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# ***Non-standard Models of Polysemy in German Adjectives and Adverbs***

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## **Abstract**

*This paper is devoted to the analysis of non-standard semantic shifts in adjectives and adverbs. Under non-standard semantic shifts I understand meaning changes, which can't be described as metaphor or metonymy. Here are some examples of the semantic shifts in question, cf.:*

*bittere Schokolade 'bitter chocolate' vs. bitterer Hunger 'very strong hunger'*

*hübsches Mädchen 'nice girl' vs. hübsch kalt 'very cold'*

*toller Hund 'rabid dog' vs. tolle Idee 'a very good idea'*

*köstlicher Kuchen 'tasty pie' vs. köstliche Musik 'very good music'*

*What is the relationship between the two meanings in the adjective-noun combinations above? Are they homonyms, that is, are they different lexemes with no connection between the meanings? Are they polysemous, that is, are they different meanings of the same lexeme? If they are polysemous, which steps of change should a source meaning undergo to get a goal meaning with such great cognitive distance? I argue that the examples above demonstrate a regular type of polysemy which working principle is not based on similarity or contiguity relations but has a number of typical characteristics. In this paper I will observe the data gathered in German in comparison with other languages and discuss in detail the features and the mechanism of the phenomenon.*

**Key words:** regularities in semantic change, implicatures, semantic fields, historical linguistics, typology

## **1. Introduction**

In the past half century, much attention has been paid to the phenomenon of semantic change. Thus, the majority of works available in this field concentrate on regularities in metaphor, metonymy and grammaticalization and provide large lists of the polysemy patterns and examples of their realization. Such catalogues, however valuable they may be, can shed no light on a challenging aspect of linguistic theory, namely what other phenomena

are possible in a certain language system. Indeed, in order to give an adequate account of the facts observed one should not only confine oneself just to cataloguing every piece of collected data, but one has also to determine constraints on this data. The latter task can only be performed, first, if all the units within a given system are covered by analysis and second, if the facts attested are ordered in a systematic classification.

In the present study, this full-scale approach is applied to German adjectives and adverbs. I selected all frequent polysemous lexemes (ca. 1500 words) from the list of the most frequently used words of German vocabulary<sup>1</sup> and carried out a corpus-based analysis of the lexemes. As a result, I got not only large lists of attested metaphorical and metonymical patterns but also revealed more complicated cases of meaning change. These cases demonstrate development of such meanings as intensity, positive estimation and negative estimation. Although the cases in question seem to be a rather productive type of polysemy and relevant for approximately 20 % of lexemes in German, one can scarcely find any literature exploring their nature, with the exception of works providing various classifications of intensifiers (see Stoffel (1901), Biedermann (1969), Bolinger (1972), Allerton (1987), van Os (1989)) and catalogues of lexemes (for the German language – Biedermann (1969)). An attempt to describe German intensifiers in the cross-linguistic perspective was made by Hentschel (1998). However, this work provides us with no sufficient data, nor does it explain the mechanism of the phenomenon. Other aspects of the phenomenon are discussed in van Os (1989) and Peters (1993). The phenomena of pejoration and melioration are briefly discussed in Lehmann (1883), Ullmann (1957) and Blank (1999).

I involved the cases in question into a diachronic analysis to trace the history of the lexemes at all the stages of their semantic development. For this purpose I used historical dictionaries (e.g. the German Dictionary of Brothers Grimm) and various historical corpora: MHDDDB (Mittelhochdeutsche Datenbank), FnhdC (das Bonner Frühneuhochdeutschkorpus), DTA (Deutsches Textarchiv), DWDS (Digitales Wörterbuch der deutschen Sprache) and COSMAS (Corpus Search, Management and Analysis System). In this paper I will represent the data gathered in German, explain the mechanism of the phenomenon revealed and provide a brief cross-linguistic comparison of the material.

## ***2. About metaphor and metonymy in adjectival and adverbial constructions***

Before turning to the discussion of the non-standard semantic models, I will first focus on the regular mechanisms of polysemy. Traditionally, metaphor and metonymy are considered to be the major mechanisms of semantic change and are usually explained in terms of similarity and contiguity respectively. As they have always tended to be in focus of scientific interest, their definitions suffered constant reanalysis and essential modifications.

The role of metaphor as a means of comparison has been reconceptualized within Cognitive Linguistics, in that it is not only “a major structuring force in semantic change” (Sweetser 1990: 19) but also an important part of our conceptual system with its function to “structure how we perceive, how we think, and what we do” (Lakoff, Johnson 1980: 128). Thus, metaphor is now viewed as “a fundamental aspect of human cognizing and of human language” (Traugott, Dasher 2002: 76). The central notions for its new definitions are *domain*<sup>2</sup> (Langacker 1987), *domain matrix* (Croft 2003) and *mapping* (Lakoff, Johnson 1980). In this way, metaphor is determined as “domain mapping” (Croft 2003) and “operates *between* domains” (Sweetser 1990: 19). It enables mapping between domains, i.e. conceptualization of one domain in terms of the structure of another domain, whereas the two domains “do not form a domain matrix for the concepts involved” (Croft 2003: 174).

The main function of an adjective is to describe properties of objects. Metaphorical extensions of adjectives help us to describe properties and states of one class of objects by using meanings normally denoting properties of another class of objects as in *empty box* vs. *empty answer*. The metaphorical semantic shift in the adjective *empty* connects the vocabulary of a physical object with the domain of mental space and indicates parallelism between the container and the result of the speech activity. In other words, mental content is structured in the terms of a physical filling.

Regarding metonymy, until recently it has received not so much attention as metaphor, although some linguists suggest it to be even “more basic than metaphor in language and cognition” (Barcelona 2003: 215). Whereas metaphor is considered to function as “domain mapping”, the mechanism of metonymy consists in “domain highlighting” (Croft 2003). Thus, metonymy is defined as a cognitive process in which “one conceptual entity ... provides access to another conceptual entity ... within the same domain” (Kövecses and Radden 1998:38).

In adjective-noun combinations metonymy highlights various participants of a situation determined by an adjective, e.g. feature of a part vs. feature of a whole as in *green leaves* – *green trees* (‘trees having green leaves’), feature vs. place of realization of the feature as in *hot climate* – *hot countries* (‘countries with hot climate’), feature vs. cause of realization of a feature as in *sad girl* – *sad news* (‘news that cause a girl experience sadness’), feature vs. time of realization of the feature as in *interesting event*– *interesting evening* (‘evening, during which some interesting events occurred’), etc. A more detailed discussion of metaphorical and metonymical shifts in adjectives and adverbs one can find in Karpova et al. (2009), Rakhilina et al. (2010), Karpova et al. (2011).

### 3 *Non-standard models of polysemy: some examples*

As mentioned above, the German language demonstrates high productivity of the polysemy models, which mechanism can't be described as standard metaphor or metonymy, i.e. as domain mapping or domain highlighting. These models represent development of intensifiers and the meaning of estimation. Let us give some examples of the cases in question.

#### 3.1 **furchtbar**

The original meaning of the German adjective *furchtbar* refers to the objects able to cause great fear and shock:

1.

Ein **furchtbares Tier** kam zu mir entgegen.

'A terrifying animal came up to me.'

This meaning has nearly disappeared in the present-day German being replaced by the meanings of intensity (2) and negative estimation (3) actively used in informal speech:

2.

Ich mache das **furchtbar gerne**.

'I do it with great pleasure.'

3.

Der **Service** in diesem Hotel ist **furchtbar!**

'The service in this hotel is very bad!'

As we see, the initial meaning of *furchtbar* in (1) can't be used for interpretations of the lexeme in (2) and (3). In contrast, the only possible understanding of such collocations as *ein furchtbar teures Auto* 'a very expensive car', *furchtbare Hitze* 'very hot weather', *furchtbar viel Geld verdienen* 'to earn very much money', *furchtbar niesen* 'to sneeze intensively', etc. is related with intensity of concepts but not with fear. Similarly, the constructions *furchtbarer Urlaub* 'very bad vacations', *furchtbares Essen* 'very bad food', *furchtbar singen* 'to sing very bad', etc. refer to our estimation of events rather than to the feeling of fear evoked by these events. In addition, *furchtbar* demonstrates the total bleaching of the initial meaning by its possibility as intensifier to be attached to words with positive semantics, cf. *furchtbar froh sein* 'to be very happy', *furchtbar schönes Mädchen* 'very nice girl', *furchtbar gut schmecken* 'to taste very good'. These examples demonstrate the loss of the initial meaning of *furchtbar* and use of the lexeme

in neutral and positive contexts as a means of emphasis.

How did the lexeme acquire the meanings of intensity and estimation? If we trace the history of *furchtbar*, we will see that the lexeme began to modify its initial meaning in pragmatically overloaded contexts:

4.

*Der könig von Schweden mit einer **furchtbaren Armee** vor den thoren.*

'The king of Sweden with his terrifying/impressive army before the gates.'

(German Dictionary of Brothers Grimm.Werke 923b)

The example above permits ambiguous interpretation, in that the army due to its quantity, power and armament not only makes one experience fear but also has a very impressive effect. Use of the lexeme in similar pragmatically rich contexts led to the semantic reanalysis of the meaning so that the idea of fear became less distinct and the adjective acquired a new component of meaning. Compare some examples:

5.

Das Scheurendach und Obergebäude darüber mit den acht Fenstern macht damit einen wunderbaren Kontrast, ... und dies gibt dem Ganzen eine **furchtbare Größe**...

'The roof of the barn and the building above with eight windows show a wonderful contrast ... and it makes the whole complex terrifying/very big.'

(Johann Jacob Wilhelm Heinse (1787). *Ardinghello und die glückseligen Inseln*. 334)

6.

Die **furchtbaren Folgen** dieser Spannung mußten bei der ersten Gelegenheit sich entwickeln.

'The terrible consequences of this tension had to develop by the first opportunity.'

(Arnold Hermann Ludwig Heeren (1809). *Geschichte des europäischen Staatensystems und seiner Kolonien*.6)

Again, the examples above demonstrate ambiguous contexts. Thus, *furchtbar* in (5) and (6) refers to description of strong emotions experienced by the author but not related to fear as such. In (5) due to the elements of the construction the whole size of the building complex looks very impressive. At the same time, from this interpretation it naturally follows that the size of the

objects is very big. Development of the estimation meaning can be followed in (6), in that the lexeme not only expresses the deep impression and worst apprehensions of the author but also shows his negative evaluation of the whole situation. In (5) and (6) reanalysis of the idea of strong emotions led to the appearance of a new implicature as a part of the literal context.

Such ambiguous overloaded contexts served as an impulse for further development of the emphasizing meaning. The corpus-based analysis showed that the lexeme first began to collocate with gradual nouns and verbs in negative contexts, so that its emphasizing force increased and led to the full distinction of the intensifying meaning, cf.:

7.

Der König ist **furchtbar misstrauisch**.

'The king is very suspicious.'

(DIE ZEIT. 05.03.1927)

Finally, the intensifier occurs in positive contexts, cf.:

8.

In seinem Photographiealbum hat er auch viele **furchtbar schöne** Bilder von Mädchens.

'He also has many very beautiful pictures of girls in his photo-album'

(Bierbaum, Otto Julius: Stilpe. Ein Roman aus der Froschperspektive, 1897)

Similarly, the estimative interpretation of objects and situations gradually lost connection with the initial semantics and turned into a separate unambiguous meaning, cf.:

9.

Ein **furchtbares Buch!**

'A very bad book!'

(DWDS. 1928. 65. W1)

### 3.2 bitter

The original meaning of the word *bitter* denotes objects with a sharp, pungent taste or smell. The lexeme collocates with nouns referring to food and smell and with verbs of eating and smelling:

10.

Diese Speise hat einen **bitteren Geschmack**.

'This dish has a bitter taste.'

11.

Die Pille **schmeckt bitter**.

'The pill tastes bitter.'

The lexeme is also often used to express strong intensity of states or activities:

12.

Ich habe das **bitter nötig**.

'I need it very much.'

13.

**Bittere Kälte** erschwert Arbeit der Feuerwehren.

'This terrible cold makes the work of the fire service very difficult.'

With no doubt the initial semantics of *bitter* illustrated in (10) and (11) can't be recognized in the examples (12) and (13). Such neutral contexts as *bitterer Hunger* 'very strong hunger', *bitter kalt* 'very cold', *bitter wenig* 'very little', *bitter bestrafen* 'to punish very strong', etc. demonstrate a totally new meaning, which doesn't resemble the source domain.

As in *furchtbar*, the meaning of taste and smell suffered radical changes on its way to intensification. Indeed, if we look at the diachronic development of the lexeme, we find *bitter* in numerous ambiguous contexts in combination with abstract nouns, first of all with nouns denoting emotions:

14.

...daz du all dein **pitter leyden**, daz du fur vns arm sunder geliden...

'...that you all the bitter/strong torments, which you suffered for us...'

(Handschrift Pillenreuth Mystik (1463). 182)

In (14) *bitter* permits a double interpretation. The first one refers to the feelings of Christ through the metaphorical description of his suffering (compare an unambiguous example of metaphor resembling mapping of the domains 'taste' and 'emotions': *Ist denn der Tod so bitter?* 'Is death so bitter?'), whereas the second one denotes intensity of the emotions. In this

way, metaphorical extension of the word serves as an impulse for the further semantic change, namely semantic reanalysis of intensity in the emotionally loaded context. The corpus data shows that the intensifying component of the meaning starts its development already in the 15<sup>th</sup> century, cf. *bitterer Hunger* 'great hunger', *bitterer Streit* 'strong quarrel', *bittere Not* 'strong need', *bittere Schmerzen* 'intensive pain'. Here, *bitter* fulfills a double function, in that it is used to express strong emotions and at the same time works as intensifier. Over time, the implicature of intensity is involved in "pragmatic strengthening" (Traugott 1988), its emphasizing role becomes more highlighted and the new polysemy becomes semantized.

Development of the intensifier is related with its combinatory power. During the process of semantization the meaning becomes more distinct and general, demonstrates more uses and exemplifies more possible patterns. Finally, the intensifier is involved in a new structure, in that it appears in an adverbial use in combinations with adjectives of state:

15.

...so waren sie über diese himmlische Toleranz so **bitter böse**, dass sie die andere Welt für ein Linsengericht verkauft hätten.

'They were so much angry with this divine tolerance, that they would have sold the other world for a lentil dish.'

(Theodor Gottlieb von Hippel (1778). *Lebensläufe nach Aufsteigender Linie* 1. 509)

Particularly interesting is that over time *bitter* is attached as intensifier to adjectives and is used as a compound part:

16.

Aber **bitterböse** wurd' er auf den Kirchenrath...

'But very angry he got with the ecclesiastical council...'

(Jean Paul (1804). *Flegeljahre* 2. 70)

17.

Bei der Rückkunft in einer **bitterkalten** Winternacht fand er zu seinem Schrecken in seiner Koje sechs ... Kugeln...

'As he returned at a very cold winter night, he found in his bed six ... balls ...'

(Reinhold Werner (1880). *Erinnerungen und Bilder aus dem Seeleben*. 262)

The use of *bitter* as a compound part in the function of an intensifier begins in the first decade of the 19<sup>th</sup> century and remains a productive model in the present-day German.

### 3.3 toll

The initial meaning of *toll* describes people and animals being insane or having poor mental faculties. Compare the examples below:

18.

... kinder, denen ihr eltern **doll** odder wansinnig **sein** worden.

'...children, whose parents had become mad or insane.'

(German Dictionary of Brothers Grimm. *von den guten werken* 83. neudr.)

19.

Er ist von einem **hund** gebissen worden, von dem er nicht weisz, ist er toll oder nicht.

'He was bitten by a dog, about which he doesn't know whether it is rabid or not.'

(German Dictionary of Brothers Grimm. Gotthelf erz. 3. 335)

This original meaning served as a basis for further semantic extensions of the lexeme. First, it extended metaphorically to denote people, who are not mentally ill but whose behavior, ideas and beliefs are similar to those who are, in that they act in a crazy way, passionately, strange and foolish, cf.:

20.

Man kann vor Freude **toll** und vom Zorn rasend **werden**.

'One can become mad from joy and furious from anger.'

(Johann Christian Reil (1803). *Rhapsodien über die Anwendung der psychischen Curmethode auf Geisteszerrüttungen*. 288)

21.

...es war ja doch ein **toller Gedanke**, bei einem Menschen Zahlung zu fordern, der gar nichts hat!

'...indeed, it was a mad idea to demand a payment from a person, who doesn't have anything!'

(Friedrich Christian Laukhard (1792). *F. C. Laukhards Leben und Schicksale*. 262)

The next step in the polysemy history of *toll* is the development of positive estimation. At first sight, the link between madness and positive estimation may seem to be absurd. However, the process of reanalysis is involved here again and can be demonstrated as follows. The metaphorical meaning 'acting like a mad, insane person' discussed above acquired in certain contexts an interpretation 'uncommon, extraordinary'. The appearance of this interpretation is cognitively clear: people who are mad or just act in this way stand out against ordinary people due to their strange behavior and beliefs. Thus, the idea of uncommonness was used in adjective-noun combinations to denote various objects being unusual, extraordinary or notable for some features, cf.:

22.

man ... frisiret ihm die **tollsten perücken** auf den kopf.

'One puts him the most fanciful/odd wigs on the head.'

(German Dictionary of the Grimm Brothers. Goethe 57. 231)

In the example above the author describes wigs worn by a person. The use of *toll* here yields a twofold reading. First, the person wearing such wigs shows extravagant taste and can be considered to be mad and foolish. Second, though the source meaning remains salient, the focus is made on the strange appearance of the wigs. Both interpretations are connected with each other and can be hardly distinguished.

Further reanalysis of the reading 'uncommon, extraordinary' led to appearance of estimation which developed in contexts permitting double interpretations, cf.:

23.

Gestern ... wurde Clerdonsehr aufgeräumt, und erzählte uns zuletzt ein **tolles Märchen**, welches ich durchaus Dir wieder erzählen soll...

'Yesterday Clerdon got very much excited and after all told us an extraordinary/wonderful fairy-tale, which I should surely tell you...'

(Friedrich Heinrich Jacobi (1792). *Eduard Allwills Briefsammlung* 1. 126)

The example (23) demonstrates gradual bleaching of the meaning 'acting like a mad, insane person'. The idea of madness is here no more salient whereas extraordinariness is highlighted. Moreover, from the context it becomes clear that the fairy-tale is very interesting and exciting and can be interpreted as very good. Over time, this implicature became semantized and is frequently used in the overwhelming majority of contexts in the present-day German where only one interpretation of the lexeme is possible:

24.

„Es ist so ruhig hier, die Leute sind so freundlich; und es ist eine so **tolle Stimmung**“, sagt er.

„It is so calm here, people are so friendly and the atmosphere is so wonderful“, he says.

(Klaus Pokatzky (1997). *Das Virus von Wust*. 6)

25.

In der Gegend kann man nämlich auch Ski laufen und Hundeschlitten fahren... und in Rovaniemi gibt es ein **tolles Arktikum-Museum**.

„In the neighborhood one can also go skiing or ride on a dog sledge... and in Rovaniemi there is a great Arktis-Museum.“

(Elsemarie Maletzke (1998). *O je, du fröhliche*. 2)

Parallel to acquirement of the meaning of positive estimation, *toll* demonstrates development of intensity through ambiguous combinations with abstract nouns:

26.

Sie kamen just zurück, als ...

Der Rest des Sturms sie überfiel.

Kreuz, Fahnen ... sind **toller Winde** Spiel ...

‘They have just come back as ...

They were caught in the rest of the storm.

Cross, flags ... are toys of mad/intensive winds.’

(Christoph Martin Wieland (1780). *Oberon*. 4)

27.

Ich eilte auf den Vorplatz um nach Hilfe zu schicken, konnte aber niemand ansichtig werden, denn alles war unten geblieben, den rasenden Menschen zu bändigen. Endlich kam eine Tochter ... und ihre Munterkeit ängstigte mich nicht wenig, da sie sich über den **tollen Spektakel** und über die verfluchte Komödie fast zu Tode lachen wollte.

‘I hurried to the porch to cry for help but couldn’t find anybody because everyone remained downstairs to cause the furious man be quite. Finally a daughter ... came but her cheerfulness scared me, as she wanted to laugh herself to death at the mad/intensive racket and the damned comedy.’

(Johann Wolfgang von Goethe (1795). *Wilhelm Meisters Lehrjahre* 3.232)

The examples (26) and (27) permit a double interpretation. In (26) one can suggest that the elements are animated in being compared with insane people. In this way, the collocation *tolle Winde* yields a metaphorical reading whereby *toll* can be understood as a secondary metaphor of the meaning 'acting like a mad, insane person' in combination with abstract nouns. At the same time, *toll* can be alternatively interpreted as intensifier, modifying a gradable noun. Indeed, this interpretation seems to be logical and the most possible because intensity of the winds is highlighted in the described situation. Thus, *toll* in (26) acquired a new reading through the reanalysis of a pragmatically overloaded context. Similarly, there is a twofold understanding of *toll* in the collocation *toller Spektakel* in (27). First, it can be understood as a metonymical extension of the sense 'acting like a mad, insane person' and, thus, yields the reading 'racket made by people acting like mad, insane'. However, this interpretation is not sufficient as it doesn't account for the function of *toll* as intensifier. Indeed, *toll* in the given situation describes the high degree of the racket, which attracted so much attention and is therefore highlighted in the situation.

Use of *toll* in pragmatic overloaded contexts, namely in combination with gradable nouns like *Aufruhr* 'fuss', *Jubel* 'triumph', *Wahnsinn* 'madness', etc. led to the bleaching of its initial sense and strengthening of the intensifying meaning. Once the semantization occurred, the new meaning began the process of actualization, i.e. expanding of its combinatory power. Like *bitter*, *toll* can be found as adverb in combinations with gradable adjectives:

28.

Ich ...denke, dass das Finanzamt ... ganz **toll stolz** auf mich **sein** muss...

'I think that the finance department ... should be very proud with me...'

(DIE ZEIT, 10.01.2008, Nr. 2)

#### 4. *Sources of non-standard models of polysemy*

In the part 3 we have discussed development of the meanings of intensity and positive and negative estimation in the lexemes *furchtbar*, *bitter* and *toll*. One can see that the adjectives have a common mechanism of semantic change, namely, appearance of new interpretations through the reanalysis of ambiguous emotionally loaded contexts followed by bleaching of the initial semantics, pragmatic strengthening of new polysemies and gradual semantization of them through the process of actualization. Our analysis of the German data revealed over 250 similar cases. The natural question arising

is as follows. Are there any other regularities between the cases in question or does each of the lexemes have an individual and independent path of semantic development?

In order to answer this question we used the theory of semantic fields (Trier 1973, cf. also Ipsen 1924, Weisberger 1962). In brief, the theory postulates that in a language lexemes can be grouped according to the similarity of meanings. In this way, the semantic definition of a single lexeme is possible only by referring to the total field it belongs to. Furthermore, semantic changes in one lexeme can be understood only accounting for semantic change in other lexemes referring to the same semantic field.

## 4.1 Semantic fields in German

I applied this theory in our research and classified the adjectives according to their initial semantics. For this purpose I used the Roget's thesaurus and the thesaurus of Dornseiff *Deutsches Wortschatz nach Sachgruppen*. As a result, I established a list of lexical groups serving as sources for the meanings of intensity and estimation in German. Some examples of semantic fields being able to develop intensification are given below.

### 4.1.1 Semantic field 'fear'

The semantic field 'fear' is one of the largest groups in my classification. Besides *furchtbar*, which was analyzed in part 3, it also includes *entsetzlich*, *fürchterlich*, *gräßlich*, *grauenhaft*, *grausig*, *schauderhaft*, *schauerlich*, *schrecklich*, *ungeheuer*, *ungeheuerlich* and *unheimlich*. The original semantics of the lexemes belonging to this group generally denotes objects and events causing fear, horror and shock, cf.:

29.

*entsetzlicher Anblick* 'look', *fürchterliches Schweigen* 'silence', *schreckliche Nachricht* 'news', *unheimlicher Ruf* 'appeal', etc.

In combination with gradable nouns and adjectives / adverbs the lexemes developed the meanings of intensity, cf.:

30.

*entsetzliche Freude* 'joy', *fürchterlicher Lärm* 'noise', *schrecklicher Hunger* 'hunger', *unheimliche Schmerzen* 'pain', *ungeheure Begeisterung* 'inspiration', etc.

*entsetzlich froh* 'happy', *fürchterlich kalt* 'cold', *schrecklich dumm* 'stupid', *unheimlich gut* 'good', *ungeheuer wichtig* 'important', etc.

#### 4.1.2 Semantic field 'insanity'

The semantic field 'insanity' is constituted by the lexemes, which initial semantics describes insane people, animals and their activities. Besides *toll* discussed in 3.3., it includes the words *wahnsinnig*, *irrsinnig*, *irre*, *verrückt*, cf.:

31.

*toller Hund* 'dog', *wahnsinniger Mensch* 'person', *irrsinnige Augen* 'eyes', *irres Lächeln* 'smile', *verrückter Blick* 'look', etc.

These lexemes can be also used to express intensity of abstract objects or states, cf.:

32.

*toller Hunger* 'hunger', *wahnsinnige Angst* 'fear', *irrsinnige Schmerzen* 'pain', *irre Geschwindigkeit* 'speed', *toll stolz* 'proud', *wahnsinnig viel* 'many/ much', *irrsinnig schnell* 'quickly', *irre spannend* 'fascinating', *verrückt bunt* 'coloured', *sich doll blamieren* 'to disgrace oneself', etc.

#### 4.1.3 Semantic field 'imagination'

The semantic field 'imagination' contains lexemes describing objects and events of an imaginary world and not existing in reality: *fantastisch*, *märchenhaft*, *sagenhaft*, *traumhaft*, *fabelhaft*, cf.:

33.

*fantastische Geschichte* 'story', *märchenhaftes Motiv* 'plot', *sagenhafter König* 'king', *fabelhafte Tier* 'animal'.

A number of contexts demonstrate use of the words as intensification means, cf.:

34.

*fantastische Geschwindigkeit* 'speed', *märchenhaftes Glück* 'happyness', *sagenhafter Blödsinn* 'nonsense', *fabelhafter Eifer* 'diligence', etc.

*fantastisch steigen* 'to rise', *märchenhaft reich* 'rich', *sagenhaft gut*

'good', *fabelhaft billig* 'cheap'.

#### 4.1.4 Semantic field 'whole'

The semantic field 'whole' contains lexemes referring to the entire object: *ganz, total, voll, völlig, komplett*, cf.:

35.

*ganzes Haus* 'whole house', *komplettes Mittagessen* 'whole dinner', *volle Tasche* 'full bag', *völliges Gehalt* 'whole salary', etc.

These words are also actively used as intensifiers, cf.:

36.

*ganz begeistert* 'inspired', *kompletter Blödsinn* 'nonsense', *total pleite* 'bankrupt', *völlig unmöglich* 'impossible', *volle Wahrheit* 'truth', etc.

#### 4.1.5 Semantic field 'animals'

The semantic field 'animals' contains lexemes originally referring to the general terms of animals and names of different species, cf. *animalisch* 'animal', *bestialisch* 'bestial', *tierisch* 'bestial', *viehisch* 'bestial', *bullig* 'bull', *bärenhaft* 'bear', *säuisch* 'pig', *schweinish* 'pig'. These lexemes have lost their initial semantics and developed into intensifiers, cf.:

37.

*bestialischer Gestank* 'stink', *tierischer Durst* 'thirst', *viehische Schmerzen* 'pain', *bullige Hitze* 'heat', *bärenhafte Armut* 'poverty', *säuische Kälte* 'cold', *viehische Dummheit* 'stupidity', etc.

*animalisch wohl* 'well', *bestialisch kalt* 'cold', *tierisch froh* 'happy', *viehisch betrunken* 'drunk', *bullig heiß* 'hot', *säuisch schön* 'beautiful', *schweinish schnell* 'quickly', etc.

#### 4.1.6 Other semantic fields

Our classification of semantic fields consists of two levels. The upper level includes six general categories, namely abstract concepts, spatial concepts, physical and material concepts, intellect, human personality and actions, human emotions. On the lower level each category is divided into smaller lexical groups. For instance, the category of emotions contains such semantic

fields as 'fear', 'unkindness', 'beauty', 'pity', 'dislike', et al. The names of the categories and groups are taken from the Roget's thesaurus. The classification is given in the table 1 below. In view of its big size, the list of the groups is presented in part.

<b>category</b>	<b>semantic field</b>	<b>examples</b>
abstract concepts	reality, death, abnormality, order, disorder, frequency, whole, big quantity	'abnormality': <i>abnorm, außergewöhnlich, außerordentlich, phänomenal, ungewöhnlich, sonderlich ...</i> 'reality': <i>reel, wirklich, tatsächlich ...</i> 'big quantity': <i>viel, reichlich, unzählich ...</i>
spatial concepts	large size, small size, height, depth, length, narrowness, thickness, form	'large size': <i>enorm, groß, klotzig, kolossal, massig, riesengroß, riesig...</i>
physical and material concepts	weight, hardness, softness, temperature, good taste/smell, bad taste/smell, senses	'badtaste': <i>bitter, bitterlich, herb, scharf ...</i> 'hardness': <i>hart, fest, solid ...</i>
intellect	insanity, stupidity, truth, imagination, impossibility, possibility, judgement, meaningless, attention	'truth': <i>richtig, echt, recht, wahr, wahrhaft, wahrlich ...</i> 'impossibility': <i>unmöglich, unvorstellbar, unwahrscheinlich, unfassbar, unglaubhaft ...</i>
human personality and actions	importance, unimportance, perfectness, opposition, popularity, power, strength, weakness	'power': <i>gewaltig, mächtig, machtvoll, übermächtig ...</i> 'perfectness': <i>prächtig, prachtvoll, schick, perfekt ...</i>
emotions	fear, unkindness, courage, seriousness, beauty, pity, dislike, cheerfulness	'unkindness': <i>arge, böse, brutal, derb, streng, grausam, grimmig, grob, niederträchtig, unmenschlich, wütend, wütig...</i> 'pity': <i>elend, elendig, erbärmlich, jämmerlich,</i>

		<i>kläglich ...</i>
morality	right, wrong	'right': <i>anständig, tüchtig, tüchtig, redlich ...</i> 'wrong': <i>peinlich, schändlich, schmäglich ...</i>
religion	deity, devil, sin, witchcraft, spell	'devil': <i>teuflich, höllisch, verdammt, verflucht ...</i> 'witchcraft': <i>wunderbar, zauberhaft, zauberisch, bezaubernd ...</i>

**Table 1. Classification of semantic fields able to develop the meanings of intensity and / or estimation in German**

## 4.2 Typological relevance of semantic fields

Comparison of the results with the Russian data confirmed typological relevance of semantic fields. Indeed, development of the meanings of intensity and estimation within semantic fields through the mechanism of reanalysis and semantization of implicatures is very productive in Russian (cf. Karpova et al., 2011). Brief consultation with dictionaries and native speakers confirmed existence of the phenomenon also in other languages. Our observation of the semantic fields 'fear', 'fantasy', 'madness' and 'size' in German, Russian, French, Italian, Spanish and English demonstrates cross-linguistic relevance of the phenomenon for different language groups. Compare the table 2 below.

Semantic field	'madness'	'fantasy'	'fear'	'size'
language				
<b>Russian</b>	<i>sumasšedšij, bešenij, bezumnyj</i>	<i>fantastičeskij, skazočnyj, nereal'nyj</i>	<i>strašnyj, užasnyj, čudoviščnuj, žutkij</i>	<i>ogromnyj, velikij, gromadnyj, gigantskij</i>
<b>French</b>	<i>délirant, fou, enrage</i>	<i>magique, fantastique, féerique, enchanté</i>	<i>monstrueux, terrible, horrible</i>	<i>colossal, grande, énorme</i>
<b>Italian</b>	<i>pazzo, matto, folle</i>	<i>fantastico, favoloso, magico</i>	<i>terribile, spaventoso,</i>	<i>enorme, grosso, colossal</i>

		...	<i>tremendo</i>	
<b>Spanish</b>	<i>rabioso, loco</i>	<i>fantastic, maravilloso, fabuloso, prodigioso,</i>	<i>espantoso, tremendo, terrible, formidable, horroroso</i>	<i>garrafal, enorme, inmenso, colossal, desmesurado</i>
<b>English</b>	<i>mad, crazy</i>	<i>fantastic, magic, fabulous</i>	<i>terrible, frightful, dreadful, fearful, horrible</i>	<i>great, enormous, colossal</i>

**Table 2. Typological relevance of the semantic fields 'madness', 'fantasy', 'fear', 'size'**

### 4.3 Cultural specificity of semantic fields in German

Cross-linguistic comparison of the German and Russian data also revealed culturally specific semantic fields, i.e. semantic fields which regularly develop certain meanings of intensity and estimation in German but not in Russian. Compare below some examples of the specific semantic fields able to develop intensifiers. Source and goal semantics are given in the brackets.

38.

'compassion' (pitiful → intensive): *elende Hitze* 'heat', *jämmerliche Kälte* 'cold weather', *kläglich enttäuscht* 'disappointed', *erbärmlich weh* 'painful';

39.

'dislike' (disgusting → intensive): *abscheulich stark* 'strong', *ekelhaft frieren* 'freeze', *scheußlich grell* 'bright', *üble Lüge* 'lie';

40.

'power' (powerful → intensive): *gewaltige Hitze* 'heat', *mächtig viel* 'much/many', *machtvoll intelligent* 'intelligent';

41.

'beauty' (beautiful → intensive): *hübsch einkaufen* 'to shop', *netter Schrecken* 'fear', *schön möglich* 'possible'.

The examples above demonstrate not only the fact that German has a more developed structure of expressive means in comparison to Russian but also points out the difference in the conceptualization of reality by the speakers. In this connection especially interesting is the question which regularities and commonalities in expressing the concepts of intensity and estimation exist

across totally unrelated languages. In this way, the typological data could provide with more information about universality of the phenomenon. Yet, only German and Russian have been compared. Therefore, a further cross-linguistic study of phenomenon is needed.

## **5. Conclusion**

In this paper, I discussed development of the meanings of intensity and estimation in German adjectives. I showed that the cases in question can't be investigated exclusively with the approach of metaphorical mapping or metonymical highlighting and proposed a framework based on the theories of semantic fields (Trier 1973), semantic reanalysis (Hopper, Traugott 1999, Eckardt 2000), generalized invited inferences (Traugott, Dascher 2000), pragmatic implicatures (Levinson 2000), actualization (Timberlake 1977, Andersen 2001) and bleaching. Further, I analyzed the features of the gathered data and revealed the general mechanism of semantic change relevant for the phenomenon. Thus, appearance of a new polysemy starts in pragmatically rich contexts, in that some information is added to the context and causes pragmatic overload and ambiguity. This additional information in the form of invited inferences or conversational implicatures initiates the process of reanalysis and is finally reconstructed as a new interpretation. Since reanalysis occurred, actualization takes place, i.e. speakers explore the possibilities of a new meaning and gradually broaden its combinatory power until the new meaning gets the full range of possibilities.

It was demonstrated that the mechanism of semantic change is systematical and occurs regularly within certain semantic fields, i.e. lexical groups of words closely related in their initial semantics. These semantic fields play a key role in the investigation of the phenomenon. Thus, the number of words in a semantic field varies in a language, so that one can distinguish between poor and rich semantic fields. This fact is closely related to the graduality of the phenomenon, i.e. gradual activation of the meanings in a group. In this way, semantic change in one lexeme in a semantic field can initiate the similar process in other lexemes from this field till all lexemes get involved. This property correlates with a process of renewal (Hopper, Traugott 1999), in that it points out the markedly emotional function of the meanings which tend to fade over time and, thus, alternative ways to express the same idea are needed. Indeed, closer diachronic inspection of the fields confirmed constant distribution of lexemes on the scales of frequency and registers.

Cross-linguistic analysis of semantic fields demonstrates typological relevance of the observed phenomenon. Regularities revealed in this semantic change replicate across languages. I suppose this fact to be bound up with the cognitive processes by which conversational implicatures from certain lexical groups come to be conventionalized as semantic polysemies. The only important question remains is whether there are universal semantic fields

relevant for totally unrelated languages. Yet, my detailed classification of semantic fields can serve as a reliable source for further typological questionnaires.

## **Notes**

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<sup>1</sup> The list of the most frequently used German words DeReWo contains 250 000 lexemes and was submitted by the Institute of the German Language, Department of Computer Linguistics in Mannheim.

<sup>2</sup> In Russian tradition, the term *domain* is often substituted by more lexicological terms *thematic class* or *taxonomic class* (Padučeva 2004).

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Mittelhochdeutsche Begriffsdatenbank MHDBD

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