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Cross-cultural linguistic realizations of conceptualizations of *anger*: Revisiting cognitive and pragmatic paradigms

Interest in the intersection of emotion and language has generated a significant body of research with several different theoretical orientations over the past several decades. Those studies that are more specifically cast within the paradigms of theoretical and cognitive linguistics and cross-cultural pragmatics¹ have provided a rich ground for continuing the analysis of not only interesting research questions, but have also provided a robust body of cross-linguistic data for consideration. The following study is an attempt to bring into focus a specific body of cognitive linguistic research on the semantic categories of *anger* as found in contemporary German and Russian. When appropriate, English language data will be used to enhance the discussion. Our analysis will consider specifically the works of Kövecses, Wierzbicka, Steen, Levontina/Zalizniak, and Durst as representing the central viewpoints of the field with regard to the study of the relationship of emotion and language. Our conclusions and suggestions for future directions, which are a direct consequence of a cross-cultural approach, will attempt to contextualize the non-universality of emotive and linguistic categories and the importance of cultural space in defining and negotiating all forms of human discourse.

Russian expressions of *anger*

One of the most vivid problems that arises in the study of semantic categories of anger in languages of the world is the tendency to base large portions of the analyses on word usage that is common in written, not oral, language. This bias, which is understandable given the need for quantification of occurrence based on large corpora and broad contextual data, often presents a very different perspective from statistically frequent forms used in oral speech. The best analyses of contemporary standard Russian expressions of emotion to date can be found in the works of Wierzbicka (1998) and Levontina/Zalizniak (2001). Before considering these works, a review of metaphors of anger in English will be helpful in contextualizing the Russian analysis.

In his book-length study, entitled *Metaphors of Anger, Pride and Love*, Kövecses (1986: 16-35) identifies the central metaphors that define anger in contemporary English. He uses the principles of source ("heat of fluid in container") and target ("anger") domains, and includes a series of "ontological correspondences," which include the following statements: "The container is a body. The heat of fluid is the anger. The heat scale is the anger scale, with end points zero and limit. Container heat is body heat. Pressure in container is internal pressure in the body. Agitation of fluid and container is physical agitation.... (1986: 17-18). These conceptual metaphors may be productive through lexical means and through set expressions (or phraseologisms) that further develop the original metaphor (1986: 14). Kövecses also includes a series of "principal metaphors" that are important to English *anger*, including "anger is insanity," "anger is a dangerous animal," "the cause of anger is a physical annoyance," "causing anger is trespassing," and "anger is a burden" (1986: 20-27). All of these categories are accompanied by lists of examples from contemporary English that verify these sets of meanings.²

As we will soon see, the central metaphors for defining *anger* in contemporary standard Russian are very different from that which we find in English. Before we present the Russian data, it seems important to remind the reader that, in fact, in spoken English "the most common conventional expression for anger" is the word *mad* (Kövecses 1986: 21). It is more common to hear and say in spoken English the word *mad* (cf. *I'm mad at you; you make me mad*) than the words *anger, angry*. This raises an important question for our methodology. In fact, Kövecses is completely correct when he states that *mad* came into English as a diachronic development based on the central metaphors of *anger* (1986:21). However, if we are conducting a synchronic analysis of English, then the status of *mad* vis-à-vis *anger* changes and becomes more significant. Where do we draw the line between synchronic and diachronic semantic information? This is a question to keep in mind and we will return to it in considering Wierzbicka's work on Russian.

Wierzbicka's analysis of *sadness* and *anger* in Russian sets out to accomplish several goals: (1) the English words *sadness/anger* are not universal human emotions; (2) emotions must be tied to words; (3) words are always both language-specific and culture-specific and are not universals; (4) the only universal words are what Wierzbicka calls "lexical universals" and in her system, the list is very restricted (1998: 3-25).

Her examples of relative equivalents of *anger* (and *wrath*) in Russian include the following forms (1998: 22-23):

Transliteration	Cyrillic	Part of speech	Gloss
gnev	ГНЕВ	noun	wrath
gnevnyj	ГНЕВНЫЙ	adjective (m. long form)	wrathful
gnevno	ГНЕВНО	adverb	wrathful
gnevat'sja	ГНЕВАТЬСЯ	verb (imperf. inf.)	become wrathful
razgnevat'sja	РАЗГНЕВАТЬСЯ	verb (perf. inf.)	become wrathful
serdityj	СЕРДИТЫЙ	adj (m. long form)	angry, mean, mad
serdito	СЕРДИТО	adverb	angrily
serdit'sja	СЕРДИТЬСЯ	verb (imperf. inf.)	be angry, mad
rasserdit'sja	РАССЕРДИТЬСЯ	verb (perf. inf.)	be angry, mad

[Note: The lexeme *gnev* in Russian is almost as rare as the English *wrath*. However, English *wrath* had a brief comeback in the 20th century through King James biblical text, Steinbeck's *Grapes of Wrath*, and, most recently, the Star Trek film, *Wrath of Khan*.]

In addition to this list, Wierzbicka includes word frequencies taken from Kučera/Francis (1969) and Carroll et al. (1971). These word frequency dictionaries targeted written forms only, and show that the frequency per million words of these terms, which are more numerous than the English equivalents, is 269 to 101 or 269 to 90, depending on the word frequency dictionary used. Thus, the Russian terms are 2.7 to 3 times more frequent than the English equivalents based on the written texts used in these dictionaries. However, since Wierzbicka only uses 4 forms from English (*anger*, *angry*, *angrily*, *wrath*), these statistics are not surprising.³ If she had included the lexeme *mad*, the numbers would have changed significantly. In fact, of her own list (given above), only the last 4 terms are common in spoken Russian, while the other terms are reserved for more archaic, and even biblical, textual uses.

The contemporary Russian equivalent to *mad/anger* that is most frequently used in speech is from the root for "evil" (*zlo/zlo*) and occurs in substantival, adjectival, verbal and adverbial forms:

Transliteration	Cyrillic	Part of speech/Gloss
zlo	зло	neut. noun/evil, meanness
zlost'	злость	fem. noun/anger, meanness
zloj, zlaja, zloe, zlyje	злой, злая, злое, злые	adj. long form/angry, mean, evil
zol, zla, zlo, zly	зол, зла, зло, злы	adj. short form/angry, mean, evil
zlit'/razozlit'	злить, разозлить	verb inf. (imperf/perf)/to make angry
zlit'sja/razozlit'sja	злиться, разозлиться	verb inf. (imperf/perf)/ to get or be angry
zlo	зло	adverb/meanly, angrily

Other frequent roots include the root –bes- (бес), meaning "demon, devil," which occurs in adjectival, adverbial and verb forms (cf. бешеный, бешено, бесить(ся), взбесить(ся)).

It would be useful to compare the use of the roots –z/l- and –serd- in their adjectival forms, where the emotion of "anger" is always one of the contextual options of the utterance:

- | | | |
|----|----------------------|-------------------------------------|
| 1. | Он злой человек. | He's a really mean guy. |
| | Он сердитый человек. | He's an angry man/mad all the time. |
| 2. | Он злой. | He's mean/evil/in a bad mood/mad. |
| | Он сердитый. | He's mad/in a bad mood. |
| 3. | Он зол. | He's mad/angry/in a bad mood. |
| | Он сердит. | He's mad/angry/in a bad mood. |

Note that the differences in meaning are most striking in the first set of examples, while the short form adjectival forms are closer in meaning to each other than both (1) and (2). If we change the subject from a human one to a canine, then an interesting shift in semantics occurs: It is possible to characterize a dog as "mean" (собака злая), but not as "serditaja," which is mostly a human emotion. In an internet search using yandex.ru, сердитый человек was found 1,050,000 times, while злой человек was found 3,280,000 times. Likewise, the short form зол was found 1,970,000 times, while сердит only 518,000.

Even from this very brief set of roots relating to "anger" in Russian, we immediately see that the etymological connections of the three basic groups are given by a connection to (1) the "heart" (serdce/сердце), (2) "evil" and "meanness" (зло, zlost'/зло, злость) and (3) "demonic evil" (bes/бес). These Russian-based meanings are fundamentally distinct from the semantics of anger in English and are not found in the set of English expressions, including the metaphoric phraseologisms. The one common thread that exists between Russian and English so far is in the larger notion of the body, as given in Kövecses, and "a separation of the body and the emotions from the Self" (1986:30).

In order to delve more deeply into the range of metaphors denoted "anger" in Russian, and for the sake of cross-cultural comparison with English, we provide a list of the more common expressions of anger in contemporary standard Russian.⁴

Expression

English gloss

быть в сердцах (с кем)	be mad at (in hearts)
быть на ножках (с кем)	be mad at (on knives)
ругаться (с кем; на кого)	be mad at, fuss at
выходить, выйти из себя	lose your temper, lose it
выводить, вывести из себя	cause someone to lose temper
(по)терять контроль над собой	lose control over self
(о)звереть	become like a beast
(о)хуеть [CSCR]	lose your mind and/or temper
устраивать, устроить скандал	pitch/throw a fit
доводить, довести до ручки	make someone mad, angry
доставать, достать кого	make someone mad, angry
заводить, завести кого	get someone mad, angry
заводиться, завестись	to get mad, excited
трястись, лопнуть от злости	shake, tremble from anger
разговаривать сквозь зубы	talk through your teeth
(по)белеть от злости	go white from anger
с цепи сорваться	break off the chain from anger
брызгать слюной	spray spit from anger
лаяться	bark, shout in anger
быть злой как собака, как черт	be mad as a dog/devil
на злых воду возят	Russian proverb: They carry water onto the angry ones
наезжать, наехать, пойти на кого	let someone have it
разойтись (он разошелся; чего ты разошлась?)	lose one's temper, get really mad
Ты что, белены объелся?	eat a mouthful of henbane
Ты что, не с той ноги встал?	got up on the wrong leg
Ты что, не опохмелился?	didn't take care of that hangover
Муха укусила	fly bit you (and you're mad)

These Russian expressions of anger give associations with leaving one's body (both expressions with the vy- and raz- prefixes give motion that is generally horizontal, not vertical), motion expressions of anger (довести/dovesti, завести/zavesti, наехать/naexat', пойти/pojti), noise, expulsion of fluid from the mouth, pain induced by sharp objects, the color white, evil and demons, dogs,⁵ failure to address alcohol-induced hangovers. There is no overt connection to fluid rising in containers and heat, as we saw in English. Even in terms of color, one cannot be "red" with anger in Russian, only "white." [Note that the German expressions of anger, while allowing an association with the color "red," may also be associated with other colors, including "green", "yellow", "blue" and "black" (e.g. *sich grün und blau ärgern* (green and blue) and *sich gelb und grün ärgern* (yellow and green) and *sich schwarz ärgern* (black)). Durst (2001: 140) even gives *grünlich* (greenish) in connection with *Wut*.]

In their work on the Russian language and emotions, Levontina and Zalizniak are very clear that they make no attempt to characterize "the nature of Russians" (2001: 292); rather, their research focuses on linguistic data only (2001: 291-336). Their approach is straightforward: (1) discover Russian lexemes that are "missing in other languages" (2001: 291), and (2) focus on those lexemes "that correspond to universal human categories" (ibid.). They divide their list of lexemes into three basic groups of emotions: (a) positive emotions, (b) negative emotions, and (c) emotions of one person toward another (2001: 293-328). The authors use a structuralist-based dyadic approach to Russian lexemes found in the early works of the Tartu-Moscow School of Semiotics, which attempts to divide the lexico-semantic fields of Russian into a "high/low" (or "spiritual/profane") opposition (2001: 293-4). While this approach does capture certain traits of the Russian lexical system, such binary modeling systems have inherent limitations in terms of their ultimate explanatory power. In fact, the model as applied to Russian reinforces what Jakobson calls "everyday mythology" (1967/1985: 108). While more than 20 lexical forms are discussed, the emotion of *anger* is missing from the Levontina/Zalizniak analysis.⁶

Clearly, the Russian data demonstrate that the central and peripheral metaphors of *anger* in Russian are fundamentally different than in English, and in fact, there is very little overlap between the two languages for the semantics of this emotion. Such a stark differentiation between two Indo-European languages puts into question the notion of how we define the relationship between emotion and language within one language, and the viability of claiming equivalence between languages from a cross-cultural perspective. We will explore this question further in the sections following the analysis of *anger* in German.

German expressions of *anger*

A major problem in research on *anger* in German is that the language is treated as uniform. No consideration is given to different varieties of German. Nevertheless, authors (e.g. Durst, 2001) suggest what they believe to be the most commonly used expressions and back up their claims by referring to corpora and native language skill. He notes that in order to determine the meanings of lexical items it is necessary to examine how people actually use the terms in spoken and written language. This observation is crucial since it means that research becomes more reliable and moves away from relying on intuitions alone. However, the German examined in these corpora frequently tends to cover only a small set of materials. The examples that are given in order to demonstrate research goals – for example establishing subsets of “basic”

emotions, demonstrating historical changes in meaning of selected expressions of anger, examining their semantic structure and making comparisons to other languages etc. – usually focus on a restricted subset of the German language. Durst (2001), for example, examines writings compiled in COSMAS (Corpus Storage, Maintenance, and Access System). Most of the selected texts date from 1949-1988 (Handbuch-Korpus, Limas-Korpus, Mannheimer Korpus). The bulk of his examples are taken from literary texts and newspaper reports. He also uses examples from texts written in the early 19th century (Goethe-Korpus and Grimm-Korpus) to look at historical changes. It is certainly legitimate to focus on a restricted sample but in such cases it cannot be concluded or assumed that words that occur in this corpus are in fact the most commonly used today. Again, what is problematic is that researchers often focus on analysis of written data. This goes hand in hand with the questions of which expressions are commonly used by whom, in what context, etc.⁷ Authors tend to not address possible differences between spoken and written language and neglect looking at regional or non-standard varieties of the language. Readers are not informed about the regional, socio-economic background or age of the German speakers who have been consulted for providing some of the examples used in the analysis. Moreover, such examples are unsystematic.

One frequency dictionary that attempts to battle those shortcomings is a frequency dictionary for learners of German by Jones and Tschirner (2006). It was developed from a four million word corpus of German literature, newspaper articles, academic and instructional texts as well as spoken language from Germany, Switzerland and Austria. Genre, register, style, geography and age group were taken into account. Compared to existing frequency dictionaries (e.g. Kaeding, 1898; Pfeffer, 1964; Scherer 1965; Meier, 1967; Swenson, 1967; Rosengren, 1972; Ruoff, 1981) this dictionary uses up to date materials: spoken language: 1989-1993, some broadcasts since 2000; literature: 1990-2000; newspapers: 2001-2002; academic texts: not stated; instructional material: not stated. However, as this dictionary is intended for learners, with its 4,034 word size is somewhat small. *Wut* (17 times in a million words; underrepresented in academic texts), *wütend* (25 times in a million words; underrepresented in academic texts), *Ärger* (27 times in a million words) and *ärgern* (32 times in a million words) are the only emotion terms on anger that can be found in this book.

The fact that German is treated as more homogenous than it is becomes apparent when looking at the emotional expressions of *anger* that are commonly quoted in research articles: *Ärger* (noun), *sich ärgern* (verb), *Wut* as well as *Zorn* and their corresponding adjectives *wütend* and *zornig*. Some researchers also include *Groll* and *Grimm* or even *Verbitterung*, *Verdruss*, *Unwille*, *Raserei*, *Anstoß*, *Empörung* and *Entrüstung* (e.g. Weigand, 1998). Durst (2001: 118) states: “In what follows, the lexical items *Ärger*, *Wut* and *Zorn*, which constitute the most frequent and most common ‘anger’ words in German, will be subjected to semantic and comparative investigation.” This also shows that researchers do not always agree where to draw the line between emotions related to anger and similar expressions.

However, a number of emotional expressions of anger existing in the German language seem to be excluded for no obvious reasons. One of these is *böse*, which can be used predicatively or as an adverb and denotes annoyance, displeasure or mild anger. (Used as an attribute it means *evil* or *bad*) (Beaton, 1996: 33). According to Beaton (1996: 33) *böse* is generally applied to people. Someone who has this feeling has a hostile attitude towards someone else who was hurtful or offensive. It may also be that the person does not approve of the actions of the other person. There is usually a close relationship between the two people. Examples from Beaton (1996: 33): *Er wird immer gleich böse. Sie sah mich böse an.* If *böse* is used with nouns such as *Blick*, it means angry. According to Beaton the most common constructions are *böse auf jemanden sein*, and *böse mit jemandem sein*. We suggest that the use of *mit* or *auf* differs regionally.

Apart from *böse*, which Durst (2001) mentions only marginally, there are numerous other terms that are not considered when researchers discuss the emotion of *anger* in German. *Krawutisch* (adj.), *sich giften* (verb), *fuchsen* (verb), *angehen* (verb), *magerln* (verb), *Gizi* (noun), *einen Gachn kriegen* are just some examples. Some of them can be found in dictionaries with a remark about the country in which the term is predominantly used. Others terms are only included in dictionaries that focus on a certain variety of German (e.g. the variety spoken in Vienna, Austria). Not to be forgotten are numerous metaphoric expressions such as *angefressen sein*, *angebissen sein*, or *aufreiben*. These are all examples of anger expressions used in parts of Austria and possibly other regions of German speaking language communities. Probably in part due to the lack of conveniently searchable recent corpus data on a wide range of non-standard varieties such varieties have been largely ignored in the analysis of anger expressions.

In order to suggest that there is variation in usage of anger expressions in German that must not be neglected, we have looked at the occurrence of some expressions on the web. A number of expressions were entered into the Google search engine (www.google.at, www.google.de, www.google.ch). Google allows searching for language and domain. The domains .at (Austria), .de (Germany) and .ch (Switzerland) were selected. We only searched for German language pages in the domains .at, .de and .ch. In order to allow a comparison of the frequency of use in these three countries that differ in size and population and therefore also in number of websites available, we normalized the results in the following way. We entered forty words (20 nouns and 20 verbs – see table) that we assume to be equally frequent in each country. (e.g. *Tisch* – *table*, *kochen* – *to cook*).

test items		.de	.at	.ch
Buch	book	46,300,000	7,480,000	8,200,000
Tisch	table	8,930,000	1,630,000	1,690,000
Löffel	spoon	1,830,000	174,000	156,000
Wasser	water	18,700,000	5,370,000	3,880,000
Bein	leg	2,780,000	441,000	334,000
Hals	throat	4,720,000	655,000	656,000
Seife	soap	2,230,000	194,000	106,000
Wolke	cloud	2,230,000	213,000	148,000
Wald	wood	8,010,000	1,890,000	1,930,000
Erde	earth	9,250,000	1,410,000	1,310,000
Zahnbürste	toothbrush	1,680,000	106,000	50,400
Idee	idea	34,500,000	2,240,000	2,570,000
Meinung	opinion	101,000,000	10,800,000	5,110,000
Frieden	peace	10,400,000	1,110,000	936,000
Gedanke	thought	5,230,000	390,000	476,000
Mut	courage	9,670,000	874,000	819,000
Verständnis	understanding	18,000,000	1,500,000	1,570,000
Freude	joy	27,200,000	1,810,000	2,010,000
Schönheit	beauty	11,800,000	1,010,000	953,000
Gewissen	conscience	11,800,000	1260000	1,620,000
gehen	to walk	78,400,000	11300000	4,350,000
kochen	to cook	28,400,000	2180000	2,170,000
schlafen	to sleep	12,000,000	973,000	1,040,000
sitzen	to sit	13,800,000	1120000	884,000
essen	to eat	106,000,000	6170000	4,330,000
kommen	to come	112,000,000	6780000	6,570,000
lesen	to read	155,000,000	8420000	11,800,000
atmen	to breathe	2,420,000	183,000	168,000
fahren	to drive	26,300,000	1960000	2,130,000
bewegen	to move	12,800,000	1200000	1,190,000

test items		.de	.at	.ch
schwimmen	to swim	8,480,000	1110000	694,000
schneiden	to cut	7,760,000	665,000	458,000
schreiben	to write	180,000,000	12100000	10,400,000
vergessen	to forget	122,000,000	8610000	12,100,000
trinken	to drink	60,600,000	5060000	2,260,000
weinen	to cry	5,100,000	525,000	424,000
denken	to think	32,000,000	2450000	2,600,000
bügeln	to iron	1,830,000	95,300	200,000
messen	to measure	25,900,000	1870000	1,750,000
machen	to do	25,900,000	9370000	9,370,000
Average		33,823,750	3,067,458	2,735,310
			11.03	12.37

Then the average number of hits for each country was calculated. There are about eleven times more hits for .de than for .at and about twelve times more hits for .de than for .ch. This corresponds roughly to the ratio of the populations in these three countries (Germany: 82,422,299; Austria: 8,192,880; Switzerland: 7,523,934 [CIA World Fact Book, June 2006 www.cia.gov/cia/publications/factbook/]). We assigned each word a score which is adjusted to be the frequency of the word in a population the size of Germany. Specifically we multiplied hit count in .at by eleven and in .ch by twelve.

This method comes with various drawbacks. For instance, the number of websites available fluctuates – even hourly. Therefore we conducted searches on four different days and averaged the results. Another problem is that there is no way of avoiding redundant counting of certain sites. For example, if a passage is quoted on several different pages such as is the case with song lyrics. If a website is listed twice (e.g. as a printer-friendly document) the search engine counts it twice. This is problematic if the items do not have a large overall number of hits. Moreover, the search method does not account for frequencies within a document. If, for instance, the item “*die Hutschnur*” comes up two times within a document, it will be counted only once. Also, the search engine only gives approximate results. Therefore low numbers of occurrences are not sufficient to draw conclusions. A third problem concerns the search settings. To make sure that all sites are actually from German domains only sites with the domain .de were searched. This restricts the pool somewhat, but what is important is to be consistent.

Moreover, there are some issues concerning the lexical items themselves. To begin with, words containing spelling errors will not be captured by the search. Also, entries in non-standard varieties may not be captured. See the following table for differences between the standard variety versus a non-standard variety for the indefinite article:

	m.	f.	n.
nom.	ein	eine	ein
dat.	einem	einer	einem
acc.	einen	eine	ein

	m.	f.	n.
nom.	a	a	a
dat.	an	ana	an
acc.	an	a	a

Especially when entering words that may be found in an Austrian German dictionary that are used colloquially in other varieties, there is not always agreement on spelling and therefore it is difficult to capture all variations. (e.g. *grantln* versus, *granteln*). Even dictionaries do not use uniform conventions (e.g. *Grant* versus *Grand*). We also cannot rule out the possibility that some of the expressions might be last names, nicknames etc. We avoided such items in searches but certainly the possibility of false positives cannot be eliminated. Also, the fact that emotions such as *Wut* can also be attributed to inanimate objects such as a storm (der Sturm *wütet*) or can have non-emotional meaning, such as *ein wütender Schmerz* (a raging pain) must not be neglected.

A major issue arises from declension and conjugation in German. Therefore, verbs in particular are a major problem in determining the number of items on the web. For instance, the expression "*sich die Krätze an den Hals ärgern*" entered in precisely this manner will only catch a fraction of the number of expressions on the internet. This should become clear when listing this example varying tense and person. Not only the form of the verb and the reflexive but also the word order can be affected.

present

- Ich** ärgere **mir** die Krätze an den Hals.
- Du** ärgerst **dir** die Krätze an den Hals.
- Er/Sie/Es** ärgert **sich** die Krätze an den Hals.
- Wir** ärgern **uns** die Krätze an den Hals.
- Ihr** ärgert **euch** die Krätze an den Hals.
- Sie** ärgern **sich** die Krätze an den Hals.

present perfect

- Ich** habe **mir** die Krätze an den Hals **geärgert**.
- Du** hast **dir** die Krätze an den Hals **geärgert**.
- Er/Sie/Es** hat **sich** die Krätze an den Hals **geärgert**.
- Wir** haben **uns** die Krätze an den Hals

past

- Ich** ärgerte **mir** die Krätze an den Hals.
- Du** ärgertest **dir** die Krätze an den Hals.
- Er/Sie/Es** ärgerte **sich** die Krätze an den Hals.
- Wir** ärgerten **uns** die Krätze an den Hals.
- Ihr** ärgertet **euch** die Krätze an den Hals.
- Sie** ärgerten **sich** die Krätze an den Hals.

past perfect

- Ich** hatte **mir** die Krätze an den Hals **geärgert**.
- Du** hattest **dir** die Krätze an den Hals **geärgert**.
- Er/Sie/Es** hatte **sich** die Krätze an den Hals **geärgert**.
- Wir** hatten **uns** die Krätze an den Hals **geärgert**.

geärgert. **Ihr hattet euch** die Krätze an den Hals geärgert.
Ihr habt euch die Krätze an den Hals geärgert. **Sie hatten sich** die Krätze an den Hals geärgert.
Sie haben sich die Krätze an den Hals geärgert.
geärgert.
future
Ich werde mir die Krätze an den Hals ärgern.
Du wirst dir die Krätze an den Hals ärgern.
Er/Sie/Es wird sich die Krätze an den Hals ärgern.
ärgern.
Wir werden uns die Krätze an den Hals ärgern.
ärgern.
Ihr werdet euch die Krätze an den Hals ärgern.
ärgern.
Sie werden sich die Krätze an den Hals ärgern.

Therefore, this research method only proves successful for cases that permit omission of the verb. Whenever possible, the verb was omitted. For example: "*sich die Krätze an den Hals ärgern*", "*Ich ärgere mir die Krätze an den Hals*", "*Du ärgerst dir die Krätze an den Hals*" etc. were searched for as the single phrase "*die Krätze an den Hals*". The search items contain both metaphorical and non-metaphorical expressions. For some of the items different variations in spelling were entered in order to highlight problems of quantifying non-standard expressions. Different spelling variations can even be found for items that do have their entries in dictionaries based on official guidelines. Such deviations from the form declared as a standard, particularly occur in discussion forums, where people write in a way that reflects their non-standard variety of German.

The full expressions used in the search are as follows:

sich die Krätze an den Hals ärgern
sich die Schwindsucht an den Hals ärgern
vor Wut an die Decke gehen
vor Wut die Wand hochgehen
vor Wut die Wände hochgehen
fuchsteufelswild sein
auf hundertachtzig sein/ jemanden auf hundertachtzig bringen
das Blut in Wallung bringen
blind vor Wut sein
Gift und Galle speien/spucken
jemandem schwillt die Zornesader
die Zornesröte ins Gesicht treiben
eine Wut im Bauch haben
eine Mordswut im Bauch haben
auszucken
einen Auszucker kriegen
jemandem über die Hutschnur gehen

sein Mütchen an jemandem kühlen
einen Gachen bekommen
einen Gizi bekommen
gachzornig sein (=jähzornig sein)
krawutisch sein
granteln
sich giften
etwas magerlt einen
angefressen sein
etwas wurmt einen
einen Grant haben
grantig sein

Finally, there are variations within the three countries, which cannot be captured by the Google search. The purpose here, however, is not to conduct a full study of usage of emotional expressions of *anger* in Austria, Germany and Switzerland, but simply to suggest that language use in different varieties of a language needs to be included in the discussion of emotion.

A first look at the results of the Google search shows that German speakers do use most of the words and expressions listed in the table. The figures have been normalized to allow for a comparison.

item	average		
	.de	.at	.ch
die Krätze an den Hals	479	217	27
die Schwindsucht an den Hals	14	11	0
vor Wut an die Decke	91	8	42
vor Wut die Wand	6	0	24
vor Wut die Wände	30	11	12
fuchsteufelswild	22,700	8,896	4,554
auf hundertachtzig	711	820	663
das Blut in Wallung	664	1,229	696
blind vor Wut	11,400	820	708
Gift und Galle	40,650	2,709	2,097
die Zornesader	284	195	30
die Zornesröte ins Gesicht	17,150	1,249	579
eine Wut im Bauch	483	349	1,062
eine Mordswut im Bauch	56	72	48
auszucken	34,525	85,022	504
einen Auszucker	51	1,422	12
an Auszucker	20	1,441	0
die Hutschnur	52,675	5,676	4,782
Mütchen kühlen	603	913	447
an Gachn	8	638	0
an Gachen	10	382	0

item	average		
einen Gachn	0	113	0
einen Gachen	0	286	0
an Gizi	16	437	0
einen Gizi	1	33	0
gachzornig	6	154	0
krawutisch	21	990	15
grantln	70	734	48
granteln	10,825	5,657	711
sich giften	35	831	0
magerln	6	482	0
magerlt	15	1,309	9
bin angefressen	163	820	534
mich wurmen	157	162	145
mich wurmt	837	2,786	1,056
an Grant	650	4,447	315
einen Grant	463	2,813	261
grantig	67,050	254,925	9,732

This shows that the question of why so many of them have not been included in the discussion of *anger* in German needs to be considered. Also, the numbers suggest that some of the usages differ across regional varieties. For instance, *an/einen Gizi*, *krawutisch* or *magerln/magerlt* are almost exclusively used on websites of the .at domain, while *die Zornesröte ins Gesicht treiben* appears predominantly in the .de search mode.

A definite statement about frequency of usage cannot be made because some of the items used for the search will certainly be more frequent in spoken than in written language (even if some of the material on the web is closer to spoken language than newspaper articles or literary texts.)

It does, however, support the idea that cross-cultural studies of emotion should be extended from studies focusing on two or more different languages such as, for example, German and Russian, English and French etc. to cross-varieties studies and within-culture variations.

A further issue, as we saw when considering the Russian data, is that *anger* has been extensively studied in English but has been neglected in other languages. Discussions of *anger* in German seem to focus mainly on contrasting English *anger* with German *Zorn*, which does not correspond well with English *wrath*, which is used in contexts of God and not as freely in everyday speech and in as a wide array of contexts such as in German.

In order to move forward with new cross-cultural data of the semantics of anger, it is necessary to review the current status of key terms and understandings within the field of cognitive and cultural linguistics, including metaphor and metonymy, the relationship between literal and figurative meanings, the question of the universality or language-specific role of the linguistic expressions of emotions across languages.

What is Metaphor?

The redefinition of *metaphor* and *metonymy* as more than mere figures of speech became standard fare following Roman Jakobson's work in the late 1950s in his seminal work, "Linguistics and Poetics" (1957/1987: 62-94). While many Slavists, structuralists, post-structuralists and semioticians continued to work with these notions as *primary axes of language and cognitive processing* following Jakobson's lead, it was Lakoff and Johnson (1980) who brought them back to center stage in their widely read work, *Metaphors We Live By* ("Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature" [1980: 228]). Since that time, CL has made the study of metaphor and metonymy one of the most important aspects of their research agenda. At the present time, Steen characterizes the general definition of metaphor (following Lakoff 1993) to be "... a set of correspondences between two conceptual domains" where "metaphors in discourse should be translatable into sets of underlying conceptual correspondences...." (Steen 2002:20).

Steen and Gibbs have moved forward in their definition of metaphor to focus not merely on its usage in language, but how to properly *identify* metaphors in discourse (Steen and Gibbs 1999, Steen 2001, 2002, Pragglejaz Group 2007).⁸ Some of the central assumptions of this approach include eight points (Steen 2002: 389-390, given in list form):

1. Meaning is grounded in knowledge
2. Literal meaning is direct meaning, metaphorical meaning is indirect meaning (in the sense of Lakoff "Meanings of Literal," not in the sense of Searle)
3. Metaphor is primarily a matter of conceptual structure, and derivatively a matter of language
4. Metaphor is a set of correspondences between two concepts in two different knowledge domains (Lakoff "Contemporary Theory")
5. Metaphor may be conventional, systematic, and familiar, or not
6. Metaphor, whether conventional or not, may be deliberate or "emergent" (Cameron)
7. Metaphor may be signaled as such, or not (see Goatly *Language of Metaphors*)
8. Metaphor may be expressed at various levels of linguistic organization and in various rhetorical forms

(The third and eighth points are notions that have been fundamental principles of the Jakobsonian view of metaphor since its inception.)

Steen sums up the CL view of metaphor in the following manner (2002a: 391-2): "We focus on metaphor as nonliteral expression in concrete messages that have a linguistic and a conceptual structure. It is especially important that we work with a conceptual-referential approach, in which words activate concepts which play a role in more encompassing and possibly abstract mental models...."

For those linguists working in more of the semiotic tradition (which is complementary to and overlaps with CL in many ways), metaphor continues to be more closely applied together with metonymy,⁹ to be defined in terms of iconicity, iconic and indexical sign types and, most importantly, to be explicated as sets of *interpretants* (following C.S. Peirce) (Andrews 1990: 59-61, 1994: 9-28, 1996a: 24-34, 2003: 24; Eco 1979: 181-191; Lotman 1990: 39-45; Shapiro 1983, 1988, 1991: 13-25). The goal of analysis is neither usage nor identification of metaphors and metonymies, but rather how these phenomena contribute to dynamic semantic changes in language, how reevaluations occur across grammatical and lexical boundaries, and their role in the mediation and translation of signs into relatively stable, repeatable units of meaning.

Maintaining the Distinction between Literal and Figurative Meaning

In "Linguistics and Poetics," Jakobson argues that it is imperative for linguists and linguistics to be concerned with all forms of language, including literary, poetic and aesthetic texts (1957/1987: 72-ff). One of the primary reasons for this definition of linguistics is the continuum of meaning formed between the literal and figurative poles of language. Jakobson addresses Bloomfield's concern about including semantics as part of the "scientific" study of language by rearticulating the important distinction between literal and figurative types of meaning (1956/1985: 118). [It is essential to remember that for Jakobson, figurative always includes both metaphor and metonymy.] In a series of later works, Jakobson continues to explain the importance of the study of figurative meaning, where figurative always includes both metaphoric and metonymic meanings, and its fundamental difference from the "nuclear meaning" of any lexeme (1969/1985: 95). He gives two fundamental bases for the central importance of figurative meanings in the study of semantics: (1) the importance of iconicity in human language (1974/1985: 201), and (2) the significance of metonymy and metaphor as

central components of the neurological and neurophysiological bases of both normal linguistic function and language breakdown (1971: 239-59, 1982/1985: 375).

The contemporary semiotic and cognitive linguistic movements continue to support the maintenance of the distinction between literal and figurative linguistic meaning in a similar fashion to the Jakobsonian approach. However, I would suggest that it is useful to move away from a binary opposition between literal and figurative, including the metaphor/metonymy dyad, to a more complex subdivision of meaning. As a preliminary modeling system, I would insert a dynamic speech act (the six-factor/six-function model of Jakobson is a good starting point combined with Lotman's work in autocommunication [Andrews 2003:26-41; Jakobson 1957/1987: 62-70; Lotman 1990: 21-33]) and include the distinctions between types of speech (речь) given in Vygotsky (1934/1999: 275-336), which include egocentric (эгоцентрическая), internal (внутренняя), external (внешняя) and written (письменная).¹⁰

The Role of Grammatical Patterns in Lexical Meaning

In the study of metaphor and metonymy, the emphasis in analysis usually rests within lexical categories, as seen in the works of Wierzbicka, Lakoff and Johnson, Kövecses and others. However, lexical categories are never free of their grammatical underpinnings, and grammatical structure impacts each and every lexical realization. Here, what is most important is not the idea that the grammar of a particular language may make it difficult for its speakers to say certain things (which is a false and misleading notion), but the fact that while any feeling or idea may be realized in any language, the grammatical structures of individual languages require speakers to make very specific distinctions, and these distinctions shape the semantics of both individual lexemes and networks of words.¹¹ Furthermore, if we return to the idea of "everyday mythology" (mentioned above in the context of Levontina/Zalizniak), where we deal with all forms of figurative speech expressed as phraseologisms, set expressions, proverbs, slips of the tongue, etc., we once again are obliged to return to the role of grammatical meaning in the realization of these lexical-based phenomena. If, for example, a language has agreement and declensional gender, then it is impossible to have nominal forms that do not have some type of gender assignment. As Jakobson points out, "the grammatical patterning of language plays a significant and autonomous part in those various manifestations of such mythopoeia" (1967/1985: 108).

The application of Peircean sign theory to the study of grammatical and lexical meaning provides additional explanatory power to a general model of linguistic meaning. Specifically, all lexemes are classified as *symbols*, where the symbol is the most developed form of the triad of sign-object relations. All symbols are compound forms, consisting of iconic and indexical components (cf. iconic symbols, indexical iconic symbols, etc.). The symbol, for Peirce, is always concerned with meaning because it presupposes the **existence of an interpreter**, *not a referent*, who will be able to make a meaningful association (5.175, 2.298). The symbol, in fact, does not identify its referent (CS Peirce 2.301):

A symbol...cannot indicate any particular thing; it denotes a kind of thing. Not only that, but it is itself a kind, and not a single thing. You can write down the word "star," but that does not make you the creator of the word, nor if you erase it have you destroyed the word. The word lives in the minds of those who use it. Even if they are asleep, it exists in their memory.

Given the hybrid nature of the linguistic *symbol*, and its dynamic relationship to other sign types, Peirce goes on to articulate the importance of the development and growth of symbols out of other sign types, "particularly from icons" (2.302), where the meaning of all symbols continues to change and grow. The implications of Peirce's definition of the *symbol* for the study of linguistic meaning is the necessary presence of iconic and indexical components, and it is precisely the iconic and indexical properties that are so important in generating metaphoric and metonymic semantic fields (Andrews 1996b: 112-118).

Emotional Intensity and Figurative Expressions

One of the more interesting directions that the study of emotion, language and metaphor/metonymy has taken in recent years is to focus on speaker/hearer-based emotional responses to the use of figurative language in speech acts. We would like to briefly mention two sets of research on this question, the first from Gibbs, Leggitt, and Turner (2002: 125-149), and the second from Pavlenko (2005). Both of these sources are interested in testing claims about this relationship, but Pavlenko's work is grounded specifically with bi- and multilingual speaker/hearers.

Gibbs, Leggitt and Turner (2002) focus their work on listeners' reactions to figurative and literal emotionally-charged discourse. Their preliminary findings demonstrate that not only metaphoric language may have a greater emotional impact than literal language in discourse, but that "novel metaphor" may convey greater emotion than "conventional metaphor" (2002: 137). Their early results distinguish between the impact of novel metaphors on speakers versus hearers, where their data "suggest, but do not unequivocally support, the hypothesis that novel metaphors convey more emotional intensity" (2002: 139). They did not receive confirmation of the hypothesis for hearers.

Pavlenko's work in emotion and language is conducted in the context of bi- and multilingual language users. She argues quite convincingly that the relationship of language and emotion is "best studied with bi- and multilingual speakers through comparison of their verbal behaviors in and reactions to different languages" (2002: 153). Pavlenko is critical of most of the work done in the study of emotion and multilingualism to date, and presents a data-based alternative approach that includes a relativized approach to "*language embodiment*" that draws heavily on current advancements in neuroscience and neurophysiology (2002: 153-191). Her results are sensitive to the importance of "strong affective linguistic conditioning" that can occur even in speakers who acquired their second language as an adult (2002: 156-ff). While her work does not address figurative language separately, she provides interesting cross-linguistic analyses between Russian and English, and specifically points out the grammatical/lexical differences in the realization of many emotion-based terms in the two languages (cf. the Russian tendency to use intransitive, reflexive verb forms for emotions that may be adjectival or participial in English [Russian 'грустить/grustit', радоваться/radovat's'a' vs. English 'be sad, be happy'] (2002: 87-88).

Emotion, Language and Universals

As the sciences become more interested in postulating and proving genetic-based explanations for a broader range of human behaviors than in the past, many linguists have moved in that direction. Cognitive Linguistics (CL) is a very broadly-based international group of scholars who generally avoid making strong claims about what lies beyond the cognitive representations that are the central point of inquiry and most relevant for human language. Instead, CL is more interested in developing robust explanatory models of cognition and language. These models, as metasystems, come in several varieties, including Lakoff's ICMs

(Idealized Cognitive models), schemas (including image-and event-schemas), basic categories, prototypes, and others (Palmer 1996: 55-79).

It is important to CL that models be used together with reliable data sets of linguistic forms that are both pragmatically and semantically viable within their corresponding languages, speech communities and communities of practice. CL is very concerned with definitions of not only *imagery*, but also *perception (visual and nonvisual)*, and as a result, posit forms of functional equivalence between imagery and perception in some cases (Palmer 1996: 49).

Palmer goes on to say that "virtually all imagery is structured by culture and personal history. Imagery is either socially constructed or embedded in social constructions" (ibid.). This position is complementary to work in neuroscience on mental imagery, where distinctions such as viewer-oriented and object-oriented mental representations are important (especially in Kosslyn 1980, 1994). In our opinion, such distinctions add clarity to the CL notions of imagery and perception.

Wierzbicka also takes a very strong stand concerning the importance of the boundedness in socio-cultural space of imagery in language:

Since every language imposes its own classification upon human emotional experience, English words such as anger or sadness are cultural artifacts of the English language, not culture-free analytical tools (1998: 7).

Thus, Wierzbicka would characterize the notion that lexical items from English can represent universal human emotions as a myth (1998:3-5). And while she posits a "language-independent semantic metalanguage" as part of her approach to the study of meaning in language, she also rightly notes that "the way people interpret their own emotions depends, to some extent at least, on the lexical grid provided by their native language" (1998: 5, 8-9). Gellatly (1995:199) eloquently develops this position, inspired by Whorf, and in revisiting and recontextualizing the Sapir-Whorf hypothesis, gives a more profound rendering of the principle (1995: 221):

...the language habits individuals develop are probably a function not only of available terminology, but also of nonlinguistic practices and of privileged images deriving from them. In other words, it seems that language as a factor in perception and cognition is inextricably bound up with other aspects of culture.

Returning to Wierzbicka, it is important to note the "noncountable" (and potentially infinite) nature of human emotions (1998: 4-5). This point is significant as we attempt to model the relationship between emotion and one language, on the one hand, and emotion and languages, on the other.¹² The conclusions that follow from this discussion argue for a clearer articulation of the interrelationship of imagery and perception, where the notion of universality of emotion becomes reconstructed into the study of the specific and meaningful distinctions that are fostered in the feedback relationship between individual cultural spaces, cognitive processes and linguistic forms, all dynamic in their own rights and in relationship to each other.

Future directions in the study of metaphoric and metonymic language require a stricter approach to inclusion of larger samplings of language data from not only written sources, but also from oral discourse appropriately embedded in the cultural context. In doing so, these data should reflect more realistically the multiple levels of variation between and within particular languages. As a result, the inseparable connection between grammatical and lexical structures in the generation of semantic and pragmatic spaces, which finds its parallel in the user-negotiated gradations found as one crosses boundaries of literal and figurative usages, will become more significant and result in more sophisticated theoretical methods of analysis.

Endnotes

1. Those linguists working in the semiotic and cognitive traditions treat *semantics* and *pragmatics* as interconnected and inseparable aspects of language. The more specific notion of *cross-cultural pragmatics* as a field is discussed at length in Wierzbicka (1991: 67-ff.).
2. This brief introduction to Kövecses' work on anger is not meant to present the full breadth of his work on the subject. For more, see Kövecses (1986).
3. Wierzbicka explicitly notes the differences in anger terms based on parts of speech in English and Russian and states that "differences of this kind are significant from a semantic and more generally, cultural point of view" (1998: 23). In her list of "anger" terms in Russian, Wierzbicka does not give the transitive verbal forms *сердить/рассердить* (*serdit'/rasserdit'*) – "to anger someone, make someone mad/angry." An additional example of a figurative meaning of the *serd-* root include the Russian expression *дешево и сердито*, used in reference to something that gets the job done quickly and painlessly.

4. Within the body of this paper, we work with two common forms of the contemporary Russian language – the contemporary standard Russian literary language (CSRL, which is codified and regulated by the Russian Academy of Sciences Language Studies Institute [Российская академия наук, Институт языкознания]), and the contemporary standard colloquial Russian language (CSCR). All of our examples are considered to be correct forms for the contemporary standard Russian literary language (CSRL). These forms may occur in written or spoken Russian. We will specifically mark those instances that are more closely affiliated with CSCR.

5. Dogs are characterized in a very interesting way in Russian. You can be mad like a dog (i.e. angry), "tired as a dog" (устал как собака), "freeze/be cold like a dog" (замерз как собака), "heal quickly like a dog" (заживет как на собаке), and it can be "very (dog) cold" (собачий холод), but you cannot "work like a dog" (the equivalent is with a horse – работать как лошадь). German expressions parallel several of the Russian fixed expressions more closely than English. Note the following examples:

- hundemüde or hundsmüde (dog-tired)
- hundeeleud (e.g. mir ist hundeeleud = I feel lousy)
- hundsgemein (person: shabby, mean, nasty; test question: fiendishly difficult)
- hundsmiserabel (e.g. ich fühle mich hundsmiserabel = I feel rotten/lousy)
- das Hundewetter (foul/filthy weather)
- die Hundekälte (freezing cold)
- hundekalt (freezing cold; adj.)
- Hundstage (dog days)

6. Some of the classifications of lexemes are potentially controversial. For example, while the authors give счастье as the "high" form of "happiness" (vis-à-vis радость), this root is very common in everyday colloquial style as a form of *goodbye*, namely счастливо. Furthermore, the sarcasm that usually accompanies the articulation of phrases like какое счастье ("such/what happiness") applies not only to the "higher" form, which would be expected, but even to the "lower" form (cf. какая радость). The phrase какая прелесть (which is similar to these forms) is much less likely to be associated with sarcasm in speech. These types of pragmatic differences remain unexplored in published work on Russian lexemes and emotions. Furthermore, if счастье is truly a "high" form of emotion, then we also need to explain why the negated adjectival form, несчастный/несчастливая, refer to a person who is unhappy or unlucky in an everyday sense and does not continue with a more abstract, spiritual meaning.

7. As Westheide (1998) points out, the semantics of a form can only be determined through consideration of how it is used in a given society. When determining the semantic equivalence of linguistic forms in different languages, their properties on the pragmatic and metapragmatic level must be taken into account. Human language "...is not a code for universal communicative needs, but a communicative system which is bound to the cultural environment" (1998:124).

8. See Steen (2002a: 386-407, 2002b: 17-33) and Steen and Gibbs (1999: 57-77) for a detailed step by step description of procedures of metaphor identification.

9. Steen (2005: 1-11) discusses the importance of giving metonymy a more prominent place in cognitive linguistics. Steen echoes Jakobson's original observation, which is often ignored in current research, that the user's perspective plays a central role in determining if an expression is more clearly metaphorical or metonymic (2005: 5).

10. The term "written speech" (письменная речь) in Russian is commonly used throughout the 20th century by linguistics and psychologists. It does not necessarily refer to quotations or indirect speech. For more information on Vygotsky's types of speech and contemporary theories of semantics, see Andrews (forthcoming).

11. Jakobson's rendering of this idea is given in his article, "Language and Culture" (1967/1985:110): "Any language is able to convey everything. However, they differ in what a language *must* convey."

12. Wierzbicka quotes William James (1890: 485) on the infinite variety of groupings along the continuum of possible human emotions, and that "all groupings would be equally real and true." I would include C.S. Peirce as well and his important observation that "all meaning is diagrammatic," which is articulated in the context of his general theory of iconicity (Peirce 1931-58: 2.170, 2.227, 2.279, 8.368).

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