') does not have a one-to-one corresponding causal structure in German, but either a compound for the same expression of excessiveness, e.g. *Riesenhunger* (lit. 'giant hunger'), or a causal construction with a verb *Anne stirbt vor Hunger* (lit. 'Anne dies of hunger'). In order to investigate such typological differences between the Romance language French and the Germanic language German, some surveys were conducted with German and French-speaking natives which are presented in Section 3.

The semantic variation for one and the same construction which oscillates between literal and non-literal meaning, or between more or less idiomatic meaning and the selection of favorite lexicalization patterns constitute pedagogical challenges for French-speaking learners of German. There are several issues in the learning process due to the "typological distance" (Athanasopoulos, 2009: 93) between German and French. Not only do learners of German have to determine whether the syntactic structure expresses a literal or an idiomatic meaning, a more or less causal meaning, but they also have to recognize that German uses different structures to express the same meaning as in French.

In the last section of this article, we will provide some teaching strategies to facilitate the learning of the causal constructions with an adjective in all its facets. We will advocate a teaching methodology which privileges holistic sequences or so-called 'chunks' (Handwerker, 2008) and which further focuses on the typological differences in the lexicalization patterns (e.g. several prepositions in German, different color terms, divergent structures), but also on conceptual metaphor and metonymy (Barcelona, 2001; Lakoff and Johnson, 1980; Niemeier, 1998).

The paper is structured as follows: Starting with examples from the Sketchengine corpora (<http://the.SketchEngine.co.uk>)² and the core corpora of

the Digitales Wörterbuch der Deutschen Sprache (DWDS, <http://www.dwds.de/>), Section 2 will describe the syntactic and semantic variation of the structure under study, thereby defining the properties of the adjectives in the construction. This section will also deal with issues related to the phraseological status of the construction and further with the meaning the construction can convey. Section 3 will examine the typological differences between French and German. It will present two surveys conducted with French-speaking and German natives with the aim of defining the favorite lexicalization patterns for the expression of excessiveness in both languages. As the typological differences can be problematic for French-speaking learners of German, the pedagogical challenges related to these differences and the variation will be analyzed in more detail in Section 4. The following Section 5 will discuss some teaching strategies intended to facilitate the learning of the construction. Finally, Section 6 will summarize the findings and propose some perspectives.

Syntactic and Semantic Variation

The examples under study have the abstract syntactic structure [ADJECTIVE PREPOSITIONAL PHRASE], they are constructions in Goldberg's sense (1995 and 2006), i.e. form-meaning pairs which are entrenched both in German and French. They are often realized in a syntactic structure with a copula verb which is most of the time *être* in French or *sein* in German ('to be'). But other copula verbs are possible, as exemplified in the following example with French *devenir* 'to become':

- (5) Fr. [...] *des fois, j'en deviens vert de colère.*
 (SketchEngine, 12930)³
 Lit. '[...] sometimes I become green with anger'.

As the above examples (1)-(4) illustrate, the adjective in this construction is often a color adjective, but other non-scalar adjectives can also be used, e.g. Fr. *fou* 'crazy', *mort* 'dead', *malade* 'ill', Germ. *blind* 'blind',

- (3) Fr. *Il est fou d'amour*
 Lit. 'He is crazy of love'
 (4) Fr. *Anne est morte de faim*
 Lit. 'Anne is dead of hunger'
 = 'Anne is very hungry'
 (6) Fr. *Elle était malade d'amour*
 Lit. 'She was ill/sick of love'
 (7) Germ. *Sie ist blind vor Liebe*
 Lit. 'She is blind of love'.

The adjective expresses the effect triggered by or resulting from the specific cause expressed by the following prepositional group. It is often an emotion, as illu-

strated in examples (1)-(3) or (6) and (7), but it can also be a physical cause, either internal (see example (4)) or external like in:

- (2) Germ. *Die Hände sind blau vor Kälte*
 Lit. 'The hands are blue from [the] cold'
- (8) Fr. *Les enfants étaient bleus de froid*
 Lit. 'The children were blue from [the] cold'.

At the semantic level the construction can convey various meanings. In its primary use, it expresses a causal event with a cause (expressed by the prepositional group) and an effect (expressed by the adjective). Cause and effect are connected to each other in the same construction by a prepositional link (Khoo *et al.*, 2002: 55)⁴. For instance, in example (2) or (8), the blue effect results from the cold, or the other way round, the cold is the cause for the color change. In its basic use the construction is further characterized by compositionality, i.e. that the causal meaning resulting from the concomitant use of the different constituent elements of the construction is fully predictable. In her (1995) book, Goldberg considered that constructions have to be non-compositional to have the constructional status:

According to Construction Grammar, a distinct construction is defined to exist if one or more of its properties are not strictly predictable from knowledge of other constructions existing in grammar: C is a construction iffdef C is a form-meaning pair <Fi, Si> such that some aspect of Fi or some aspect of Si is not strictly predictable from C's component parts or from other previously established constructions. (Goldberg, 1995: 4)

In her later book (2006) she reconsidered this aspect and redefined constructions as having to be entrenched and frequent in use:

In addition, patterns are stored as constructions even if they are fully predictable as long as they occur with sufficient frequency. (Goldberg, 2006: 5)

The causal structure under study can be considered to be entrenched as a search in the French and German corpora of the Sketchengine shows. In February 2012, examples of the causal structure with a color adjective were looked for, both in the French corpus frWaC, which contained 1.628.667.738 tokens and 1.279.937.839 words and in the German corpus deTenTen (with 2.844.839.761 tokens and 2.338.036.362 words). We started with a search of the causal construction with the most common color adjectives⁵ (see Berlin and Kay 1969) *white, black, red, green, blue* and *yellow*. In the

German corpus we found 26 instantiations as against 114 examples in the French corpus. As we realize, the number of hits of the specific construction with a color term is rather low, i.e. less than 1 per million. Goldberg does not further define what she means with 'sufficient frequency', but since more than 100 examples could be found in the French corpus, we expect the structure to be recurrent and therefore entrenched. Moreover the analyzed constructions build a "semantic unity" (Gries, 2008: 8) and convey a specific meaning. We will further see in Section 3 that the difference between the results for German and French is justified by the preferred lexicalization patterns in both languages.

Some examples can be understood in a compositional or non-compositional way, depending on the meaning being conveyed, as exemplified by (1):

- (1) Fr. *Pierre est rouge de colère*
 'Peter is red with anger'.

This example can mean that Peter is indeed red in the face because he got upset about something, in which case the meaning is compositional and fully predictable from the abstract construction. The use of color adjectives is quite common in this type of construction, it refers to a change of color in the face due to a particular cause. Soriano und Valenzuela (2009: 423) speak of the 'rise of a body fluid' to explain the color change, e.g. in example (1):

the color refers to a body fluid that intervenes (or is believed to intervene) in the experience of the emotion at stake. In the case of anger the fluid is blood, which rushes to the neck and face areas when we feel outraged. (Soriano and Valenzuela 2009: 423)

The 'rise of a body fluid' can lead to different colors in the face, like yellow, blue, white, green⁶ and so on, e.g.

- (9) Fr. *Elle est verte de peur, morte de trouille!*
 (SketchEngine, 10573)
 Lit. 'She is green with fear, dead of fright!'
- (10) Fr. [...] *ils étaient tous pâles de terreur et certains ont commencé à vomir*
 (SketchEngine, 05302)
 Lit. '[...] they were all pale with terror and some of them started to vomit'
- (11) Fr. *Il était jaune d'indigestion*
 Lit. 'He was yellow because of indigestion'
- (12) Fr. *Il est rose de bonheur*
 Lit. 'He is pink of happiness'
 (<http://www.gazette-besancon.fr/2010/02/23/jean-louis-fousseret-je-suis-rose-de-bonheur/>).

The same construction can also be used in a non-compositional way to express an extreme or excessive

state. This is particularly the case when the construction is not used literally, but much more in an idiomatic way. Let us look again at some examples:

- (1) Fr. *Pierre est rouge de colère*
Lit. 'Peter is red with anger'
- (3) Fr. *Il est fou d'amour*
Lit. 'He is crazy of love'
- (4) Fr. *Anne est morte de faim*
Lit. 'Anne is dead of hunger'
= 'Anne is very hungry'
- (6) Fr. *Elle était malade d'amour*
Lit. 'She was ill/sick of love'
- (7) Germ. *Sie ist blind vor Liebe*
Lit. 'She is blind of love'
- (9) Fr. *Elle est verte de peur, morte de trouille!*
(SketchEngine, 10573)
Lit. 'She is green with fear, dead of fright!'

In the examples, the subject is not 'really' red (1), crazy (3), dead (4), ill (6), blind (7) or green (9). Semantically, these examples do not express causality (even if primarily they did), but much more a state of excessiveness or exaggeration. Examples (1) or (9) can convey the literal meaning of a color change in the face, but more than that, they can also refer to a specific state, namely a state of anger in example (1), or of great fear in (9). In this case, the color of the face is the metonymical expression for this state and the underlying metonymy is COLOR OF THE FACE FOR PHYSICAL STATE.

Non-color adjectives are also possible in the construction, more specifically resultative or telic adjectives (*dead, crazy, ill, blind*). Of course, the instantiations [X *est mort de* Y] (see example 4) or [X *est fou de* Y] in example (3) were originally motivated by causality, i.e. 'Y (almost) provokes the death/the craziness of X'. The motivation faded with the lexicalization process and some slots can be filled rather freely, e.g. Fr. *Il est mort de faim/de soif/de peur/de fatigue* and so on, lit. 'He is dead of hunger/thirst/fear/tiredness'.

The description of the different instantiations of the construction with an adjective uncovers different degrees of fixedness and accordingly idiomaticity. In its compositional use the construction is not idiomatic but expresses a causal event, just like in the following example with a non-color adjective:

- (13) Fr. *Il est triste de la perte de sa mère*
Lit. 'He is sad about the loss of his mother'.

The above example:

- (1) Fr. *Pierre est rouge de colère*
'Peter is red with anger'

can also be understood in a literal way, e.g. in a context where somebody is so upset that s/he indeed gets a red face. If the interpretation of the same example is non-literal, i.e. if at least one lexical element is fixed (see Gries' definition of phraseologism 2008: 6) it is idiomatic in use and following traditional research in phraseology (Burger, 2007; Dobrovol'skij 2011; Donalies, 2009; Fleischer, 1997) can be defined as a phraseologism. As we saw before, a higher degree of idiomaticity, e.g. with the lexicalized expressions *fou de, mort de, malade de*, leads to a greater loss of the causal meaning. When in use, some of the slots around these expressions have to be filled (see also Dobrovol'skij, 2011: 114 or Rostila, 2011: 265), namely X and Y in [X *est fou de* Y], [X *est mort de* Y] or [X *est malade de* Y]. Various elements are possible, e.g. in example (3) *Il est fou d'amour*, one could replace the prepositional complement Y by almost any other complement which can make somebody 'crazy', for instance (3) *Il est fou de pizza* ('of pizza'), *de linguistique* ('of linguistics'), *de toi* ('of you'), *de son ordinateur* ('of his computer'), to name just a few. Following Fleischer (1997: 130), who proposes the term *Phraseoschablone* (literally: 'phraseo-pattern') for such expressions, Dobrovol'skij (2011: 114) suggests the term *phraseo-construction*. This is the term we will use for this type of examples.

To summarize, the syntactic structure [ADJECTIVE PREPOSITIONAL PHRASE] is polysemous, the instantiations of this structure are different realizations of the same schematic construction, they are linked to each other by inheritance links (Goldberg, 1995). We will postulate that the prototypical realization of this construction is compositional and expresses the literal meaning of causality, e.g.:

- (13) Fr. *Il est triste de la perte de sa mère*
Lit. 'He is sad about the loss of his mother'.

The same prototypical meaning can be instantiated with a color adjective, e.g.:

- (14) Germ. *Seine Nase ist schwarz vom Tabak* (DWDS, Kernkorpus)
Lit. 'His nose is black from the tobacco'
- (15) Germ. [...] *ihre Gesichter sind rot von der beißenden Kälte* (DWDS, Die Zeit, 03.06.2009, Nr. 7)
Lit. '[...] their faces are red from the biting cold'.

If the construction under study is not compositional, its meaning is linked to the prototypical use by a part-of relation, to use Goldberg's terminology (1995), e.g.:

- (1) Fr. *Pierre est rouge de colère*
'Peter is red with anger'

- (2) Germ. *Maria ist gelb vor Eifersucht*
 ‘Maria is yellow with jealousy’
 (3) Fr. *Il est fou d’amour*
 Lit. ‘He is crazy of love’.

The different realizations of the same schematic construction instantiate different degrees of fixedness and idiomaticity. This leads us to classify our examples on a continuum between a prototypical compositional pole and another idiomatic non-compositional pole. Between both poles we have the metonymical use of the same construction.

Conceptual and Typological Differences between French and German

After the description of the variation in the different instantiations of the construction with an adjective followed by a prepositional group⁷, we now want to turn to the contrastive analysis of the examples as they are realized in the Romance language French – the mother tongue of the learners (L1) – and the Germanic language German which corresponds to L2. Cognitive Linguistics postulates a strong link between language and cognition (Dirven and Ruiz de Mendoza Ibáñez, 2010). Langacker (1987: 5) goes one step further when he claims that “Cognitive Grammar [...] equates meaning with conceptualization” (Langacker, 1987: 5). Consequently, all linguistic meaning is conceptual in nature and linguistic entities reflect underlying concepts. Interestingly, different speech communities do not conceptualize and categorize reality in the same way, they construe events differently and often use different linguistic expressions for the same reality. According to Ellis and Cadierno (2009: 122), “[c]onstrutions are conventionalized linguistic means for presenting different interpretations or construals of an event”. Consequently, differences between expressions in French and German reflect differences in conceptualization. Let us now look at the differences with the construction under study in both languages.

Selection of the Adjective

A contrastive study of the causal construction in French and German brings to the fore that French and German select different color adjectives. Whereas German will speak of *gelb* (‘yellow’) in association with the feeling of jealousy or envy, French will rather associate the green color (*vert*) with the same emotion:

- (1) a. Germ. *Maria ist gelb vor Eifersucht*
 ‘Maria is yellow with jealousy’
 b. Fr. *Maria est verte de jalousie*
 ‘Maria is green with jealousy’.

De Knop (2013) describes two surveys conducted with French-speaking Belgians and with German natives aiming at testing the difference in the selection of the color adjectives out of context on the one hand and in the causal construction on the other. The investigation unveils some interesting aspects. First, in the causal construction French has a strong preference for the green color but also for blue, German rather favors yellow in the same construction. Secondly, the causal construction has a strong impact on the meaning and associations of the adjectives. If used out of context, many associations related to the adjective are rather positive, e.g. white is often associated with purity, peace, quiet, cleanliness and so on. When used in the causal construction the adjective often conveys a negative meaning, e.g. *Il est blanc de peur*, lit. ‘He is white with fear’ (see De Knop, 2013 for further details).

Selection of the Preposition

In an article about “Emotions as cause and the cause of emotions”, Dirven (1997) distinguishes seven different causal prepositions in English for the expression of causality, i.e. *with*, *for*, *out of*, *from*, *in*, *through* and *by*. They all highlight different aspects of causality, e.g. the “uncontrollable cause of a process” (58) with the preposition *with*, the “cause of emotions as a target” (70) which triggers *at*, or “the cause of emotions as abstract motion on a surface” (72) for the preposition *about*, to name just a few (see Dirven 1995; 1997 or Khoo *et al.*, 2002 for more details). In the same way, German has several prepositions for the expression of causality, more specifically *von*, *vor*, *aus* and *wegen*. French is different as it only has the preposition *de* and *à cause de*. In the construction under study the preposition selection is even more limited in French which only uses *de*, while German can select either *von* or *vor*:

- (14) Germ. *Seine Nase ist schwarz vom Tabak* (DWDS, Kernkorpus)
 Lit. ‘His nose is black from the tobacco’
 (15) Germ. [...] *ihre Gesichter sind rot von der beißenden Kälte* (DWDS, Die Zeit, 03.06.2009, Nr. 7)
 Lit. ‘[...] their faces are red from the biting cold’
 (16) Germ. *Die Hände der Kinder waren blau vor Kälte* (DWDS, Kernkorpus)
 Lit. ‘The hands of the children were blue from (the) cold’
 (2) Germ. *Maria ist gelb vor Eifersucht*
 Lit. ‘Maria is yellow with jealousy’.

In the French translation of these examples it is always the preposition *de* which is used:

- (14') Fr. 'Son nez était noir du⁸ tabac'
 (15') Fr. '[...] leurs visages sont rouges du froid mordant'
 (16') Fr. 'Les mains des enfants étaient bleues de froid'
 (2') Fr. 'Maria est verte de jalousie'.

The French preposition *de* is polysemous, it conveys different meanings for which German uses different prepositions. The German preposition *von* is mainly used for external causes like the cold, tobacco, etc. It is always used with the definite article. *Vor* is used in most examples without an article, it often expresses an inherent cause like a strong feeling for instance (see example 2). The change of state, e.g. becoming blue or red in the face, triggered by the cause happens non-intentionally. If the change were controlled and taking place intentionally, then one would have to use the preposition *aus*. No such examples were found in the collection of examples as it is hardly possible to change one's face color intentionally. For further details see Girdenienė (2006).

The difference in number and type of the prepositions between French and German reflects typological differences between Romance and Germanic languages (see also Talmy, 2000). Germanic languages – to which German belongs – favor the expression of manner. This dimension pervades several levels of lexicalization and is not restricted to expressions of location and motion, as has been shown by De Knop and Gallez (2013). The preposition diversity for the expression of causality in German is a further illustration of this manner dimension. The polysemy of the construction is neutralized in German with this diversity, which is not the case in French.

Analytic vs. Synthetic Lexicalization Patterns

In the discussion about the entrenched nature of the causal construction with a color adjective in Section 2, the search for examples in both the French and the German corpora of the Sketchengine was already described in detail. It could also be observed that more examples with a color adjective could be found in the French corpus frWaC than in the German corpus deTenTen. In this section we want to discuss the possible reasons for this difference and present a more fine-grained analysis. To start with, Table 1 presents the detailed results about the number of hits of the causal construction with a color adjective in both corpora.

The difference in frequency can be explained by the favorite lexicalization patterns in both languages, i.e. by typological differences. German as a Germanic language privileges synthetic lexicalization patterns (Primus, 1997), whereas French as a Romance language is characterized by analyticity (see Haarmann, 2004; Hinrichs,

2004; Siemund, 2004; or Würstle, 1992). The notion of syntheticity is a wide concept which covers not only agglutination or inflection, but also synthetic ways of expressions like compounding (Siemund, 2004: 170). As we have seen before, the causal construction with an adjective often expresses an extreme state of excessiveness, especially when it is used in a non-compositional way. For instance, in the above examples of phraseo-constructions, it is not the literal meaning which is meant but much more an extreme state:

- (3) Fr. *Il est fou d'amour*
 Lit. 'He is crazy of love'
 = 'He is very much in love'
 (4) Fr. *Anne est morte de faim*
 Lit. 'Anne is dead of hunger'
 = 'Anne is very hungry'
 (6) Fr. *Elle était malade d'amour*
 Lit. 'She was ill/sick of love'
 = 'She was very much in love'.

The expression of excessiveness has found some attention in linguistic research, mostly under the term 'intensification' (see Dressler and Merlini Barbaresi, 1994; Kirschbaum, 2002; Miclea, 2010; Oebel, 2012; Račienė, 2013; van Os, 1989; or Zeschel, 2012). According to Kirschbaum (2002: 6-7) intensification can be realized at different linguistic levels in German: (i) at the morphological level, especially with compounding as with *Riesenfreude* ('giant pleasure'), *ultracool*; (ii) at the syntactic level, e.g. *Sein Auge ist blau wie ein Veilchen* ('His eye is blue like a violet') or *In der Nacht hatte es sehr gefroren* ('In the night it had frozen a lot'); and finally, (iii) at the lexical level with words which express an intensity, e.g. *verheerend* ('devastating'). Different languages privilege different "intensification strategies" (Zeschel, 2012: 52), as has been illustrated in the contrastive studies by Miclea (2010), who focuses on adjectives expressing intensification in German and Romanian, or by Račienė (2013) who compares expressions of intensification between German and Lithuanian. Zeschel (2012: 63) offers a comparative approach of three constructions in English and German in the framework of Construction Grammar, namely 'Intensifier + Noun' (e.g. *glowing health*), 'Intensifier + Adjective' (e.g. *glowingly healthy skin*) and 'Intensifier + with + Noun' (e.g. *glowing with health*). He limits his analysis to intensification expressions from the conceptual domains of sound, light, heat and smell. We will see hereunder that the intensification expressions in our study concern other domains. For further contrastive studies see Dressler and Merlini Barbaresi (1994) or Oebel (2012).

Table 1. Frequency of causal constructions with a color term (De Knop, 2014)

Colour term	Number of hits in German corpus	Colour term	Number of hits in French corpus
<i>weiß</i>	5	<i>blanc</i>	11
<i>schwarz</i>	10	<i>noir</i>	67
<i>rot</i>	8	<i>rouge</i>	14
<i>grün</i>	3	<i>vert</i>	19
<i>blau</i>	0	<i>bleu</i>	0
<i>gelb</i>	0	<i>jaune</i>	3
Total	26		114

German as a synthetic language favors compounds for the expression of intensification⁹: “Das Intensivierungsphänomen durch Komposition ist in allen germanischen Sprachen vertreten, im Deutschen allerdings besonders stark“ (Račienė, 2013: 127). As claimed by Zeschel (2012: 71) this is due to “a general typological tendency towards complex word-formations that continues to influence German”.

For instance, the literal translation of example (4) into German is possible, but not in use, e.g. (4') *Anne ist tot vor Hunger*. In German this example can be translated by a causal construction with a verb which expresses the dying process, namely *sterben* in (4'') *Anne stirbt vor Hunger*. But alternatively, it is often an expression with a so-called ‘augmentative compound’ (Lohde, 2006: 64) which is favored, e.g. (4''') *Anne hat einen Bärenhunger/Riesenhunger*, lit. ‘Anne has a bear hunger/giant hunger’ (= ‘Anne is very hungry’). In a similar way, Germans will rather speak of *liebeskrank sein* (lit. ‘to be love sick’) as a translation for example (6). The French phraseo-construction [X *est mort de* Y] as illustrated with the above examples in Section 2, *Il est mort de faim/de soif/de peur/de fatigue*, lit. ‘He is dead of hunger/thirst/fear/tiredness’ instantiates the conceptual metaphor EXCESSIVENESS IS DEATH. The corresponding German augmentative compounds either conceptualize the same idea of death (noun *Tod*/adjective *tot*) or alternatively the metaphor EXCESSIVENESS IS GIANT with the first constituent of the compound (*Riesen*):

- (4a) Fr. *Anne est morte de faim*
Lit. ‘Anne is dead of hunger’
- (4b) Germ. *Anne hat einen Riesenhunger*
Lit. ‘Anne has a giant hunger’
- (17a) Fr. *Il est mort de soif*
Lit. ‘He is dead of thirst’
- (17b) Germ. *Er hat einen Riesendurst*
Lit. ‘He has a giant thirst’
- (18a) Fr. *Il est mort de peur*
Lit. ‘He is dead of fear’
- (18b) Germ. *Er hat Todesangst*
Lit. ‘He has death fear’

- (19a) Fr. *Il est mort de fatigue*
Lit. ‘He is dead of tiredness’

- (19b) Germ. *Er ist todmüde*
Lit. ‘He is death tired’.

Both constituents of the German compound are related to each other by a metaphor rather than by causality. The second constituent of the German compound expresses the emotion.

Survey about the Different Lexicalization Patterns in French and German

In order to confirm our hypothesis that German privileges more synthetic ways of expression, whereas French rather selects analytic lexicalization patterns for the expression of excessiveness or intensification, we started two surveys with French-speaking and German natives. The French-speaking test group consisted of 17 Belgian students of Romance languages at the Université catholique de Louvain, the group with the German natives was a mixed group of 4 students and 8 non-student adults. Both groups received the same questionnaire in their mother tongue asking for alternative ways of expressions, e.g. ‘How can you say that ... someone is very hungry, someone is very thirsty, someone is very unhappy,...’ (see Appendix I and II). Each questionnaire contained 10 questions. Several answers were possible for each question. At the beginning of the survey it was specified that there are no wrong answers. The participants knew nothing about the purpose of the test.

Results of the Survey

The test results confirm our expectations. It can first be observed that the French-speaking group selected no compounds at all, but more varied ways of expression than the German group. The most frequent expressions for French speakers consist of an adjective followed by *comme* (‘as’) which introduces a comparison with a following noun (7.6% of the answers), as illustrated in *blanc comme un linge* (lit. ‘white as (a) linen’), *blanc comme une endive* (lit. ‘white as an endive’), *blanc comme un mort* (lit. ‘white as a dead person’), *pâle comme la mort* (lit. ‘pale as (the) death’). Most of these expressions are idiomatic in French and they belong to

the phraseological ways of expressing that someone is very pale. Even more idiomatic is the single example *malheureux comme les pierres* (lit. ‘unhappy like the stones’) for the idea of being very unhappy. The French-speaking group also opted for causal constructions with a verb (6.8%), e.g. *mourir/crever de faim* (lit. ‘to die of hunger’) or *mourir/crever de soif* (lit. ‘to die of thirst’). Only 4.7% of the answers corresponded to the causal construction with an adjective, for instance *vert de peur/de jalousie* (lit. ‘green with fear/with jealousy’), *rouge de colère* (lit. ‘red with anger’). In 3% of the cases we have a nominal group consisting of a noun further determined by another noun, e.g. *avoir une faim de loup* (lit. ‘to have a hunger of wolf’) or *un froid de canard* (lit. ‘a cold of duck’). As a last alternative, we find a noun with an attributive adjective (2.1%) as illustrated by *une peur bleue* (lit. ‘a blue fear’).

The German group produced mainly compounds (32%), in only 3 cases (0.01%) also a causal construction with an adjective, e.g. ... *ist gelb vor Neid* (‘...is yellow with envy’). The causal construction with a verb, as exemplified here above, for example (4) *Anne stirbt vor Hunger*, is hardly represented (0.03%). Among the compounds, we can further differentiate between nouns and adjectives, e.g. *einen Bärenhunger haben* (lit. ‘to have a bear hunger’) or *totunglücklich sein* (lit. ‘to be death unhappy’). Most examples are nominal, e.g. *Mordshunger haben* (lit. ‘to have crime hunger’), *Riesenangst haben* (lit. ‘to have giant fear’), *Bleichgesicht sein* (lit. ‘to be a pale face’), *Angsthasse sein* (lit. ‘to be fear hare’), *Todesangst haben* (lit. ‘to have death fear’). Most of the nominal compounds are idiomatic phraseologisms, their first constituent is often used to build other compounds, e.g. *Mordshunger* (lit. ‘crime hunger’), *Mordsangst* (lit. ‘crime fear’); or *Riesendurst* (lit. ‘giant thirst’), *Riesenhunger* (‘giant hunger’). Among the compound examples 38% are adjectives which sometimes build whole series. This pertains to expressions for extreme coldness, e.g. *todeskalt* (lit. ‘death cold’), *eiskalt* (lit. ‘ice cold’), *mega kalt* (lit. ‘mega cold’), *arschkalt* (lit. ‘ass cold’), *bitterkalt* (lit. ‘bitter cold’), *hundekalt* (lit. ‘dog cold’) and *lauskalt* (lit. ‘louse cold’). Some of the adjectival examples are directly derived from the nominal compounds, for instance *mordshungrig* (lit. ‘crime hungry’), *todesängstlich* (lit. ‘death fearful’), *heißhungrig* (lit. ‘hot hungry’). German linguists use the term ‘Zusammenbildungen’ for such examples (see among others Wolf, 2002: 77). Table 2

hereunder recapitulates the results for both groups. To sum up, French speakers use a variety of lexicalization patterns for the expression of excessiveness or intensification, showing no preference for one type of pattern, whereas Germans rather privilege compounds. Let us now see how to deal with these differences from a pedagogical point of view.

Pedagogical Issues

When one learns a foreign language, one soon realizes that there are differences in the lexicalization patterns and that “[t]here are very few one-to-one correspondences between languages” (Littlemore, 2009: 4). In Cognitive Linguistics terms, language reflects underlying conceptualizations and categories and as a consequence differences in language reflect differences at the conceptualization and categorization level. Pavlenko (2005: 446) distinguishes seven possible patterns between verbal and conceptual performance with bilinguals. In the first pattern (i), both L1 and L2 conceptual representations coexist. This is particularly the case with beginning learners. But it is especially the second pattern (ii), namely an “L1-based conceptual transfer” (Pavlenko, 2005: 446), i.e. “the L1-based conceptual system guiding L2 language learning and use, at least in the beginning and intermediate stages of L2 acquisition” (Pavlenko, 2005: 438) which creates a kind of “obstacle” (Boers *et al.*, 2010: 5) for the proper learning of the foreign categories. The other patterns described by Pavlenko are less relevant for our study, therefore we simply refer to Pavlenko (2005: 446) for a description of more categories.

The difficulties encountered by French-speaking learners of German with the causal construction with an adjective can be different in nature. Either they are conceptual, i.e. they depend on the different conceptualizations in French and in German, whereby the L1-based conceptual system (in this case French) is predominant and transferred onto the categories of German-L2 (compare Pavlenko, 2005: 446). As outlined before in Section 3.1, French and German speakers sometimes select different adjectives in the causal construction, e.g. *yellow* in German vs. *green* in French for the same emotion of jealousy:

- (2) a. Germ. *Maria ist gelb vor Eifersucht*
 Lit. ‘Maria is yellow with jealousy’
 b. Fr. *Maria est verte de jalousie*
 Lit. ‘Maria is green with jealousy’.

Table 2. Results of the surveys by the French-speaking and German groups

	French-speaking group	German-speaking group
Compound	/	32%
Causal construction with a verb	6.8%	0.03%
Causal construction with an adjective	4.7%	0.01%
Nominal group + another noun	3%	/
Adjective as noun	7.6%	/
Noun/Verb + adjective	2.1%	0.02%

A further challenge for learners of German is the right selection of the causal preposition in the causal construction (see also Section 3.2.). German focuses on the manner dimension and consequently has a variety of causal prepositions which means that the learner has to identify the conceptualization which motivates the selection of the right preposition: is it an external (which would motivate the use of *von*) or an intrinsic cause (for the selection of *vor*). Difficulties are particularly prominent for learners of languages which use one and the same polysemous preposition in the causal construction, as French does with the preposition *de*. Littlemore (2009: 29) already underlined the problem of the diverging number of conceptual categories between L1 and L2. She observes that “[t]hings become even more difficult for language learners when a concept that is divided into two broad categories in their own language is divided into, say, three categories in the target language” (2009: 29). In our case it is one single prepositional category in French-L1 against three categories in German-L2.

A further difficulty results from the “typological distance” (Athanasopoulos, 2009: 93) between German and French and especially from the favorite lexicalization patterns in both languages for the same concept. This is a linguistic difference between both languages (see Section 3.3). French-speaking learners have to realize that German is a synthetic language and that it privileges synthetic ways of expression with compounds. This applies more specifically to expressions of excessiveness and intensification for which French has a whole variety of analytic lexicalization possibilities, among others causal constructions with an adjective. The learning problem is not a linguistic one as German also has causal constructions with an adjective to express the same meaning as in French. But the challenge for learners of German resides in the recognition of the privileged ways of expression for causality or an extreme emotional or physical state. Accordingly, learning a foreign language means to learn to re-orientate one’s attention to different conceptual or linguistic aspects in the foreign language. But, as claimed by Littlemore (2009: 29), “[...] the categorization systems that we build up due to our L1 cause us to form habits that are hard to break when we encounter a different language with different categorization systems”. In the following section we will propose some strategies to ‘break such habits’ and to facilitate the learning of the causal construction with an adjective with all its specific dimensions.

Teaching Strategies

The previous sections aimed at describing the syntactic and semantic variation in the causal

construction with an adjective in a contrastive study between French and German. Learners of German will not be aware of this variation which means that the first didactic step should consist in focusing on this variation and on the differences between both languages. The foreign learner has to “reconstruct” the second language (Ellis and Cadierno, 2009: 124), this “involves learning a new set of conventionalized form-meaning mappings, that is, acquiring the specific linguistic means used by the native speakers of the target-language to construe given events and situations” (Ellis and Cadierno, 2009: 125). Following Goldstone and Steyvers (2001), Roberson (2005: 66) suggests that “a critical component on any category learning is increased selective attentional weighting of salient dimensions”. This reminds of Schmidt’s (1990 and 2001) “noticing hypothesis”. Athanasopoulos (2009: 92) advocates a “cognitive restructuring in the mind of bilinguals”, which in the examples under study means to not only spend time on the “categorical divisions”, but also on the linguistic habits in the foreign language. Robinson and Ellis (2008) advocate a “rethinking for speaking”, in order to counteract the biases due to L1-categories and lexicalization patterns. We are now going to describe more concretely how this can be achieved.

Chunks

Ellis and Cadierno (2009: 114) claim that “much of communication makes use of fixed expressions memorized as formulaic chunks”. Phraseological units pervade communication, either in the form of collocations, multi-word sequences, holophrases, phrasemes, idioms and so on (Wulff, 2012). This assumption offers a good starting point for a teaching methodology based on chunks or holophrases: “[L]anguage acquisition is the learning of an inventory of patterns as arrangements of words with their associated structural meanings.” (Ellis and Cadierno, 2009: 114) Characterized by the “idiom principle” (Ellis and Cadierno, 2009: 113), phraseo-constructions as fixed patterns with some open slots build an ideal field to practice such chunks. The frequency dimension should not be neglected, which means that it is to be recommended to draw the learner’s attention to German favorite lexicalization patterns from the beginning of the learning process. The variation in the lexicalization patterns can be highlighted as well.

Following the principle of form-meaning mapping and in order to draw the learner’s attention to alternative ways of expression, we will advocate a teaching methodology which opts for an onomasiological procedure by starting from the question of how extreme or excessive states can be expressed in both French and German. This methodology offers the advantage to focus

first on the similarities between German and French as both languages use the same causal construction with an adjective. But it also allows to stress the differences between both languages with the alternative augmentative compounds in German for the expression of excessiveness. One could use the different examples of the survey in Appendix I and II. For instance, how can one express that one is very hungry, very thirsty, is feeling very cold, etc.

The conceptual differences which become obvious with the selection of the adjective in the causal construction can be illustrated with some cloze exercises asking for different adjectives in the same causal construction. This is in line with the definition of phraseo-constructions as partly fixed structures, but in which some slots have to be filled (Dobrovol'skij, 2011: 114). The teacher can ask which adjective is possible in a phraseo-construction such as German *Peter ist ... vor ...* or French *Marie est ... de ...* ('Peter is ... of/from ...' / 'Maria is ... of/from...'). This is a way to "introduce the students to controlled variation in these basic phrases with the help of simple substitution drills, which would demonstrate that the chunks learnt previously were not invariable routines, but were instead patterns with open slots" (Nattinger and DeCarrico, 1992: 117). But many other exercise types are possible. For the teaching of chunks, Handwerker and Madlener (2006) and Handwerker (2008) suggest to work with film sequences and animations, they propose a three-step procedure: (i) presentation of film sequences and animations with a large offer of chunks; (ii) a reduced and simplified series of chunks (without particles, adjuncts, ...) are presented in parallel in a photo series that can be used to check the use or meaning of the chunk; and (iii) concrete explanations of the specific chunk in (ii). This three-step procedure should be accompanied by many exercises. There is no limit to teachers' creativity.

Conceptual Metonymy and Metaphor

As we saw in detail in Section 2, causal constructions with an adjective are often used to express excessive emotional states, be it literally, metonymically or metaphorically. It is the 'fluid rise' metonymy for a specific state or emotion which plays a major role in the phraseo-constructions. This metonymy is strongly linked to the conceptual metaphors EMOTION IS A NATURAL PHYSICAL FORCE and ANGER IS THE HEAT OF A FLUID IN A CONTAINER (Barcelona, 2001), as realized in the following instantiations:

- (1) Fr. *Pierre est rouge de colère*
'Peter is red with anger'
- (2) Germ. *Maria ist gelb vor Eifersucht*
'Maria is yellow with jealousy'.

In these examples, it is the head which is perceived as being a container and where the color change is taking place.

Because this metonymy and these metaphors exist in both French and German, the teacher can start from the similarities between both languages, showing examples of a similar realization of both conceptual metonymy and metaphor in both languages. Then s/he can point to the differences between both languages (see also Barcelona 2001: 137ff) and especially to the alternative ways in German for the expression of excessiveness. This is particularly clear in the following contrastive examples which instantiate the conceptual metaphor EXCESSIVENESS IS DEATH in:

- (18) a. Fr. *Il est mort de peur*
Lit. 'He is dead of fear'
b. Germ. *Er hat Todesangst*
Lit. 'He has death fear'
- (19) a. Fr. *Il est mort de fatigue*
Lit. 'He is dead of tiredness'
b. Germ. *Er ist todmüde*
Lit. 'He is death tired'.

Here are examples for the other metaphor EXCESSIVENESS IS GIANT, e.g.

- (4) a. Fr. *Anne est morte de faim*
Lit. 'Anne is dead of hunger'
b. Germ. *Anne hat einen Riesen hunger*
Lit. 'Anne has a giant hunger'
- (17) a. Fr. *Il est mort de soif*
Lit. 'He is dead of thirst'
b. Germ. *Er hat einen Riesendurst*
Lit. 'He has a giant thirst'.

As we can realize, foreign language teaching cannot do without conceptual metaphor or metonymy.

Conclusion

The present study of causal constructions with an adjective has dealt with the large variation in French and German and from a contrastive perspective with the differences between these two languages and the difficulties encountered by French-speaking learners of German. Because of their form-meaning mapping, their entrenchment and their phraseological character, Construction Grammar enriched by phraseological aspects offers an adequate model to describe the examples of causal constructions with an adjective. This approach has to be extended to language-specific lexicalization patterns to explain why German prefers compounding for the expression of excessiveness. This assumption was checked with a survey conducted with natives of German and French aiming at defining the favorite lexicalization

patterns in both languages. The results confirmed our hypothesis that German as a synthetic language privileges compounds, whereas French as an analytic language uses varied syntactic structures. But some reservations have to be expressed about the survey results:

- The number of participants was rather limited (17 in French and 12 in German)
- Both test groups had different profiles: The Belgian group consisted only of students, whereas the German group was mixed, with both students and older adults.

In spite of these biases, we could recognize some relevant tendencies which will have to be further tested with larger groups.

An adequate teaching methodology for the type of examples under discussion should address the issues of chunking and conceptual metonymy and metaphor. These are favorite concepts of Cognitive Linguistics which offers explanations that “draw on learners’ everyday real world experience by tapping into an intuitive reservoir of knowledge that facilitates an understanding of the systematic relationships among the units of language” (Tyler, 2012: 18). In this sense, we hope to have shown a few avenues to foster language teaching efficiency.

Acknowledgements and Notes

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¹ We will present some figures in the next section to sustain the entrenchment hypothesis advocated in this paper.

² The SketchEngine is a “corpus query system incorporating word sketches, one-page, automatic, corpus-derived summary of a word’s grammatical and collocational behaviour [...] which gives access to large corpora for 42 languages” (<http://www.SketchEngine.co.uk/?page=Website/SketchEngine>).

³ We will add the source only for the examples which have been found in the corpora; when no source is indicated, the example belongs to a list of examples collected by the author from everyday speech.

⁴ In Section 3 we will deal in detail with the possible prepositions in French and German.

⁵ We focused our search on causal structures with a color adjective for methodological reasons. Because of their limited number, it is easy to enter a color adjective and get the hits.

⁶ The color in the face will be rather perceived as yellowish, bluish, whitish, greenish,..., still it is the term for the plain color which is used in the construction.

⁷ The subject can be different. But one could not replace Y, i.e. *bonheur*, by another object.

⁸ We could even have extended this description to some more realizations of a similar construction which contains the same syntactic elements as the construction under study but without conveying a causal meaning, e.g. Fr. *Pierre est sûr de sa sœur*, lit. ‘Peter is sure of his sister’ (= ‘Peter can rely on his sister’) or Fr. *Elle est très belle de visage* (Salles, 1998: 122), lit. ‘She is very pretty of the face’ (= ‘She has a pretty face’). As these examples do not express any causality or excessiveness, we do not want to deal with them here but simply refer to Léard and Marengo (2005) and Salles (1998) for a detailed description.

⁹ *Du* is a contracted form which compounds the preposition *de* (‘of’) + the definite article *le* (‘the’).

¹⁰ It is not the aim of this article to list and discuss all the intensification strategies that are possible in German. Much more do we want to present some tendencies and in a contrastive perspective try to find an explanation for the smaller amount of examples of causal constructions with a color adjective in the German corpus. For a detailed survey of intensification possibilities in German, we can refer to van Os (1989).

References

- Athanasopoulos, P., 2009. Cognitive representation of colour in bilinguals: The case of Greek blues. *Bilingualism: Language and Cognition*, 12: 83-95. DOI: 10.1017/S136672890800388X.
- Barcelona, A., 2001. On the Systematic Contrastive Analysis of Conceptual Metaphors: Case studies and Proposed Methodology. In: *Applied Cognitive Linguistics II: Language Pedagogy*, Pütz, M., S. Nie-meier and R. Dirven, (Eds.), Mouton de Gruyter, New York, pp: 117-146.
- Berlin, B. and P. Kay, 1969. *Basic Color Terms: Their Universality and Evolution*, 1st Edn., University of California Press, Berkeley, ISBN-13: 978-0520014428, pp: 210.
- Boers, F., A. De Rycker and S. De Knop, 2010. Fostering Language Teaching Efficiency through CL: Introduction. In: *Fostering Language Teaching Efficiency through CL*, De Knop, S., F. Boers and A. De Rycker, (Eds.), Mouton de Gruyter, Berlin, New York, ISBN-13: 978-3110245820, pp: 1-26.
- Burger, H., 2007. *Phraseologie: Eine Einführung am Beispiel des Deutschen*. 1st Edn., Erich Schmidt Verlag, Berlin, ISBN-10: 3503098127, pp: 240.
- De Knop, S., 2013. Eine Beschreibung von Konstruktionen mit Farbbezeichnungen im Rahmen der Konstruktionsgrammatik. In: *Konstruktionsgrammatik und Romanische Sprachen*, De Knop, S., F. Mollica and J. Kuhn, (Eds.), Peter Lang Verlag, Frankfurt am Main, ISBN-13: 978-3631622698, pp: 111-136.

- De Knop, S., 2014. A Contrastive Study of Colour Terms in French and German Causal Constructions. In: Multilingual Cognition and Language Use: Processing and Typological Perspectives, Filipović, L. and M. Pütz, (Eds.), John Benjamins, Amsterdam, Philadelphia, ISBN-13: 978-9027223982, pp: 73-96.
- De Knop, S. and F. Gallez, 2013. Manner of Motion: A Privileged Dimension of German Expressions. In: Compendium of Cognitive Linguistics Research, Thomas Fuyin Li, (Ed.), Nova Science Publishers, Hauppauge, NY, ISBN: 978-1626184657, pp: 25-40.
- Dirven, R., 1995. The Construal of Cause: The Case of Cause Prepositions. In: Language and the Cognitive Construal of the World, Taylor, R. and R.E. MacLaury, (Eds.), Mouton de Gruyter, Berlin, ISBN-13: 978-3111753799, pp: 95-118.
- Dirven, R., 1997. Emotions as Cause and the Cause of Emotions. In: The Language of Emotions: Conceptualization, Expression and Theoretical Foundation, Niemeier, S. and R. Dirven, (Eds.), John Benjamins, Amsterdam, ISBN-13: 978-1556195143, pp: 55-83.
- Dirven, R. and F. Ruiz de Mendoza Ibáñez, 2010. Looking back at 30 years of Cognitive Linguistics. In: Cognitive Linguistics in Action: From Theory to Application and Back, Tabakowska, E., M. Choinski, and L. Wiraszka (Eds.), de Gruyter Mouton, Berlin, ISBN-13: 978-3110205817, pp: 11-70.
- Dobrovol'skij, D., 2011. Phraseologie und Konstruktionsgrammatik. In: Konstruktionsgrammatik III. Aktuelle Fragen und Lösungsansätze, Lasch, A. and A. Ziem (Eds.), Stauffenburg, Tübingen, ISBN-13: 978-3860571965, pp: 110-130.
- Donalies, E., 2009. Basiswissen Deutsche Phraseologie, Narr Francke, Tübingen, ISBN: 978-3825231934.
- Dressler, W.U. and L. Merlini Barbaresi, 1994. Morphopragmatics: Diminutives and Intensifiers in Italian, German and other Languages, de Gruyter, Berlin, ISBN-13: 978-3111776491.
- Ellis, N. and T. Cadierno, 2009. Constructing a Second Language. Introduction to the special section, Annual Review of Cognitive Linguistics, 7: 11-139. DOI: 10.1075/arcl.7.05ell.
- Fleischer, W., 1997. Phraseologie der deutschen Gegenwartssprache, Max Niemeyer, Tübingen, ISBN: 978-3484730323.
- Girdenienė, S., 2006. Zum Ausdruck der inneren Ursache durch Präpositionalphrasen im Deutschen und Litauischen. Kalbotyra, 56: 48-55. <http://archive.minfolit.lt/arch/15001/15441.pdf>
- Goldberg, A.E., 1995. Constructions: A Construction Grammar Approach to Argument Structure, 1st Edn., University of Chicago Press, Chicago, ISBN-13: 978-0226300863, pp: 265.
- Goldberg, A., 2006. Constructions at Work: The Nature of Generalization in Language. Oxford University Press, Oxford, ISBN-13: 978-0199268528.
- Goldstone, R.L. and M. Steyvers, 2001. The sensitization and differentiation of dimensions during category learning. Journal of Experimental Psychology: General, 130: 116-139. DOI: 10.1037//009634461301116.
- Gries, S.Th., 2008. Phraseology and Linguistic Theory: A Brief Survey. In: Phraseology: An Interdisciplinary Perspective, Granger, S. and F. Meunier, (Eds.), John Benjamins, Amsterdam, Philadelphia, ISBN-13: 978-9027232465, pp: 3-25.
- Haarmann, H., 2004. Prozesse sprachlichen Strukturwandels im Spannungsfeld von Kontaktlinguistik und Sprachtypologie. In: Die europäischen Sprachen auf dem Wege zum analytischen Sprachtyp, Hinrichs, U. and U. Büttner, (Eds.), Harrassowitz Verlag, Wiesbaden, ISBN-13: 978-3447047852, pp: 67-85.
- Handwerker, B., 2008. 'Chunks' und Konstruktionen – Zur Integration von lerntheoretischem und grammatischem Ansatz. Estudios Filológicos Alemanes, 15: 49-64. ISSN: 1578-9438.
- Handwerker, B. and K. Madlener, 2006. Multimedia-Chunks für Deutsch als Fremdsprache. Ein Lernmodul zur Entwicklung lexikalisch-grammatischer Kompetenz. In: Sprachen Schaffen Chancen, Hahn, A. and F. Klippel (Eds.), Oldenbourg, München, ISBN-13: 978-3486005233, pp: 199-206.
- Hinrichs, U., 2004. Vorbemerkungen zum analytischen Sprachtyp in Europa. In: Die europäischen Sprachen auf dem Wege zum analytischen Sprachtyp, Hinrichs, U. and U. Büttner (Eds.), Harrassowitz Verlag, Wiesbaden, ISBN-13: 978-3447047852, pp: 169-196.
- Khoo, C., S. Chan and Y. Niu. 2002. The Many Facets of the Cause-Effect Relation. In: The Semantics of Relationships: An Interdisciplinary Perspective, Green, R., C.A. Bean and S.H. Myaeng (Eds.), Kluwer, Dordrecht, ISBN-13: 978-9048159963, pp: 51-70.
- Kirschbaum, I., 2002. Schrecklich nett und voll verrückt. Muster der Adjektiv-Intensivierung im Deutschen. Ph.D. Dissertation. <http://docserv.uni-duesseldorf.de/servlets/DerivateServlet/Derivate-2650/650.pdf>
- Lakoff, G. and M. Johnson, 1980. Metaphors We Live By. Chicago University Press, Chicago, ISBN-10: 0226468011, pp: 292.
- Langacker, R.W., 1987. Foundations of Cognitive Grammar: Theoretical Prerequisites. 1st Edn., Stanford University Press, Stanford, California, ISBN-10: 0804738513, pp: 540.
- Léard, J.M. and S. Marengo, 2005. Pour une Typologie des Compléments Adjectivaux: Arguments, Quasi-Arguments et Non-Arguments. In: L'adjectif en Français et à Travers les Langues: Actes du Colloque International de Caen, Jacques, F. and N. Le Querler (Eds.), Presses universitaires de Caen, Caen, ISBN-13: 978-2841332045, pp: 387-402.

- Littlemore, J., 2009. Applying Cognitive Linguistics to Second Language Learning and Teaching, Palgrave MacMillan, London, ISBN-13: 978-0230302358.
- Lohde, M., 2006. Wortbildung des modernen Deutschen. Ein Lehr- und Übungsbuch, Narr, Tübingen, ISBN-13: 978-3823362111, pp: 330.
- Miclea, R.O., 2010. Strukturen der Steigerung und Intensivierung im Vergleich. Am Beispiel des Adjektivs im Deutschen und Rumänischen. <http://reviste.ulbsibiu.ro/gb/GB26/cap15.pdf>
- Nattinger, J.R. and J.S. DeCarrico, 1992. Lexical Phrases and Language Teaching. Oxford University Press, Oxford, ISBN-13: 978-0194371643, pp: 218.
- Niemeier, S., 1998. Colourless Green Ideas Metonymise Furiously. In: Kognitive Lexikologie und Syntax, Ungerer, F. (Ed.), Universität Rostock, Rostock, pp: 119-146, ASIN: B00810V5E6.
- Oebel, G., 2012. Intensivierungskonzepte bei Adjektiven und Adverbien im Sprachvergleich/Crosslinguistic Comparison of Intensified Adjectives and Adverbs. Dr. Kovac Verlag, Hamburg, ISBN-13: 978-3830065463, pp: 436.
- Pavlenko, A., 2005. Bilingualism and Thought. In: Handbook of Bilingualism: Psycholinguistic Approaches, Kroll, J.F. and A.M.B. De Groot (Eds.), Oxford University Press, Oxford, ISBN: 978-0195373653, pp: 433-453.
- Primus, B., 1997. Der Wortgruppenaufbau in der Geschichte des Deutschen: Zur Präzisierung von synthetisch vs. analytisch. Sprachwissenschaft, 22: 133-159. ISSN: 0344-8169.
- Račienė, E., 2013. Zu sprachlichen Ausdrucksmitteln der Intensivierung von Eigenschaften im deutsch-litauischen Vergleich. Santalka: Filologija, Edukologija, 21: 123-134. DOI: 10.3846/cpe.2013.13.
- Roberson, D., 2005. Color categories are culturally diverse in cognition as well as in language. Cross-Cultural Research, 39: 56-71. DOI: 10.1177/1069397104267890.
- Robinson, P. and N. Ellis, 2008. Handbook of Cognitive Linguistics and Second Language Acquisition. Routledge, London. ISBN-13: 978-0805853520, pp: 576.
- Rostila, J., 2011. Phraseologie und Konstruktionsgrammatik. Konstruktionsansätze zu präpositionalen Funktionsverbgefügen. In: Idiome, Konstruktionen, 'verblühte Rede'. Beiträge zur Geschichte der germanistischen Phraseologieforschung, Prinz, M. and U. Richter-Vapaatalo (Eds.), Hirzel Verlag, Stuttgart, ISBN-13: 978-3777621449, pp: 263-282.
- Salles, M., 1998. La construction converse 'Etre un peu lent de la tête mais rapide des pieds'. La Linguistique, 34: 121-136. ISSN 0075-966X.
- Schmidt, R.W., 1990. The role of consciousness in second language learning. Applied Linguistics, 11: 129-158. DOI: 10.1093/applin/11.2.129
- Schmidt, R.W., 2001. Attention. In: Cognition and Second Language Instruction, Robinson, P. (Ed.), Cambridge University Press, Cambridge, ISBN-13: 978-0521003865, pp: 3-32.
- Siemund, P., 2004. Analytische und Synthetische Tendenzen in der Entwicklung des Englischen. In: Die europäischen Sprachen auf dem Wege zum analytischen Sprachtyp, Hinrichs, U. and U. Büttner, (Eds.), Harrassowitz Verlag, Wiesbaden, ISBN-13: 978-3447047852, pp: 169-196.
- Soriano, C. and J. Valenzuela, 2009. Emotion and colour across languages: Implicit associations in Spanish colour terms. Social Science Information, 48: 421-445. DOI: 10.1177/0539018409106199.
- Talmy, L., 2000. Toward a Cognitive Semantics. Ist Edn., MIT Press, Cambridge, ISBN-13: 978-0262700979.
- Tyler, A., 2012. Cognitive Linguistics and Second Language Learning, Routledge, New York, London, ISBN-13: 978-0415802505.
- Van Os, C., 1989. Aspekte der Intensivierung im Deutschen. Ist Edn., Gunter Narr, Tübingen, ISBN-10: 387808837X, pp: 267.
- Wolf, N.R., 2002. Wörter bilden. Grundzüge der Wortbildungslehre. In: Über Wörter. Grundkurs Linguistik, Dittmann, J. and C. Schmidt (Eds.), Rombach, Freiburg im Breisgau, ISBN-13: 978-3793093169, pp: 59-86.
- Wulff, S., 2012. Idiomaticity. In: The Routledge Encyclopedia of Second Language Acquisition, Robinson, P. (Ed.), Routledge, London, ISBN-13: 978-1138817050, pp: 291-293.
- Würstle, R., 1992. Überangebot und Defizit in der Wortbildung: Eine kontrastive Studie zur Diminutivbildung im Deutschen, Französischen und Englischen. Ist Edn., Peter Lang, Frankfurt am Main, ISBN-13: 978-3631450581, pp: 255.
- Zeschel, A., 2012. Incipient Productivity. A Construction-Based Approach to Linguistic Creativity, de Gruyter Mouton, Berlin, ISBN-13: 978-3110270013, pp: 268.

Corpora

Kernkorpus des Digitalen Wörterbuchs der Deutschen Sprache (DWDS), <http://www.dwds.de/>
 SketchEngine, <http://the.sketchengine.co.uk>.

Appendix I: French survey

Votre date de naissance

Donnez des expressions alternatives (il n'y a pas de mauvaise réponse !)

Comment peut-on dire en français

1. que quelqu'un a fort faim
2. que quelqu'un a fort froid.....
3. que quelqu'un est très malheureux.....
4. que quelqu'un a fort peur.....
5. que quelqu'un a beaucoup de succès.....
6. que quelqu'un est fort pâle.....
7. que quelqu'un est très jaloux.....
8. que quelqu'un a de fortes craintes.....
9. que quelqu'un est fort en colère.....
10. que quelqu'un a fort soif

Appendix II: German survey

Ihr Geburtstag

Geben Sie alternative Ausdrucksmöglichkeiten (Es gibt keine falsche Antwort!)

Wie kann man noch auf Deutsch sagen,

1. dass jemand sehr großen Hunger hat
 2. dass jemandem sehr kalt ist.....
 3. dass jemand sehr unglücklich ist.....
 4. dass jemand große Angst hat.....
 5. dass jemand viel Erfolg hat.....
 6. dass jemand sehr blass ist.....
 7. dass jemand sehr neidisch ist.....
 8. dass jemand sich sehr fürchtet.....
 9. dass jemand sehr wütend ist.....
 10. dass jemand sehr großen Durst hat.....
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